Usenet Newsgroup Archive: rec.radio.amateur.antenna

2000-10 - 2000-12

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Date span: 2000-10-01 through 2000-12-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,425

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001001164632.06491.00000022@ng-fm1.aol.com>
Source record: 178719

I think I would begin by placing the radials on (or in) the ground where they'll do some good for you--rather than resonating them so they can add excessive ground loss to your system. Get a cheap Black&Decker electric lawn edger and cut neat little slits for them.

Rick K1BQT

2. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D7905D.17E0453E@dvol.com>
Source record: 178720

John Burrell wrote:

> I flatly refuse to marry him Reg, regardless of your shotgun! We're just
> good friends......
>
> 73 John G8OZH
>
> p.s. I like your site Reg. There are some very useful programs there.
> Thanks.

>
Prolific as hell isn't he? They're all great.
>
w3rv

3. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Miles <k7rnz@worldnet.att.net>
Message-ID: <39D7AD2F.988F7086@worldnet.att.net>
Source record: 178721

David:
Check with your local electrical supply company or hardware store.
What I think you are after is what is called a "Direct burial ground rod clamp."

They are made of bronze and will have no adverse reaction to copper wire or ground rods. That is what I use and have seen no problems.

To avoid electrolysis corrosion use materials which are near each other on the galvanic chart. Copper and aluminum are far apart (aluminum being the highest) and will have an adverse reaction with the aluminum being the sacrificial element.

73's...Dick K7RNZ

David wrote:

> Can someone tell me which dissimilar metals will corrode when they are in
> contact with each other? I'm using a solid copper gounding bar as a single
> point ground bulkhead for my tower and station equipment on the exterior
> wall of my house. I have ten 8' grounding rods surronding the tower and
> bonded together with the #2 copper wire which runs back to the bulkhead.
> I've got some large copper connectors to use with the #2 wire but what type
> of metal bolts can I use to attach the copper connectors to the copper bar?
> I looked everywhere for brass, bronze or copper bolts with no luck. Would
> stainless steel work? I just don't want to start corrosion using the wrong
> thing.
>
> Thanks for some advice,
> David, K4ZZR
> --
> Please reply to: k4zzr@gate.net
> REMOVE "NONSPAM"

4. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <r6TXOWQBehla+Uicbg=2ze+wKqHC@4ax.com>
Source record: 178722

On 01 Oct 2000 20:02:06 GMT, w1rfi@aol.com (W1RFI) wrote:

>But the reality is that the funds are limited. If
>you feel that volunteerism is important, would you care to fund one of the
>trips?

Hello volunteer,

I already have selected my charity where I prefer to expend my voluntary effort. Perhaps someone else here?

Maybe I went to a group that was even less funded, but they got my money, too, through positive relations.

Who but a volunteer would venture into fractal design with such hostility surrounding the topic? :->

OK, so I'm a fool - who still feels volunteerism is important.

73's
Richard Clark, KB7QHC

5. Re: Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8r8aq4$5i9$1@iac5.navix.net>
Source record: 178723

What frequency are you hoping to set up for? What is the height of the shunt fed tower and what is mounted on it?

"Herb Rosenberg" <kg6ok@pacbell.net> wrote in message news:39D79EFE.91FADF18@pacbell.net...
> I have just set up a shunt feed for my tower, with 4 elevated radials at
> about 8-10 high.
>
> I cut the radials at about 70 feet each, and put them in place. I then
> used an MFJ 259 with a pair of opposite oriented radials made into a
> dipole (disconnected from the tower of course), to measure the resonance
> point, with the hope that I could use this to trim the radials. I was
> told that this was a good approach to doing this.
>
> Well, the MFJ 259 shows the resonance freq of each pair of radials at
> about 2.300 MHZ. The best dip I get there is about 2:1 swr. If the
> radials are 70 feet each, I would have expected the resonance to be much
> higher, and I don't want to start cutting the radials as aggressively as
> they measurements would suggest.
>
> Any help or ideas would appreciated.
>
> Thanks.
>
>

6. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <QoLUXAAbV715EwkC@g3ohx.demon.co.uk>
Source record: 178724

In article <8r6oe8bmf1@uranium.btinternet.com>, Reg Edwards
<g4fgq.regp@btinternet.com> writes
>"Yep" and "yup" are well understood in Old England but are
>used less frequently than "yes". Their USA slang origin is
>recognised.
>
>The words are not quite so affirmative as "yes" and have a
>slightly dismissive flavour. So the vow "Yup I will" from
>the bridegroom would not be accepted by the bride's father
>with a loaded shotgun.
>
>But fine between friends.
> ---
>Reg, G4FGQ
>==========================
>Cecil asked -
>>
>> Yep. (Is "yep" a good word in England :-) How about "yup".
>
>
>

For the young-at-heart, what about 'Yeah' (as in 'She loves you, yeah,
yeah, yeah'). However, this is also a goddamn Merrycan-ism.

Ian.

7. RE: Television Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: AlainMV@aol.COM
Message-ID: <e1.a619d3c.2709120a@aol.com>
Source record: 178725

Hello All!

This is not an antenna question, as much as it is a reception question. My wife and I have just moved into our first home; the only place in the garage where I could put my R-71A receiver is on the other side of the living room wall. Right! Just behind the rear of the t.v!

Each time she turns the t.v. on, it wipes out my reception!

What can I do to mitigate the "buzz" that's generated from the boob tube, short of lining the wall with a lead shield or DX-ing after 10 P.M.?

Many Thanks and 73's

Alain (WPE2OLR from the old Newark, New Jersey Radio Club, circa 1962)
e-mail: alainmv@aol.com

8. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d7b62f.477238@news.akorn.net>
Source record: 178726

On Sun, 01 Oct 2000 12:54:45 -0500, CAM <cam2338@bigfoot.com> wrote:

>VE9SRB wrote:
>> What you measure and "see" in the transmission line system are the steady
>> state conditions, nothing else.

Cecil wrote:
>My point exactly - those steady-state conditions actually exist and
>can be proven by measurements. They actually are what they are. You
>would have us believe that there are invisible and undetectable
>voltage and current waves flowing throughout the system with opposite
>phases to each other. That's very close to the argument that people
>use to try to prove that God exists.

With video, standing waves can cause problems....depending on how long the area is where the reflected waves "stand" and how fast the phase sensitive information changes.

Using Steve's method to look at the line should result in exactly the same results as using your's Cecil, when discussing systems like we normally use at HF. If it doesn't, than something is wrong with someone's method. I know your method works in what I commonly do Cecil.

73 Tom

9. Re: Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <stfetcmnlv7f06@corp.supernews.com>
Source record: 178727

In <39D79EFE.91FADF18@pacbell.net>, Herb Rosenberg <kg6ok@pacbell.net> writes:

>I have just set up a shunt feed for my tower, with 4 elevated radials at
>about 8-10 high.

>I cut the radials at about 70 feet each, and put them in place. I then
>used an MFJ 259 with a pair of opposite oriented radials made into a
>dipole (disconnected from the tower of course), to measure the resonance
>point, with the hope that I could use this to trim the radials. I was
>told that this was a good approach to doing this.

>Well, the MFJ 259 shows the resonance freq of each pair of radials at
>about 2.300 MHZ. The best dip I get there is about 2:1 swr. If the
>radials are 70 feet each, I would have expected the resonance to be much
>higher, and I don't want to start cutting the radials as aggressively as
>they measurements would suggest.

>Any help or ideas would appreciated.

>Thanks.

You will likely find that the longer lengths don't bother you much.

However in the interest of pristine perfection .. ;)

Instead of cutting them, use an egg insulator at the far end and simply
fold them back on themselves temporarily. Use a rope on the other end
of the egg insulator to play the egg back as you shorten it.

At that point, you can test to your heart's content and not cut any
wire. Lengthen it and shorten it at your whim to fool all you want.

Re tuning this these wires... Since the thing is all interactive due to
coupling and whatever is around the thing .. think about this way...

Another way to do this is to connect a small few turn loop between the
two quarter wave wires connecting them together in the middle. Poke the
snoot of a grid dip oscillator coil into this loop. You can then dip
the frequency of the radial pair with it too!

That's a neat way to tune the loop elements in wire quads too. When I
was playing with them, I used to simply take one corner, side, whatever.
I'd break the loop with a regualr antenna wire steatite insulator.
Between the holes on either end, I'd take #12 or so TWN or whatever.
I'd use a plastic screwdriver handle for a form, winding the large
single strand wire for six or so turns around it. Then I'd form the
ends of the wire through the insulator holes and use Kerney clamps to
attach the free wire ends.

You could poke the grid dipper into this little loop and see a dandy dip at the reasonant freuency of the loop! Pulling the wire shorter on the sides while keeping it long enough, or paying it out would tune the loop.

Another simple trick is to use a short section of ladder line in the middle of this test insulator - going away at right angles to the wire plane. By putting the little coil in series with one leg of the thing, you could adjust the length of the ladder line to raise or lower the frequency of either the loop or the radial pair. For wire beams, this is a neat way to get a three-element array reversed as a fixed array.

You use the ladder line stub to get the longer element lenght needed for the reflector, with the actual wire length the right length for the director. To reverse the throw of a 40 meter or 80 meter quad, simply short across the ladder line at the split off insulator, or open the ladder segement up to make it longer.

Wire quads actually play fairly well close to the ground on 40 and 80 this way, but you have to feed them in vertical polarization mode. They come alive that way! More than three elements fed this way in low band near proximity to the ground is a waste of time. A little modeling with any of the popular programs will show you why in short order!

Cheers ..

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

10. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d7bbf7.1957357@news.akorn.net>
Source record: 178728

On Sun, 01 Oct 2000 13:11:58 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>They start being rather large at HF, though they are quite practical at UHF.
>An 8 turn helix would need a boom about 16 meters long on 10m. It does have
>good gain, and it naturally gives circular polarization, which might be beneficial
>to deal with the spin modulation of Mode A satellites. I don't think there are any
>new Mode A birds in the works, however, so that might be a moot point. Frankly,
>I'd just build a quad or yagi instead. That'd be mechanically simpler, and linear
>polarization isn't a detriment for skywave HF propagation.

I understood him to mean a helically loaded antenna, which is commonly
and incorrectly referred to as a helical antenna for HF.

I can't imagine anyone wanting to build an axial mode helical antenna
for HF!

73 Tom

11. 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001001184135.18419.00000064@ng-ci1.aol.com>
Source record: 178729

I called and had a QSO with JA7DY this evening, running 1/2 watt out from my
JST 245, with precision attenuator in-line.

Wow!

He was 30 over and I was S-7.

For performance info and construction tips see:

http://www.fractenna.com/ham/hampage1.html

73,
Chip N1IR

12. Re: Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <stffdrhegu0e5@corp.supernews.com>
Source record: 178730

In <20001001164632.06491.00000022@ng-fm1.aol.com>, k1bqt@aol.com (Rick Littlefield) writes:
>I think I would begin by placing the radials on (or in) the ground where
>they'll do some good for you--rather than resonating them so they can add
>excessive ground loss to your system. Get a cheap Black&Decker electric lawn
>edger and cut neat little slits for them.
>
>Rick K1BQT

Rick .. the elevated four wire deal works beautifully, however I think he will find that the 8 foot height is not helpful. From a *LOT* of use of this array on 40 CW, I can tell from experience that the minimum that he will really see come alive is likely to be 19 feet up or more. That is one reason I ground mounted my 80 meter 4 square, as opposed to elevating it.

From *BITTER* experience, I'll also not the other killer deal here.

As you go up with the elevated radial deal, the lightning strike problem takes on a whole new dimension. That ten feet to the ground at the RF frequence is a whale of a voltage spike at thousands of amperes.

No matter how well you work out a scheme to drain off the hit flow, you wind up with a much tougher job of damping the hit to real ground with the elevated radial game. The only real clean way I ever got away with it was/is to run the shunt feed coax line down to ground, use the appropriate protection there and bury it back to the shack.

I'll, again, state that lets not go into the theory of phased vertical arrays all bonded together with elevated radials here, please. What doe count is that the phasing box, relays, shack entry path for the hits and induction kick stuff, is a lot harder to work with with the elevated radial deal than the other ..

However -- the elvated deal, as long as about an 1/8 wave above ground is used as a mimimum plays *VERY* well on low bands.

My worked total on 40 CW with one is at 314 countries now .. ;)

The 80 game is harder in this Hell they call Sand Soil Texas .. its only about 230 worked on 80 and that one is ground mounted .. ;)

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

13. Re: Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d7bd8f.2365553@news.akorn.net>
Source record: 178731

On Sun, 01 Oct 2000 20:30:54 +0000, Herb Rosenberg <kg6ok@pacbell.net>
wrote:

>I cut the radials at about 70 feet each, and put them in place. I then
>used an MFJ 259 with a pair of opposite oriented radials made into a
>dipole (disconnected from the tower of course), to measure the resonance
>point, with the hope that I could use this to trim the radials. I was
>told that this was a good approach to doing this.

That's about the only way to do it! It is a "correct way".

>Well, the MFJ 259 shows the resonance freq of each pair of radials at
>about 2.300 MHZ. The best dip I get there is about 2:1 swr. If the
>radials are 70 feet each, I would have expected the resonance to be much
>higher, and I don't want to start cutting the radials as aggressively as
>they measurements would suggest.

The direction of error makes sense to me. You have a dipole .03 or .04
WL above earth. It will be a lossy system, so the impedance will be
much higher than 50 ohms. Because the system is so close to earth, the
wires will appear electrically much longer than they are physically.

When I install Beverages, I use the same method to determine the
electrical length. I find the Beverage is about 10-15% longer
electrically than it is physically.

How did you "float" the 259 to keep it balanced? Did you let it hang
in the air? Did you use a choke balun of some sort?

The Vf you measured seems pretty slow.

By the way, don't expect high efficiency with your system. You will
have quite a bit of ground loss.

73 Tom

14. Filters do make a difference!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <mOPB5.233424$c5.4615461@news2.rdc1.on.home.com>
Source record: 178732

Finally got around to setting up the filters on my newsreader and this newsgroup is now enjoyable!! No more Chirp!! I'm sure I will have to add some more but seems to be working very well.

Barry D.

15. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8r8hoglvc1@news.gate.net>
Source record: 178733

Dick,

I'm already using the bronze ground rod clamps and an anti-corrosive joint compound for the underground wire and rods. All I need is a couple of 3/8" bolts to hold a copper cable clamp to the copper bulkhead (a 20"x4"x1/8" grounding plate with several drilled holes) outside the house where all of the ground rod wires end at a single grounding point. The stainless steel bolts will work for the time being since the clamp and bulkhead are both copper.

73,
David

| David:
| Check with your local electrical supply company or hardware store.
| What I think you are after is what is called a "Direct burial ground rod clamp."
|
| They are made of bronze and will have no adverse reaction to copper wire or
| ground rods. That is what I use and have seen no problems.
|
| To avoid electrolysis corrosion use materials which are near each other on the
| galvanic chart. Copper and aluminum are far apart (aluminum being the highest)
| and will have an adverse reaction with the aluminum being the sacrificial
| element.
|
| 73's...Dick K7RNZ
|
|
|
| David wrote:
|
| > Can someone tell me which dissimilar metals will corrode when they are in
| > contact with each other? I'm using a solid copper gounding bar as a single
| > point ground bulkhead for my tower and station equipment on the exterior
| > wall of my house. I have ten 8' grounding rods surronding the tower and
| > bonded together with the #2 copper wire which runs back to the bulkhead.
| > I've got some large copper connectors to use with the #2 wire but what type

| > of metal bolts can I use to attach the copper connectors to the copper
bar?
| > I looked everywhere for brass, bronze or copper bolts with no luck.
Would
| > stainless steel work? I just don't want to start corrosion using the
wrong
| > thing.
| >
| > Thanks for some advice,
| > David, K4ZZR
| > --
| > Please reply to: k4zzr@gate.net
| > REMOVE "NONSPAM"
|

16. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001001194420.09086.00000079@ng-cd1.aol.com>
Source record: 178734

Puke.

17. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <EfQB5.1854$ai4.484713@news.ntplx.net>
Source record: 178735

Rick Littlefield <k1bqt@aol.com> wrote:

> >Four were compared in the March 1997 issue.<

> Was that Frank Witt's review? If so, you may wish to take the numbers with a
> grain of salt. As I recall, his methodology yielded inaccurate data.

Hi, Rick,

That is still under consideration. :-) The inaccuracy, if any, appears to be at the high end of the scale -- ie, a tuner that was listed as having 3 dB loss could be somewhere between 2 and 4 dB, for example. Of course, at 3 dB loss, the tuner would probably be in the unuseable range for most power levels. I believe that the accuracy was acceptable for the lower losses -- the range over which one is going to be able to use the tuner. But, as you may have seen in my other post, I did recommend the article and, in fairness, I didn't want to do so without also mentioning the questions that have been raised. I figure if I am taking the question seriously enough to be looking at alternative methods, that I should at least raise the issue when I recommend the article. (Good science, I guess. :-)).

For the next review, I intend to use other methods to measure the tuner's loss and compare them to the values obtained using the "Witt" method. If there are significant differences, I will either do a sidebar or post some info on the ARRL web about tuner testing or write a QEX article or something. I can't speak for the editor, but I do intend to make the results available publically somehow.

I think the easiest way to measure the insertion loss of the tuner would be to do it at low power, using our signal generator and microwattmeter. If I operate the tuner into an attenuator designed to match N ohms to 50 ohms, I could input say +20 dBm and measure the output accurately, after adding back the loss of the attenuator matching device. Dean Straw suggests doing it with high power, using an RF ammeter to measure the current delivered to specific loads. I will try both, then ask Mr Witt to characterize the tuners for us. Should be an interesting excercise; your input, here, or off-line, is most welcome.

73,
Ed Hare, W1RFI
ARRL Lab

18. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Jim <pinkston@networksplus.net>
Message-ID: <39d7b96e$1@news.networksplus.net>
Source record: 178736

Jeffrey Steinberg <jeffreys@cyburban.com> wrote in message
news:39d6a988$0$1369$45beb828@newscene.com...
> It was meant to be unrelated.
>
> I am just an observer here. There are a lot of people claiming
> to not want to hear about fractal antennas (I am not one of them).
>
> This is how newsgroups split. I think it would be healthy. Its why there
are
> over 40K now. Its always best to have any group of people committed to a
topic
> to split off when critical mass hits.
>
> --jeffrey steinberg, kc2guc, scarsdale, ny

I don't think it's a case of not wanting to hear about fractal antennas, but lots of people are tired of hearing lots & lots of nothing. The main proponent for fractals on this NG won't divulge any info on this NG about his fractal antenna. You have to go join his NG. I know I am always willing to listen & learn but Fractenna won't give anything up here, he just keeps saying stuff like "I'm the greatest & my antenna is the greatest." But no data is shown to back it up. I honestly think that Fractenna might just know a thing or two worth passing on to people like me but if asked, he tends to get rude & tells people to "go look it up" like doesn't want anyone wasting his time. Maybe the NG should split, but not many people are gonna leave this NG & go to another one. In fact, I doubt Fractenna would leave this one. I think he actually enjoys stirring things & pissing people off.
But to summarize, I don't think there's anyone here that wouldn't want a rational, logical discussion about fractal antennas. Too bad it ain't gonna happen.
Jim
KC0GSX

19. Help with indoor FM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Emmanuel Sopeju <esopeju@istar.ca>
Message-ID: <2tofts8850nj04q7m1b7g19nn4e5o6d1n2@4ax.com>
Source record: 178737

I am looking for help in finding an indoor antenna for FM reception on my audio receiver. I visited the local Radio Shack today and saw some indoor antennas, but mostly for TV reception.

I tried to connect my Cable TV coax cable to the receiver, but the signals shot-out (no reception at all) . I'm doing something wrong ?

Please help.

Thanks

20. Help with FM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Emmanuel Sopeju <esopeju@istar.ca>
Message-ID: <vcpfts0mvidbl55vklgtcjkmke47ht00ne@4ax.com>
Source record: 178738

I am looking for help in finding an indoor antenna for FM reception on my audio receiver. I visited the local Radio Shack today and saw some indoor antennas, but mostly for TV reception.

I tried to connect my Cable TV coax cable to the receiver, but the signals shot-out (no reception at all) . I'm I doing something wrong ?

Please help.

Thanks

21. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D7E7E5.B014648E@hiwaay.net>
Source record: 178739

Another question on this subject- I have read on one of the antenna or Tower reflectors, or on this NG, that stainless foil ("shim-stock") used as an intermediary material , would protect such joints from corrosion. In my case, I have heavily galvanized rods, and heavy copper wire or strap. Is a connection using stainless clamps with stainless foil between the galvanized rod and the copper conductor appropriate? A similar connection will exist where the conductor is connected to the tower leg. I also have available (for the rods) the Bronze clamps normally used.

Bill-W4BSG

David wrote:
>
> Thanks for the replies.....
>
> I asked the same question on the electrical engineering newsgroup and was
> told to get Silicon Bronze bolts. You can picture the blank look on the
> stock boy's face when I asked for some of these at Home Depot. A web
> search for them turned up lots and lots of wholesale distributors for
> silicon bronze bolts, but they all failed to mention where Joe Public can
> actually purchase them. :-) Maybe I'll find them at an electrical
> contractors outlet.
>
> I'll use the stainless steel one for the time being until I can find the
> kind I really need. I've never really tried making a good ground system
> until now. I'd usually just put a couple of rods at the base of the tower
> and pray. After reading about lightning on the Polyphaser website I've got
> a much better handle on what to do. And since I live in Florida it's
> pretty important to do it right. I don't want to lose my ham gear -or- my
> house!
>
> 73,
> David, K4ZZR
>
> | >Can someone tell me which dissimilar metals will corrode when they are in
> | >contact with each other?
> |
> | All of them, some more quickly than others.
> |
> | >I'm using a solid copper gounding bar as a single
> | >point ground bulkhead for my tower and station equipment on the exterior
> | >wall of my house. I have ten 8' grounding rods surronding the tower and
> | >bonded together with the #2 copper wire which runs back to the bulkhead.
> | >I've got some large copper connectors to use with the #2 wire but what

> type
> | >of metal bolts can I use to attach the copper connectors to the copper
> bar?
> | >I looked everywhere for brass, bronze or copper bolts with no luck.
> Would
> | >stainless steel work? I just don't want to start corrosion using the
> wrong
> | >thing.
> |
> | Copper bolts would be best, because there's no dissimilar metals issue
> | at all. But good luck finding copper bolts. Copper is a bitch to thread,
> and
> | copper bolts aren't a production item. Naval bronze would be second best.
> | Marine suppliers should have these. (It is also the material from which
> | good clamps intended to go on ground rods are made.) It'll last many
> years.
> | Brass isn't a good choice. It will corrode quickly in this application.
> Stainless
> | steel will corrode in this application, but it does so slowly. Bolts made
> of 316L
> | will last several years if properly passivated (dipped in nitric acid
> after forming).
> | That's standard practice for marine hardware.
> |
> | Gary
> | Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> | 534 Shannon Way | We break it |
> | Lawrenceville, GA | Guaranteed |

22. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39D806C9.4AF0A29A@qth.com>
Source record: 178740
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

According to JST 245 specs , it wont go below 5 watts...amazing shit that guy does!!!

Fractenna wrote:

> I called and had a QSO with JA7DY this evening, running 1/2 watt out from my
> JST 245, with precision attenuator in-line.
>
> Wow!
>
> He was 30 over and I was S-7.
>
> For performance info and construction tips see:
>
> http://www.fractenna.com/ham/hampage1.html
>
> 73,
> Chip N1IR

[One or more binary attachments are retained only in the source text.]

23. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D7EE0F.CE7224DD@eznec.com>
Source record: 178741

I want to thank you for running the numbers. It spurred me to get some more quantitative values myself, and I found I was mistaken in the way the IC730 ALC works.

I have a fairly low 80 meter dipole which is resonant on the lower part of the band. So beginning at resonance, I moved up the band and checked forward and reverse power at several frequencies. Of course, I don't know the impedances being presented to the rig, but they do represent pretty typical conditions under which SWRs higher than 1:1 are encountered.

In the following table, Pf is forward power and Pr reverse power to the antenna at each frequency. Dummy Pf is the forward power to a dummy load at the same frequency, to make sure that the output is reasonably flat with frequency. Dummy load reverse power was zero at all frequencies. The SWR column is the SWR computed from the antenna forward and reverse readings. The frequency range is about 3.69 to 3.99 MHz. My ability to read the meter is within a watt or two at the forward power level, and within a watt at the reverse power level.

Pf Pr Dummy Pf SWR
98 0 99 1
98 5 98 1.58
99 10 97 1.93
100 15 96 2.26
100 20 96 2.62
100 25 95 3.00
100 30 95 3.42

So my rig is behaving like Reg's, and like my homebrew rig -- it's keeping the forward power constant. My earlier statement that it keeps the net power (forward minus reverse) constant was incorrect. The net power does decrease as the SWR increases, although the decrease isn't much, amounting to a little over 1 dB at 3:1.

To answer your question about the Bird wattmeter -- routine calibration or setting isn't required. The meter shows absolute power on a somewhat nonlinear scale, with the scale factor depending on which "slug" is inserted in the meter. (There are slugs for a wide selection of power levels and frequency ranges.) The forward power is read from the meter with the slug in one position, then the slug is rotated 180 degrees to read the reverse power on the same scale. The net power has to be manually computed by subtracting the readings. The specified accuracy of 5% of full scale is too poor for really precise measurement, but resolution is fair, and most meters appear to be much more accurate than the specification indicates. Some of the slop in the spec is undoubtedly

due to the fact that sensitivity varies somewhat over a slug's specified frequency range, and to accommodate all combinations of slugs and meters. All the above applies to the model 43, by far the most common model, and one which has been a standard for decades.

Your measurement method is subject to error from any stray reactance as well as meter inaccuracy, so is probably no better than the Bird. But I think both our sets of measurements show that the rigs are doing a reasonably good job of adjusting their output levels to maintain a constant forward (not to be confused with net) power in the face of varying load impedances.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy asked -
>
> > What does the output of your rig do when it's confronted
> with 1.8:1 SWR?
>
> ==========
>
> I have an Icom 735.
>
> I tested it at 1.9 MHz in FM mode using a small number of
> resistive loads of known values, doing nothing except
> changing the load resistance and determining the load power
> by measuring the RF voltage across it. I don't trust SWR
> meters.
>
> Load ohms SWR Rel Power
>
> 17 3 70 %
> 34 1.5 91 %
> 50 1.0 100 %
> 97 1.9 89 %
> 113 2.3 78 %
>
> Draw a best-fit parabola through these points and when the
> SWR is 1.8 the two relative power levels are 84 % and 92 %
> which I admit are higher than I expected.
>
> Whether any SSB distortion due to PA non-linearity occurs at
> these relatively high SWR's I don't know. Doesn't matter on
> CW and FM of course.
>
> On closer inspection of the ALC circuitry I see that the SWR
> bridge Forward voltage takes control until the Reflected
> voltage exceeds some critical value at which point the
> reflected voltage is used to throttle back the PA drive.

>
> Excessive PA current is not prevented by any RF measurement
> but simply by detecting the DC collector current. When the
> DC current exceeds some critical value a control signal is
> fed into the ALC line.
>
> I am not familiar with your Bird wattmeter. Does it measure
> load power directly in some manner or by indicating the
> difference between forward and reflected power levels ?
> Does it first have to be calibrated or "set" in conjunction
> with a 50-ohm standard load ?
> ---
> Reg.

24. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <stfrjgm9co4o19@corp.supernews.com>
Source record: 178742

Good info, Gary--

A few comments--

"Gary Coffman" <ke4zv@bellsouth.net> wrote in message >
> That's about right for a nuclear plant, because primary loop temperature
is
> kept relatively low.

Yes. A nuke operates about about 600 degrees and 1000 psia steam pressure to the turbine. Fossil plants run at about twice that pressure. But I think there's a theoretical limit on the efficiency of a condensing steam turbine anyhow--and there may be more to it than just the energy you have to give up in condensing steam back to water.

>
> (Thermal efficiency is relatively unimportant for a nuclear plant, of
course,
> because fuel costs are a negligible part of their bussbar power cost.

Nuclear fuel costs are far from neglibigle, but they're much less a portion of total production cost in a nuke than in a fossil plant. Thermal efficiency is very important in a nuclear plant though, although it is limited by primary system (reactor) constraints as you said. The NRC licenses a plant at a certain thermal power level in the reactor. How much of that primary power is converted into electrical power is up to the plant owner, and more electrical power is obviously more profit. So plant operators are constantly trying to maintain and improve secondary side efficiency. I'm sure the same is true in fossil plants.

Most of
> the cost is debt service on the horrific capital costs incurred building
them
> in the US. Most of that is due to the average 12 years it takes to get a
plant
> licensed and producing power in the US.

I'm sure there's a lot of deviation from the mean in that 12 year average. You have to decide at what point you throw out the numbers on the plants that *never* come on line. The three I had experience with came on line in about 6 or 7 years.

>Racking up interest for that long before
> generating the first billable kilowatt-hour makes the debt load huge.

That's absolutely true. The anti-nuclear forces back in the seventies didn't have too much luck getting the technology outlawed absolutely, so

their strategy evolved into making it too expensive for any utility to afford. They were pretty successful at that. A good ploy was to get laws enacted that said utilities could not pay anything on a plant until it went on line. The pitch was, "Utilities want YOU to pay for plants that aren't even making power yet! YOU can vote to forbid that." So utilities had to borrow hundreds of millions in the high inflation 70's at 15 to 20% interest for 5 to 10 years." Plants that had cost 400 to 500 million in the early 70s escalated to 3 to 4 billion in the late 70s and 80s. The anti-nuclear forces were successful and as usual, the ratepayers got stuck with the bill. (And with all the extra pollution from the fossil plants that had to be built to compensate.)

By contrast,
> it takes less than 12 months in France, and less than 2 years in Japan to get
> a plant licensed. That makes nuclear power much more economical in those
> countries, France is now 86% nuclear and Japan is over 50% nuclear while
> the US remains less than 6% nuclear.)

Yeah, you hear a lot of good things about programs over there. But in France and Germany they are constantly on the brink of electing regimes that wants to close down their entire nuclear industries. I think the Germans might be there now. And I got to visit some Japanese nuclear plants a few years ago. I was very surprised to learn that their version of the NRC was perhaps more restrictive than ours, and public opinion just as negative. They had no nuclear plants under construction and none on order.

>
> OK, extreme topic drift there, but it is a pet peeve of mine that we are being misled
> about these things by certain supposedly environmentalist groups and the politicians
> who cater to them. I'm particularly irked by the Clinton/Gore people who signed the
> greenhouse treaty, yet are doing their best to prevent nuclear plants from being built
> and are pushing electric cars. That can do nothing except increase greenhouse gas
> generation, as well as making us more dependent on imported fossil fuels to fire the
> generators. (Clinton/Gore have pronounced domestic coal "too dirty", and are pushing
> for new power plants to be either natural gas or oil fired.)

Yes, its ironic and ridiculous to fret about greenhouse gasses and other fossil fuel related pollution while ignoring a solution that's right under your nose. I've learned that the best the nuclear industry can expect from Washington is benign neglect. That's pretty much what we've gotten from the present admistration and what we got from Reagan-Bush in the 12 years previous. (A lot of my associates cheered in 1980 saying, "Now we've got a pro-nuclear administration. We can expect things to pick up." But

cancellations continued, no new plants were ordered, and there were no new initiatives out of Washington to remove unreasonable restrictions on nuclear power.) There's no political capital to be had in taking a rational stance on nuclear energy, given negative programming of the the average voter's mind back when the anti-nuclear power thing was the "cause of the week."

>
> Gary

Antenna connection? My rig is nuclear powered ---

73--Nick, WA5BDU

25. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D7F063.C6F5F4CE@hiwaay.net>
Source record: 178743

Murray- for once, dammit, I need to ask that someone re-read a post of
Chips- He DID say he used an attenuator, so 1/2 Watt out is possible.
By strict English usage, of couse, his statement is ambiguous, because
the reference to where "out" is, is open to interpretation (HI).

Bill

Murray Neece wrote:
>
> According to JST 245 specs , it wont go below 5 watts...amazing shit that guy
> does!!!
>
> Fractenna wrote:
>
> > I called and had a QSO with JA7DY this evening, running 1/2 watt out from my
> > JST 245, with precision attenuator in-line.
> >
> > Wow!
> >
> > He was 30 over and I was S-7.
> >
> > For performance info and construction tips see:
> >
> > http://www.fractenna.com/ham/hampage1.html
> >
> > 73,
> > Chip N1IR

26. Re: Verical vs. Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D7EF40.52627A3A@bigfoot.com>
Source record: 178744

kb2sin wrote:
> I am looking for some constructive opinions on Beams Vs. Verticals on HF.

What do you want your antenna to do?
--
http://www.mindspring.com/~w6rca

27. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39d7f159$0$1355$45beb828@newscene.com>
Source record: 178745

I think he said he had an attenuator in-line, so the JRC could have
been putting out 5 watts and he stepped it down.

--jeffrey

In article <39D806C9.4AF0A29A@qth.com>, RadioRanch@qth.com says...
>
>This is a multi-part message in MIME format.
>--------------5C1D70D8D1136B9546F2F5DF
>Content-Type: text/plain; charset=us-ascii
>Content-Transfer-Encoding: 7bit
>
>According to JST 245 specs , it wont go below 5 watts...amazing shit that guy
>does!!!
>
>Fractenna wrote:
>
>> I called and had a QSO with JA7DY this evening, running 1/2 watt out from my
>> JST 245, with precision attenuator in-line.
>>
>> Wow!
>>
>> He was 30 over and I was S-7.
>>
>> For performance info and construction tips see:
>>
>> http://www.fractenna.com/ham/hampage1.html
>>
>> 73,
>> Chip N1IR
>
>--------------5C1D70D8D1136B9546F2F5DF
>Content-Type: text/x-vcard; charset=us-ascii;
> name="RadioRanch.vcf"
>Content-Transfer-Encoding: 7bit
>Content-Description: Card for Murray Neece
>Content-Disposition: attachment;
> filename="RadioRanch.vcf"
>
>begin:vcard
>n:Neece;Murray
>tel;cell:915 553 5621
>tel;fax:915 580 9051
>tel;home:915 580 9051
>tel;work:915 553 5621

>x-mozilla-html:TRUE
>url:http://www.qth.com/k5mdm
>org:www.wt5arc.org;BE THERE
>version:2.1
>email;internet:RadioRanch@qth.com
>title:Odessa Hamfest NOV 4-5
>adr;quoted-printable:;;2636 Kermit Hwy.=0D=0A;Odessa;Texas;79763;USA
>note;quoted-printable:Odessa Hamfest=0D=0ANov.4-5,
2000=0D=0A<<http://www.wt5arc.org>>
>x-mozilla-cpt:;-8208
>fn:www.qth.com/k5mdm
>end:vcard
>
>--------------5C1D70D8D1136B9546F2F5DF--
>

28. Re: variometer for ant. tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: rick@vax.area.com
Message-ID: <8r8vik$1hk$1@vax.area.com>
Source record: 178746

Lam Research at one time used variometers in the matching networks of their 13.56 MHz plasma etch machines. They consisted of nested spherical inductors made of copper tubing. The reason why they did this was to increase the tuning speed compared to a series LC having a vacuum varible for the C. It worked quite well.

They had to have the variometers custom made since you can't buy variometers off the shelf.

Rick N6RK

29. Re: Television Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <39D805EC.91E39F8D@cadvision.com>
Source record: 178747

AlainMV@aol.COM wrote:

> Hello All!
>
> This is not an antenna question, as much as it is a reception question. My
> wife and I have just moved into our first home; the only place in the garage
> where I could put my R-71A receiver is on the other side of the living room
> wall. Right! Just behind the rear of the t.v!
>
> Each time she turns the t.v. on, it wipes out my reception!
>
> What can I do to mitigate the "buzz" that's generated from the boob tube,
> short of lining the wall with a lead shield or DX-ing after 10 P.M.?
>
> Many Thanks and 73's
>
> Alain (WPE2OLR from the old Newark, New Jersey Radio Club, circa 1962)
> e-mail: alainmv@aol.com

One thing you can do is try another AC outlet -- you could be sharing a common
line.
You might also try putting a snap-on choke on the AC line -- maybe even both.
Also, disconnect your antenna and see if the noise is still there. That might
give clues
to the source of the noise, or put a dummy load on the antenna which would be an
even
better test. Even moving the sets a few inches further apart might help if the
receiver is
getting direct radiation from the TV's oscillator. I'm sure there are more
things you can
try -- perhaps others can throw in their ideas. This was just off the top of my
head (where very little is left anyways!). Good Luck!

--
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

30. Re: Car Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <8r8a05$95q$1@news.hawaii.edu>
Source record: 178748
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf

<sideband@mindspring.com> wrote:
>Doesn't this put a lot of rf in the car?

A glass-mounted antenna a quarter-inch farther away doesn't? How
much power were you intending to run? 73, Jeff KH6O

>Jeffrey Herman wrote:
>> Guys, a compromise between glass-mounted and exterior-mounted
>> antennas is this: Take the end of your feedline and remove about
>> 19 inches of the outer cover; at that point separate the inner
>> conductor from the copper braid and run them opposite to each other
>> and perpendicular to the feedline, taping them to your rear window:
>>
>> inner cond. copper braid
>> -------------||--------------
>> ||
>> ||
>> || coax feedline
>> ||
>> ||
>>
>> It's nothing but a 2m dipole made entirely from the last 19 inches
>> of your feedline, taped to your car's back window. If the horizontal
>> orientation bothers you, run the two legs at a 45 degree angle from
>> the vertex (where the conductors separate) with that point taped to
>> the base of the window:
>> \ /
>> \ /
>> \ /
>> \ /
>> \/
>> ||
>> ||
>> ||
>>
>> No muss, no fuss, no damage to the car, and much better results than
>> the glass-mounted "dummy load."
>>
>> It makes a fine indoor antenna at home, too; mount it as a vertical
>> dipole taped to a window.
>>
>> 73, Jeff KH6O
>

31. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <1eLWOXKLFzCmVxTUZs4las2a1q=l@4ax.com>
Source record: 178814

On Sat, 30 Sep 2000 21:38:18 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>> Your allowing that
>> >a "virtual short" does not stand up under a rigorous
>> >mathematical treatment
>> is in marked contrast to Walt's rigorous mathematical treatment.
>
>I haven't read the CQ articles but I know the phasors don't act
>at a virtual short exactly the way they act at a dead short. But
>we know all about the steady state signals so we can make the
>"theory" fit the known circumstances. Maybe we can say it is
>virtually a short. :-) Maybe that's what Walt meant in the first
>place.

Hi Cecil,

Maybe.

73's
Richard Clark, KB7QHC

32. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <d+PWOSQ86st8LEBc0JHzN2cGEW02@4ax.com>
Source record: 178815

On Sat, 30 Sep 2000 21:20:28 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>> What is this
>> I * I * Z
>> you speak of?
>
>With a Thevenin equivalent circuit, it would be I*I*Rg
>which is often less than I*I*RL indicating that if Rg
>equals RL, part of RG is non-dissipative.

Hi Cecil,

Then why call it Rg? What if RL is complex?

73's
Richard Clark, KB7QHC

33. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r6oe8bmf1@uranium.btinternet.com>
Source record: 178816

"Yep" and "yup" are well understood in Old England but are used less frequently than "yes". Their USA slang origin is recognised.

The words are not quite so affirmative as "yes" and have a slightly dismissive flavour. So the vow "Yup I will" from the bridegroom would not be accepted by the bride's father with a loaded shotgun.

But fine between friends.

Reg, G4FGQ
==========
Cecil asked -
>
> Yep. (Is "yep" a good word in England :-) How about "yup".

34. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <WhbXOazIyUOsXRx1ZKd6EgaivbtD@4ax.com>
Source record: 178817

Richard Clark <rwclark@rwclark.seanet.com> wrote:

>On 30 Sep 2000 15:16:52 GMT, w1rfi@aol.com (W1RFI) wrote:
>
>>
>>It can be downloaded from (sorry, this one is on the members-only site):
>>
>
>Hmmm, This is a familiar sieve. This repository must hold the secrets to fractals to be
>so selective. Undoubtedly this org fosters the same perception of arrogance and through
>that is suffering a declining interest from the greater population of Hams.
>
>Correlatable as far as I can tell. Causal? Seems so from the tenor of grief expressed by
>so many posters here for any of these organizations that hide their knowledge (errors?).
>
>For groups desiring to be representative, it is a sad irony that they with-hold what some
>might find interesting. I bet $money$ underlies this motive.

You pay $34 a year. You get 12 printed, hi-gloss magazines a year in
your mailbox. That's not an unreasonable subscription rate for a
limited-interest specialty magazine. In addition, you get access to
various parts of the arrl.org site, open only to subscribers.

Does qsl.net publish a monthly magazine?

Bob
k5qwg

>
>All such organizations should observe the model of
>http://www.qsl.net
>to find Free and open publication and access to any data. qsl.net has $money$ issues too,
>but doesn't need to charge a 5 drink minimum for a fractal table dance (which is to say
>qsl.net is easily distinguishable from a chip-joint). How do they do it? Through
>subscription and "voluntary" contributions. Volunteerism - this seems to be a lost
>practice for some while an art for others.
>
>73's
>Richard Clark, KB7QHC

35. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r75k7$ou0$1@slb1.atl.mindspring.net>
Source record: 178818

Cecil:

Switch to rum, Tom doesn't like rum!

Peter K1PO

"CAM" <cam2338@bigfoot.com> wrote in message
news:39CD4625.31349977@bigfoot.com...
> Tom W8JI wrote:
> > What I do is stick a straw through the CRT and drink your scotch and
> > water while you aren't looking.
>
> Dang, that's why my glass is almost always empty.
> --
> http://www.mindspring.com/~w6rca

36. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r764hrev1@slb7.atl.mindspring.net>
Source record: 178819

Thread:

"Fractenna" <fractenna@aol.com> wrote in message
news:20000923103850.19801.00000211@ng-mf1.aol.com...
>
> If it is random then it is a fractal.
>

Give a kid a hammer and the whole world becomes a nail!

Peter K1PO

37. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <diFB5.230457$c5.4606933@news2.rdc1.on.home.com>
Source record: 178820

>
> 3) He is a pompous ass and when in front of a judge acting as his own
> attorney as he has been doing all along, well, folks guess what....said
> judge will figure it out just as we all have...see #4
>
>

I doubt Chirp has the balls to act like he does in this newsgroup when dealing with people in person. I believe the jackass should really be pitied.

Barry D.

38. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d72148.8483482@news.akorn.net>
Source record: 178821

On Sun, 01 Oct 2000 10:50:58 GMT, Bob Miller <bamiller@texas.net>
wrote:

>You pay $34 a year. You get 12 printed, hi-gloss magazines a year in
>your mailbox. That's not an unreasonable subscription rate for a
>limited-interest specialty magazine. In addition, you get access to
>various parts of the arrl.org site, open only to subscribers.
>
>Does qsl.net publish a monthly magazine?
>
>Bob
>k5qwg

I didn't know QTH.net has a "magazine".

Is it like Antennex, or do they have technical editing of some sort
the keep the bolognia out? Antennex had all that CFA crap going on
for a year, and was selling plans to build the CFA.

Talk about making money without providing anything.

73 Tom

39. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d7237a.9046452@news.akorn.net>
Source record: 178822

On 30 Sep 2000 23:46:21 GMT, matjake@aol.com (MatJake) wrote:

>Hi
>
>I have been reading this newsgroup for a year and I was just wondering if
>anyone had any experience with helical antennas on HF. I like to experiment and
>was considering building one for ten or 15 meters. Does anyone have any hints
>or know of anyone who has been succesful with idea?
>
>Thanks and 73,
>Matt

Helical loading is one of the more electrically inefficient was to
load an antenna. It has mechanical advantages, but no electrical
advantage.

It works ok if the antenna is large compared to the wavelength or you
want a skinny structure without a heavy lumped inductor or top hat.

Some people claim it works better because the current distribution is
more like a full size antenna, but that isn't actually true.

73 Tom

40. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <IKFB5.8990$qi7.928622@nnrp4.clara.net>
Source record: 178823

I flatly refuse to marry him Reg, regardless of your shotgun! We're just good friends......

73 John G8OZH

p.s. I like your site Reg. There are some very useful programs there. Thanks.

41. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D72C32.BADC8ABF@bigfoot.com>
Source record: 178824

VE9SRB wrote:
> In the case of the re-reflected voltage at the match point, it adds to the
> driving voltage and the above formula is correct.

Your formula is irrelevant to the present discussion because the two
voltages associated with the two powers are not driving the same impedance.

It is true (in the example) that the reflected voltage adds to the driving
voltage to get the forward voltage because the forward voltage is known to
be larger than either of the other two voltages. But you cannot extend the
voltage values to the power values unless you take the two different Z0s
into account. Otherwise, you are assuming the proof of an invalid argument.
When you take the two different Z0s into account, you will find:

Pg = Vg^2/50 = Ig^2*(50) = 100w in the example
P+ = V+^2/300 = I+^2*(300) = 200w in the example
P- = V-^2/300 = I-^2*(300) = 100w in the example

Because the reflected voltage and reflected current are 180 degrees out of
phase, if the reflected voltage adds to the driving voltage to get the forward
voltage, then the reflected current must *subtract* from the driving current
to get the forward current. This is consistent because we know that the forward
current is less than the driving current. Thus:

|V+| = |Vg| + |V-| and |I+| = |Ig| - |I-|
Vg*Ig = 100w, V-*I- = 100w, V+*I+ = 200w
Vg/Ig = 50, V-/I- = 300, V+/I+ = 300

This is certainly a less complicated model than an infinite series of
interference patterns and is perfectly consistent with known measurements.
--
http://www.mindspring.com/~w6rca

42. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39D723F3.281C3882@berkshire.net>
Source record: 178825

somehow i don't think this made it when i tried a couple days ago.....

ok, where are the legal beagles... chip's own words seem to ring a bell that may point out why his copyright infringement claims won't stand up.

Fractenna wrote:
>
> The file was transcribed by Steven Best and thus is a derivative work of the
> aforementioned copyright material, in which the copyrighted material is at
> least substantially recognizable in Best's rendition.
>

> Those who have downloaded this file are so advised that this is copyrighted
> material with an intended controlled distribution; it is not in the public
> domain; its web-based distribution does not constitute 'fair use'.
>

'fair use' and 'derivative work'. use of published material is normally legal as long as it is properly attributed (see the "mi2 loop.txt" file in the same directory as the eznec model), and is not a substantial part of the original work. didn't i remember that roy transcribed this from a published article? as such it was surely just a single figure or two in that article and as such would probably be only a small part of the original work. and if the original wires table wasn't published at all as it sounds then there may even be doubt that it could have been copied in the first place. and being 'recognizable' doesn't necessarily prove infringement. the use of the main melody of very recognizable songs is legal for parodies with new lyrics. speaches and recognizable writings are frequently, and legally, modified and published as parodies. copying and quoting technical work of others then improving or adding to it is a standard practice and does not require prior permission unless using a substantial part of the orginal work.

look at this from a more generic point of view with this situation:
1. person-a publishes an article with pictures, graphs, and word descriptions of a design for item-x. they make certain claims that item-x works a particular way. they do not publish their design files or specific parts of them that would let someone else duplicate their work.
2. person-b reads the article and says 'i can do better'. taking the description of item-x and looking at the pictures they reverse engineer item-x and create their own model of how it works in a different (or even the same) modelling program. from that derived model they learn how item-x performs and find that it has some shortcomings and can be done just as well or better a slightly different way.

first, if this were scientific work i would expect person-b to publish their work citing person-a's work and showing how it was wrong or how it could be

improved. this is done all the time in technical journals.

second, if this were a comercial product i would expect person-b to file a patent application with specific improvements on the original design... and if granted and if person-a wanted to use those changes person-a would have to buy them from person-b.

so fire up that patent process roy, you may have something here if fracky is so keen to squash it!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

43. Mini-G5RV orientation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1440764e51fe50789896f1@news.gte.net>
Source record: 178826

I just purchased a mini-G5RV antenna (40-10 meters) at the local swap meet. It can fit in my backyard fairly well, BUT....

I may have to have it oriented as a "folded" dipole, because I don't think I can stretch it the full length and keep it hidden within the tree that's camouflaging the back part of our home. If I let it get too far out in the open, I'm liable to have the condo association come down on me. Right now I'm trying to put it up inconspicuously. Looks like it will probably be folded at a 45-degree angle at the feedpoint.

What will "folding" it do in terms of radiating pattern and other operating characteristics?

Thanks in advance for any help you can provide.

--

-- // Steve //

Steve Silverwood, KB6OJS Yahoo! Messenger: "steve_kb6ojs"
Fountain Valley, CA AOL Instant Messenger: "steve kb6ojs"
Email: kb6ojs@arrl.net Web: http://home1.gte.net/kb6ojs

44. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001001092544.20197.00000013@ng-ff1.aol.com>
Source record: 178827

>It was meant to be unrelated.
>
>I am just an observer here. There are a lot of people claiming
>to not want to hear about fractal antennas (I am not one of them).
>
>This is how newsgroups split. I think it would be healthy. Its why there
>are
>over 40K now. Its always best to have any group of people committed to a
>topic
>to split off when critical mass hits.
>
>--jeffrey steinberg, kc2guc, scarsdale, ny
>
>In article <20000930105157.17825.00000033@ng-mg1.aol.com>, fractenna@aol.com
>says...
>>
>>>
>>>How about just creating rec.radio.amateur.antenna.fractal
>>>for those who want to discuss this topic and leave
>rec.radio.amateur.antenna
>>>for "conventional" antennas?
>>>
>>>In article <8r3jdh$k2c$1@bob.news.rcn.net>, coneal@ultranet.com says...
>>>>
>>>>When he looks in the mirror, he sees
>>>>the most beautiful person he has ever seen....
>>>>that's the problem...
>>
>>Hi Jeff--
>>
>>Mr. Lewallen made a public and globally accessed statement stating that the
>>(unauthorized) file was available on the EZNEC web site. If he had made such
>a
>>post on ' alt.moxie' then the public notification of unauthorized use would
>>have been posted there.
>>
>>This has nothing to do with a fractal antenna or anything else that you
>allude
>>to. It has to do with intellectual property, ownership, and infringement.
>>
>>Your suggestion is a good one but unrelated.
>>
>>73
>>Chip n1IR

>

Hi Jeff--

Certainly there is justifiable focus.

But effectively you have this already, with the existence of the fractal antenna reflector. Its moderated to boot, so the personal stuff never makes it across.

73
Chip N1IR

45. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001001092806.20197.00000014@ng-ff1.aol.com>
Source record: 178828

>>Could you please tell us why you feel it necessary to attack me, personally,
>in this way?<
>
>IMHO, it is not necessary to attack Chip in this way. For one thing, it is
>always unwise to tell anyone anything they already know. Instead, preserve
>the
>bile. Gary's right--too many people spending too much time pounding thin air
>with a rubber mallet. Very Don Quixote, and you might hit your kneecap.
>
>73
>
>Rick K1BQT
>

It doesn'y matter to me WHY people choose to act reasonably and rationally.
Doing it is the 'pudding' , to mix metaphors:-)

In any case the notion of attacking me personally never made sense, never makes
sense, will never make sense. Case in point: attacking me for posting an
invitation to three lists!

73
Chip N1IR

46. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001001093117.20197.00000015@ng-ff1.aol.com>
Source record: 178829

>I haven't seen as much of the commercials as I am sure some of you have. I
>did
>offer Chip my opinion of the appropriateness of his "This thread is closed"
>series of posts.
>
>73,
>Ed Hare, W1RFI
>

Perhaps you can proffer what it was that was being advertised(i.e.
commercials)?

You can't because there isn't.

That like some jerk saying that I'm advertising Fractal Antenna Systems, Inc
when I point out the relevant web page on the air-- so they can see my
antenna...

If that's 'commercial', then get the FCC on me!

Chip n1IR

47. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D73AE4.38796A95@bigfoot.com>
Source record: 178830

VE9SRB wrote:
> So, for 100 watts +
> 100 watts to equal 200 watts, 173.2 volts + 173.2 volts would have to equal
> 244.95 volts.

You forgot to take the difference in Z0s into account.
One of the 100w values is into a Z0 of 51.5 ohms and the
other is into a Z0 of 300 ohms. Going from a 51.5 ohm environment to a 300 ohm
environment requires a transformation. You are ignoring the transformation
of voltage and current that Mother Nature insists upon when the Z0 changes.

For 100 watts into 51.5 ohms plus 100 watts into 300 ohms to equal 200 watts
into 300 ohms, 71v plus 173v would have to equal 244v and, WONDER OF WONDERS,
it does exactly that. 71^2/50=100 173^2/300=100 244^2/300=200
71+173=244 Funny how that works.

> 2) Transmission line theory demands that the level of power reflection at
> *any* impedance junction be a function of the impedance discontinuity at the
> junction. In this example, we have an impedance discontinuity between a
> 51.5 ohm line and a 300 ohm line. Transmission line theory tells us that a
> total reflection of power cannot occur at this junction.

Transmission line theory tells us that a reflection will occur at a 51.5/300
ohm junction but there are no reflections on the coax. This says that *total
acceptance* of forward power occurs at a 51.5/300 ohm junction when it is
Z0-matched. If you have total acceptance of forward power on one side of the
Z0-match then you must have total rejection of reflected power on the other
side. This model is consistent, simple, and useful. Why do we need to talk
about an infinite series of interference patterns? What is wrong with assuming
the 1/2WL series section has transformed the impedance to 51.5 ohms thus
making the impedance discontinuity effectively disappear? What mistake have
amateurs been making when they used this concept over the past 70 years.
Would they have radiated any more power if they had adopted your approach?

> So, the correct source
> power delivered into the 300 ohm line is 50 watts not 100 watts.

This is simply not true because we can measure otherwise. We know all the
generated power is delivered to the load in a lossless Z0-matched system.
Source power delivered to the Z0-match is measured at 100w and continues
to be 100w. No amount of words is going to change the meter reading.

We know there are no reflections at the 51.5/300 ohm junction because there
are no reflections on the coax. The generator power has nowhere to go except
into the 300 ohm line. The thing that makes this possible is the impedance
transformation going on in the 300 ohm line. The reflections from the load

arrive at exactly the right phase and magnitude to cancel any reflections that try to happen on the coax. Even your infinite series of interference patterns shows this to be true. THERE IS NO REFLECTED POWER ON THE COAX.

> The source power delivered to the 300 ohm line is 50 watts.

Nope it's not because we can measure otherwise. You cannot source 50 watts and get 100 watts to the load. Are you really pulling our legs with all this perpetual motion stuff?

> Now, the impedance match. How does it occur?

It occurs the same way a stub can be cut to present an impedance other than Z0. The reflected waves transform the 51.5/300 ohm impedance into a 51.5 ohm Z0-match. The forward power from the generator sees a virtual 51.5 ohms at the Z0-match so there are no reflections. Your infinite series of interference patterns shows that the impedance bump at the Z0-match disappears during the transient state and the reflections from the Z0-match become zero. Don't you understand that the phasor addition of two voltages can result in zero voltage and the phasor addition of two currents can result in zero current? There is zero reflected voltage and zero reflected current on the coax after steady-state conditions are reached.

Stubs and series section transformers present virtual impedances to the incident waves. Complete cancellation of reflected power is often the result. Saying the components of the cancelled waves are still there after they have been canceled takes us into the realm of the metaphysical.
--
http://www.mindspring.com/~w6rca

48. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001001093416.15454.00000005@ng-fp1.aol.com>
Source record: 178831

>From: Bob Miller bamiller@texas.net

> In addition, you get access to various parts of the arrl.org site, open
> only to subscribers.

Actually, the majority of the ARRL site is open to all comers, not just subscribers. The members-only section includes an online publication, downloads of the past QST Product Reviews and a fully searchable QST/QEX index (with categorization). The majority of the members-only pages are related to the aspect of ARRL that non-members are choosing not to buy -- QST articles. Seems fair to me; if people are not interested in a QST subscription, then it is reasonable to presume that they would not be interested in the articles and indices from same.

>Does qsl.net publish a monthly magazine?

Not to my knowledge; they also do not maintain support for a field organization of volunteers, an educational department that maintains contact and support for school teachers using ham radio in the classroom, a DC office that attends numerous meetings and functions, and prepares comments in defense of amateur spectrum, a technical staff that does the same.

The concept that everything ARRL offers should be free so that some individuals do not have to chip in to help pay for those sorts of things because QSL.NET offers some free things on its web page so it can have enough traffic to charge money for its ads is really mixing apples and oranges, IMHO.

I have to wonder, too, how the QSL.NET pages compare in terms of available articles for download to the 100+ pages and 500+ QST/QEX articles available for download from the ARRL pages at:

http://www.arrl.org/tis

To comment a bit on the previous post:

>>How do they do it? Through subscription and "voluntary"
>>contributions.

Over the years, I have noted that most who say this have not made such voluntary contributions personally. :-)

>>Volunteerism - this seems to be a lost practice for some while an
>>art for others.

In case anyone does not understand, I will add that the ARRL HQ staff is paid; the ARRL Board of Directors -- the ones who set ARRL policy -- are unpaid, and elected by the direct vote of ARRL members.

73,
Ed Hare,
and, in case any of the non-members don't know, me:
ARRL Lab

49. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D73CF3.205428E4@bigfoot.com>
Source record: 178832

Richard Clark wrote:
> Then why call it Rg?

I might be a dissipative loss resistance in series with an non-
dissipative source resistance.

> What if RL is complex?

Why make things more complex than necessary?
--
http://www.mindspring.com/~w6rca

50. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <stegrkjq753f08@corp.supernews.com>
Source record: 178833

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D6AB84.B83927C9@bigfoot.com...
> Nick Kennedy wrote:
> > ... the value can be as low as you want it to be, all the way
> > down to zero.
>
> Say Nick, would you send me one of those amps with a source impedance
> of zero? That would be a cool amp in more ways than one.
> --

Hello Cecil--

I sure will, but you're going to need a boiler to power it since my comments were on generators and not on rf amps. My point being that generators are *not* analogous to rf amplifiers in this regard.

BTW--to clarify the truncated quote above, lest anyone think that I stated that the actual source impedance of a generator can be made zero--I didn't. I said that using the "dynamic" method of changing the load and inferring the impedance from the terminal voltage change (which may be as low as zero), could give the false impression that the machine's impedance is zero.

73--Nick, WA5BDU

51. Re: Mini-G5RV orientation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D744D2.E9FDDD34@bigfoot.com>
Source record: 178834

Steve Silverwood wrote:
> What will "folding" it do in terms of radiating pattern and other
> operating characteristics?

Don't fold it back upon itself. Let the ends hang down.
--
http://www.mindspring.com/~w6rca

52. How to get a 20m diapole resonant on 40 and 10 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Ralph Blach <rblach@intrex.net>
Message-ID: <39D7498B.874D1F5D@intrex.net>
Source record: 178835

I have installed a 20 meter diapole at my house. I only have room for this antenna and I was wondering how to get it resonant on 40m and 10 meters.

Any help or ideas would be appreciated.

--
Ralph "Chip" Blach
KF4WBK
Chapel Hill, North Carolina

53. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_jIB5.1864$0n.170771@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178836

Hi Cecil:

Its been fun.

What you measure and "see" in the transmission line system are the steady state conditions, nothing else. You need to look at the transient response to see what is really happening with wave reflections.

I have no intension of turning this into an argument on points that I know to be so basic to understanding transmission line theory, so I will stop at this message. You have stated your opinion, I mine. We disagree, which is the resolution I expected when we entered into this discussion.

Thanks, Steve

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D73AE4.38796A95@bigfoot.com...
> VE9SRB wrote:
> > So, for 100 watts +
> > 100 watts to equal 200 watts, 173.2 volts + 173.2 volts would have to
equal
> > 244.95 volts.
>
> You forgot to take the difference in Z0s into account.
> One of the 100w values is into a Z0 of 51.5 ohms and the
> other is into a Z0 of 300 ohms. Going from a 51.5 ohm environment to a 300
ohm
> environment requires a transformation. You are ignoring the transformation
> of voltage and current that Mother Nature insists upon when the Z0
changes.
>
> For 100 watts into 51.5 ohms plus 100 watts into 300 ohms to equal 200
watts
> into 300 ohms, 71v plus 173v would have to equal 244v and, WONDER OF
WONDERS,
> it does exactly that. 71^2/50=100 173^2/300=100 244^2/300=200
> 71+173=244 Funny how that works.
>
> > 2) Transmission line theory demands that the level of power reflection
at
> > *any* impedance junction be a function of the impedance discontinuity at
the
> > junction. In this example, we have an impedance discontinuity between a
> > 51.5 ohm line and a 300 ohm line. Transmission line theory tells us
that a
> > total reflection of power cannot occur at this junction.

>
> Transmission line theory tells us that a reflection will occur at a
51.5/300
> ohm junction but there are no reflections on the coax. This says that
*total
> acceptance* of forward power occurs at a 51.5/300 ohm junction when it is
> Z0-matched. If you have total acceptance of forward power on one side of
the
> Z0-match then you must have total rejection of reflected power on the
other
> side. This model is consistent, simple, and useful. Why do we need to talk
> about an infinite series of interference patterns? What is wrong with
assuming
> the 1/2WL series section has transformed the impedance to 51.5 ohms thus
> making the impedance discontinuity effectively disappear? What mistake
have
> amateurs been making when they used this concept over the past 70 years.
> Would they have radiated any more power if they had adopted your approach?
>
> > So, the correct source
> > power delivered into the 300 ohm line is 50 watts not 100 watts.
>
> This is simply not true because we can measure otherwise. We know all the
> generated power is delivered to the load in a lossless Z0-matched system.
> Source power delivered to the Z0-match is measured at 100w and continues
> to be 100w. No amount of words is going to change the meter reading.
>
> We know there are no reflections at the 51.5/300 ohm junction because
there
> are no reflections on the coax. The generator power has nowhere to go
except
> into the 300 ohm line. The thing that makes this possible is the impedance
> transformation going on in the 300 ohm line. The reflections from the load
> arrive at exactly the right phase and magnitude to cancel any reflections
> that try to happen on the coax. Even your infinite series of interference
> patterns shows this to be true. THERE IS NO REFLECTED POWER ON THE COAX.
>
> > The source power delivered to the 300 ohm line is 50 watts.
>
> Nope it's not because we can measure otherwise. You cannot
> source 50 watts and get 100 watts to the load. Are you really
> pulling our legs with all this perpetual motion stuff?
>
> > Now, the impedance match. How does it occur?
>
> It occurs the same way a stub can be cut to present an impedance
> other than Z0. The reflected waves transform the 51.5/300 ohm
> impedance into a 51.5 ohm Z0-match. The forward power from the
> generator sees a virtual 51.5 ohms at the Z0-match so there are no
> reflections. Your infinite series of interference patterns shows that

> the impedance bump at the Z0-match disappears during the transient
> state and the reflections from the Z0-match become zero. Don't you
> understand that the phasor addition of two voltages can result in zero
> voltage and the phasor addition of two currents can result in zero
> current? There is zero reflected voltage and zero reflected current on
> the coax after steady-state conditions are reached.
>
> Stubs and series section transformers present virtual impedances
> to the incident waves. Complete cancellation of reflected power
> is often the result. Saying the components of the cancelled waves
> are still there after they have been canceled takes us into the
> realm of the metaphysical.
> --
> http://www.mindspring.com/~w6rca

54. Still Setting Records

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <1IIB5.46072$ux3.5481@newsfeed.slurp.net>
Source record: 178837

Hi, All Concerned:

Among other things: I notice that Bub, BA, the Boston University Bloviator, By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid 1000+ posts a week to wreck.radio.a.a, over the 3 weeks prior to this last, according to Deja stats.

He continues his wreckord pace, according to deja, at 1400 posts this last week. 56 pages of lyrical, deathless prose.

Kewl! That thing can really post! Or, does he have help?

Thought the 'Subject' below was especially appropriate. Bogus???????????

****
<SNIP
Results for: "fractenna" Save this Search

SEARCH AGAIN for "fractenna" Products | Northern Light

Messages
1-25 of 1400 matches
Page 1 of 56 Next >>

Date Subject
Forum Author
09/29/2000 WARNING: BOGUS SPAM ATTEMPTS rec.radio.amateur.ant
Fractenna
SNIP>
****

K3BHJ

55. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <acdetskebfrlfrh0vtq4kcdota69u0cght@4ax.com>
Source record: 178838

On Tue, 26 Sep 2000 20:38:17 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:
>Wes, N7WS wrote:
>"How come this big metal thingee (the tower) can stand up there above
>ground and take all sorts of lightning hits without structural damage
>but the same steel, when encased in concrete and buried, somehow
>vaporizes and explodes the cement.(?)"
>
>Electric arcs produce extreme temperatures. We use arcs to melt metals
>and to weld. Where lightning strikes or jumps a gap, pitting occurs.

That's true, which is why we don't want any gaps in the path of the lightning discharge. All of the conductors must be securely electrically bonded together.

>Steel is more resistive than copper but lightning is so fleeting that
>the resistive heating in a tower or in the rebars of its base is not
>very impressive.

Yeah, about enough to raise the temperature of a cup of coffee 2 degrees.

>Steel is less resistive than concrete. When lightning strikes the
>concrete will have the larger voltage drop and thus the larger power
>dissipation.

True, which is why we need a lot of contact with a lot of concrete. That spreads the current and prevents any one spot from getting excessively hot. That's what a Ufer is designed to do.

>Concrete is an ongoing chemical reaction between the cement and water in
>the mix which sticks the pieces of aggregate together. At first the
>reaction is rapid. You can feel the heat produced by the reaction in
>fresh concrete. But, as more and more of the constituents gel, fewer
>remain to enter the reaction and the process slows but is NEVER
>completed. Never in a million years, it is believed. So, conductive
>water always remains to provide passage to an electric current.

Concrete never really cures, but after 90 days the amount of free water left in the concrete is very small, a small fraction of one percent of the water used to mix the concrete. The amount of free water continues to decrease, at an exponentially slower rate, for as long as the concrete exists. It will never reach zero, but it will approach zero arbitrarily closely as time goes on.

>Lightning travels between the rebar and the earth through the concrete.
>It finds moisture a better path than other constituents of the concrete.
>Enough resistance is in the water to produce superheated steam as there
>is so much lightning current and such small bubbles of water. Think

>small steam boiler explosions.

The current is carried by the hydrated cement (that's a chemically bonded solid, not a liquid solution). The residual free water in the micropores, each about 20 microns diameter, and isolated from other micropores, is surprisingly pure and doesn't carry much current at all. The presence of the micropores actually serves to reduce the conductivity of the concrete because they can be considered to be tiny insulating spheres embedded in a conductive matrix of cement. To raise the temperature of the water in the micropores, the surrounding cement has to get hot and conduct the heat to the water. Concrete is a relatively poor conductor of heat.

>Concrete is hard to crush, but easily snapped like a Hershey bar if
>subjected to tensile forces. The exploding water bubbles break away the
>seams between vapor cells and crack the concrete.

This doesn't happen, if you spread the currents properly. That's what the bonded rebar cage and the concrete jacket do. By spreading the current through a large volume, current density at any particular spot is kept low. We're effectively dealing with many many resistive paths in parallel. The current divides among these many paths, and the total resistance is small. (Picture millions of 5k ohm resistors in parallel. Total resistance is tiny, and current through any one resistor is also tiny, which gives a tiny I^2 * R heating at any particular spot.)

Lets do some numbers. A properly constructed Ufer should have less than 5 ohms resistance to Earth. Now an average lightning bolt has a current of 18 kA, and a duration of 12 uS. The number of joules dumped in the concrete is then

E = I^2 * R * t = 18000^2 * 5 * 12E-6 = 19.44 kj

Now the average amateur tower base has about 2 cubic meters of concrete, or about 8E6 cubic centimeters, so the energy per cubic centimeter is 0.00243 joule per cubic centimeter. It takes 4.18 joules to raise the temperature of 1 cubic centimeter of water 1 degree Celsius. So we shouldn't expect the concrete to become perceptably warm to the touch from a lighting strike, and indeed it doesn't.

Of course there isn't a perfectly even distribution of current throughout the concrete. The current density is highest right at the surface of the rebar. A minimum Ufer must have 20 lineal feet of 1/2 inch rebar embedded in the concrete. That's a surface area of 2432 square centimeters. That gives us a current density at the surface of the rebar of 7.4 amps per square centimeter. That's surprisingly low isn't it? A good tower base or pier will use more than 20 lineal feet of rebar in its construction, reducing that current density even more. That's why it works.

Now if you only had a foot long J bolt embedded in the concrete, the current density would be much higher, about 150 amps per square centimeter, and then you could have problems with hot spotting. But that's not permitted by the NEC as a standalone ground, and since it isn't Code, your insurance doesn't have to pay off if your base cracks and the tower falls.

Gary
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534 Shannon Way | We break it |
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56. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <39D756A1.A5A8A722@hotmail.com>
Source record: 178839

Are you mentally ill? I'd rather read about baldness cures, get out of
debt free and pyramid schemes than your spam-rubbish.

Don't go away mad, just go away wanker.

MC

Fractenna wrote:
>
> To All Readers:
>
> It has come to my attention that Roy Lewallen, W7EL, has posted an unauthorized
> copyrighted file on his
>
> http://www.eznec.com
>
> web site.
>
> The file is of a fractal antenna, commonly dubbed 'MI2' . The copyright holder
> of this material is Fractal Antenna Systems, Inc., which has not been ask for ,
> nor has granted, publication and distribution of this file by Mr. Lewallen.
>
> The file was transcribed by Steven Best and thus is a derivative work of the
> aforementioned copyright material, in which the copyrighted material is at
> least substantially recognizable in Best's rendition.
>
> It has been initially assumed that Mr. Lewallen was not aware of the copyright
> infringement, however in private correspondence he has chosen to deny that such
> copyright protection exists.
>
> Mr. Lewallen is being formally sent a letter requesting that he cease and
> desist the further distribution of this copyright material and will have until
> December 15, 2000 to comply. Failure to do so will lead to suit against Roy
> Lewallen d/b/a Lewallen consulting/EZNEC.
>
> Those who have downloaded this file are so advised that this is copyrighted
> material with an intended controlled distribution; it is not in the public
> domain; its web-based distribution does not constitute 'fair use'.
>
> Copies of the file are available--under held copyright--by request, to those
> members of the fractal antenna reflector:
>
> fractalantenna-subscribe@egroups.com
>
> In a few weeks, it will also be available as a conditional(licensed)download

> from the web site
>
> http://www.fractenna.com
>
> Readers are advised not to break copyright law by downloading said file from
> the EZNEC web site.
>
> Thank you for your help and understanding.
>
> Sincerely,
>
> Nathan Cohen, Ph.D.
> CTO
> Fractal Antenna Systems, Inc.

57. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39D75639.E241E4DB@wb6hqk.ampr.org>
Source record: 178840

CAM wrote:
>
> Nick Kennedy wrote:
> > If we have a black box (voltage source and
> > series impedance assumed), we can measure its impedance by loading it to a
> > certain current draw and measuring the terminal voltage, then changing the
> > current drawn and measuring the voltage again. This should allow a fairly
> > easly calculation of the series impedance in that Thevenin box.

The procedure you outlined is often referred to as a 'load pull test'
and is commonly used to determine the source impedance of transformers,
generators, amplifiers and arbitrary networks, linear and nonlinear.

> Unfortunately, multiplying that series impedance by the square of the
> current through it often does not yield the true dissipation inside the
> generator. Why not?

Why should it?

A load pull test measures the rate of change of source voltage with
respect to changes in load current. It measures a source
characteristic, whose dimension happens to be ohms. The test does not
prove the existence of an actual series impedance causing an actual
voltage drop (and associated electric field) proportional to current
flow.

In order for power to be generated or dissipated, there must be both a
current flow and a potential (voltage drop) for that current to be
'pushed through'.

As Tom Donaly mentioned earlier, power production and dissipation is
associated with the divergence of the Poynting vector, E X H where E is
the electric field in (volts/meter) and H is the magnetic field
(amps/meter). 'X' is the vector cross product.

Unless the source impedance is a real, physical impedance (complex
permitted), there will not be a physical voltage drop associated with
it. Power generation or dissipation requires a current flowing through
a voltage drop.

bart
wb6hqk

58. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r7l1i$9qg$0@208.207.71.162>
Source record: 178841

Richard Clark wrote:

> On Sat, 30 Sep 2000 21:38:18 -0500, CAM <cam2338@bigfoot.com> wrote:
>
> >Richard Clark wrote:
> >> Your allowing that
> >> >a "virtual short" does not stand up under a rigorous
> >> >mathematical treatment
> >> is in marked contrast to Walt's rigorous mathematical treatment.
> >>
> >I haven't read the CQ articles but I know the phasors don't act
> >at a virtual short exactly the way they act at a dead short. But
> >we know all about the steady state signals so we can make the
> >"theory" fit the known circumstances. Maybe we can say it is
> >virtually a short. :-) Maybe that's what Walt meant in the first
> >place.
>
> Hi Cecil,
>
> Maybe.
>
> 73's
> Richard Clark, KB7QHC

Walt's book "Reflections" wasn't written for engineers, rather toward a ham radio hobby in which Walt clearly understood the need for easily understandable explanations for antenna and transmission line phenomena. Engineers and scientists don't need what he wrote, but a great many hams do. So he couched his comments in terms that they could much more easily understand. Rather than being a scientific treatise it was aimed directly at a populace of hobbyists who need the information but who for the most part certainly are not scientists nor engineers.

It is easy to understand why engineers and scientists would not subscribe to any technical publication wherein they find any hint of technical inaccuracy-even the use of a theorem that is well known to apply strictly to only theoretical cases. But within the world of ham radio seems to me that it must be viewed on balance as a greatly positive result in that many hams who have studied "Reflections" find their understanding of its subject material is greatly enhanced. And clearly not all professionals find a need to criticise the seemingly minor technical liberties taken in the name of simplification and ease of understanding by a ham radio populace most of whom don't have the advanced math skills necessary to analyze the underlying science.

If only Walt had thought to preface his use of the Conjugate Matching theorem with a mild disclaimer such as "While these remarks are not totally accurate from a purely scientific standpoint, here's essentially what happens..." he could have saved lots of bandwidth here and numerous trees from being pulped into paper to print all the protestations. I'd bet he would have, had he had any idea what the consequences of the omission would be. After all, he was writing to hams and I'm sure that he understands the science fully. Hopefully with the Worldradio edition some such disclaimer will be included. I'd hate to see this bru-haha go all over again.

73, Dick Carroll W0EX

59. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <l2metsknn1b0730ubm8u9s7n035p2v00ut@4ax.com>
Source record: 178842

On Mon, 25 Sep 2000 07:35:47 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>Reg Edwards wrote:
>>
>> Roy said -
>> > My commercial
>> > rig has an ALC, and it produces 100 watts out into any
>> load, provided
>> > that the mismatch isn't so large as to make it shut down.
>> The rig's
>> > efficiency might be a little less (or more) when presented
>> with a 1.8:1
>> > mismatch, but why should I care?
>> ================================
>>
>> Roy, you have a remarkable rig if it can provide 100 watts
>> into any load, at high efficiency, up to the point when the
>> swr is 1.8:1.
>> . . .
>
>It's an Icom IC-730. I haven't exhaustively tested it over every
>possible impedance which can cause an SWR of 1.8:1 or greater, but the
>SWR of the load it sees is this value or greater more often than not.
>And every time I've checked the net output power with the Bird wattmeter
>over the 18 years I've had the rig, it's 100 watts within the meter's
>accuracy.

Closed loop feedback systems can be wonderful things as long as the closed loop gain is well below the open loop gain of the amplifier, and the amplifier isn't overdriven such that it becomes voltage or current limited. That would appear to be the case for the IC730. It appears to be behaving like an ideal opamp.

I generally don't like ALC systems, since as often applied they produce amplitude distortion in what should be a linear amplifier system. (That's particularly harmful for digital modulations such as PSK31.) But if the feedback system is intelligently designed, it can linearize an amplifier system faced with a varying load. Intelligent design includes using a conservatively rated amplifier so that its rated output is well below the maximum possible output you could get from it if driven to the point of being voltage or current limited.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
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60. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8r7nvbrpb1@nnrp1.deja.com>
Source record: 178843

In article <39D73AE4.38796A95@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> Stubs and series section transformers present virtual impedances
> to the incident waves. Complete cancellation of reflected power
> is often the result. Saying the components of the cancelled waves
> are still there after they have been canceled takes us into the
> realm of the metaphysical.

Ah, but the realm of the metaphysical is used to explain why a balanced
transmission line doesn't radiate. From the two sides of the line there
are two fields that (ideally) exactly cancel. So you can say the two
fields are still there even though they've cancelled each other.
It's analogous to the transformer case. If new hams have no trouble
accepting two fields cancelling, then why would they have any trouble
with two wave components cancelling?
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

61. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8r7ptm$ta7$1@nnrp1.deja.com>
Source record: 178844

In article <8r7l1i$9qg$0@208.207.71.162>,
Dick Carroll <dixie@townsqr.com> wrote:
> Walt's book "Reflections" wasn't written for engineers, rather
toward
> a ham radio hobby in which Walt clearly understood the need for easily
> understandable explanations for antenna and transmission line
phenomena.
> Engineers and scientists don't need what he wrote, but a great many
> hams do. So he couched his comments in terms that they could much more
> easily understand. Rather than being a scientific treatise it was
aimed
> directly at a populace of hobbyists who need the information but who
for
> the most part certainly are not scientists nor engineers.
>
> It is easy to understand why engineers and scientists would not
> subscribe to any technical publication wherein they find any hint of
> technical inaccuracy-even the use of a theorem that is well known to
> apply strictly to only theoretical cases. But within the world of ham
> radio seems to me that it must be viewed on balance as a greatly
> positive result in that many hams who have studied "Reflections" find
> their understanding of its subject material is greatly enhanced. And
> clearly not all professionals find a need to criticise the seemingly
> minor technical liberties taken in the name of simplification and ease
> of understanding by a ham radio populace most of whom don't have the
> advanced math skills necessary to analyze the underlying science.
>
> If only Walt had thought to preface his use of the Conjugate Matching
> theorem with a mild disclaimer such as "While these remarks are not
> totally accurate from a purely scientific standpoint, here's
essentially
> what happens..." he could have saved lots of bandwidth here and
> numerous trees from being pulped into paper to print all the
> protestations. I'd bet he would have, had he had any idea what the
> consequences of the omission would be. After all, he was writing to
hams
> and I'm sure that he understands the science fully. Hopefully with
the
> Worldradio edition some such disclaimer will be included. I'd hate to
> see this bru-haha go all over again.
>
> 73, Dick Carroll W0EX
>

Hi Dick,
I realize you're trying to justify why Reflections is the way it is. However, I absolutely disagree with the idea that ham radio publications should be dumbed down with inaccuracies in order that the typical ham can understand it. Difficult concepts can often be explained in a way that is technically accurate but that is easily understood by someone lacking an engineering background. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

62. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D76950.601E5091@eznec.com>
Source record: 178845

I honestly believe that the purpose of all this is to draw attention to Chip, not to redress any kind of damage to him or Fractenna. It's succeeding in doing that as long as people respond. (And by this response I'm also guilty.)

As I told Chip in response to his email, there is no material on my site which is copyrighted by Fractenna. To date, no suit has been filed, and I'm not holding my breath. If one is filed, it should certainly be interesting to anyone interested in copyright law, to say nothing of students of psychology. In the meantime, the content of my web site remains unchanged, and I join the growing list of people who Chip has threatened to sue but hasn't.

So my request is to just ignore all the huffing and puffing, and not worry about it. It just plays into what I feel is the whole purpose of the exercise -- to draw attention to Chip. The more outrageous and bizarre the claims and threats, the more attention is drawn. I'm sure that this, rather than any sort of logic, is the reason for the level of claims and threats being put forth.

Roy Lewallen, W7EL

63. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <jfnetsgstvotqm7cgdmr4c63h9fm7a6iu3@4ax.com>
Source record: 178846

On Sat, 30 Sep 2000 21:23:32 -0500, "Nick Kennedy" <nkennedy@tcainternet.com> wrote:
>
>> The second law of thermodynamics limits the efficiency of the process of
>> turning heat into electricity to probably 60-something percent, with the
>> remaining heat being wasted out the cooling tower at the generating
>> station. So only 60% of the heat required to make the energy you used
>> ended up in your bathroom.
>>
>> Dennis Ferguson
>
>Hello Dennis-
>
>It's even worse than that. Actually, the efficiency of a modern steam
>turbine electric power plant is about 30%. And they do push the theoretical
>limit pretty hard.

That's about right for a nuclear plant, because primary loop temperature is
kept relatively low.

(Thermal efficiency is relatively unimportant for a nuclear plant, of course,
because fuel costs are a negligible part of their bussbar power cost. Most of
the cost is debt service on the horrific capital costs incurred building them
in the US. Most of that is due to the average 12 years it takes to get a plant
licensed and producing power in the US. Racking up interest for that long before
generating the first billable kilowatt-hour makes the debt load huge. By contrast,
it takes less than 12 months in France, and less than 2 years in Japan to get
a plant licensed. That makes nuclear power much more economical in those
countries, France is now 86% nuclear and Japan is over 50% nuclear while
the US remains less than 6% nuclear.)

But coal, oil, and gas fired plants do have better thermal efficiencies than that.
More on the order of 38% for older coal fired plants. Combined cycle plants
have broken the 50% thermal efficiency barrier at the bussbar within the last
10 years, but they use an extremely high primary temperature. That puts rather
extreme requirements on the topping turbine loop (essentially a jet engine),
which makes them expensive to build and maintain. They also have to use
high quality fuel to avoid blade erosion in the primary loop. Few such plants
are in operation because their bussbar costs simply aren't competitive.

Of course by the time the power is transmitted to your home, it has encountered
a number of other losses. So thermal efficiency at the wall plug may be quite a bit
lower than at the power plant bussbar. If you charge batteries and run an electric
car, the total system efficiency begins to really reek, less than 6% end to end. A
conventional internal combustion engine in a car handily beats that, example a
Ford 351 Cleveland engine has a 28% thermal efficiency when operated at 80%

of torque peak, and a 13% overall efficiency on the EPA driving cycle test (designed to simulate typical driving conditions, though your mileage may vary). Diesels do better, as high as 45%, with typical numbers in the mid-30s.

Electric cars don't reduce pollution, calling them zero emissions is a non-sequitor. What they do is export pollution to a generating plant located elsewhere (the old not in my backyard syndrome), and at a lower total system efficiency so more fuel has to be burned than would be the case by simply using a combustion engine in the car. The power plant may have scrubbers that clean their exhaust of particulates and hydrocarbons better than the catalysts used on cars, but they can't scrub out the excess greenhouse gas (CO2) they have to produce due to the lower system efficiency.

OK, extreme topic drift there, but it is a pet peeve of mine that we are being misled about these things by certain supposedly environmentalist groups and the politicians who cater to them. I'm particularly irked by the Clinton/Gore people who signed the greenhouse treaty, yet are doing their best to prevent nuclear plants from being built and are pushing electric cars. That can do nothing except increase greenhouse gas generation, as well as making us more dependent on imported fossil fuels to fire the generators. (Clinton/Gore have pronounced domestic coal "too dirty", and are pushing for new power plants to be either natural gas or oil fired.)

Gary
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64. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <A2jXOYTkCx0aJPw3aP3bV81zDcl=@4ax.com>
Source record: 178847

On 1 Oct 2000 15:25:38 GMT, Dick Carroll <dixie@townsqr.com> wrote:

> Walt's book "Reflections" wasn't written for engineers, rather toward
>a ham radio hobby in which Walt clearly understood the need for easily
>understandable explanations for antenna and transmission line phenomena.
>Engineers and scientists don't need what he wrote, but a great many
>hams do. So he couched his comments in terms that they could much more
>easily understand. Rather than being a scientific treatise it was aimed
>directly at a populace of hobbyists who need the information but who for
>the most part certainly are not scientists nor engineers.
>

Hi Dick,

Yes, I have a copy of his book, but it is not currently on my shelf because I've loaned it out. It is quite useful and well written. Absolutely everything above is correct and glowingly describes why he is so revered.

As for virtual shorts and opens - quite turgid. In fact the coverage of this topic has much too engineering to make an appeal to simplicity.

> If only Walt had thought to preface his use of the Conjugate Matching
>theorem with a mild disclaimer such as "While these remarks are not
>totally accurate from a purely scientific standpoint, here's essentially
>what happens..."

Maybe.

73's
Richard Clark, KB7QHC

65. Re: Car Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gunner Dave Kc6old <gunnerd@earthlink.net>
Message-ID: <39D76D9E.D41DCC0A@earthlink.net>
Source record: 178848
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf

Thats what I run at HOME! (NO exterior antennae allowed) Works ok.
Dave Kc6old

Jeffrey Herman wrote:
>
> Guys, a compromise between glass-mounted and exterior-mounted
> antennas is this: Take the end of your feedline and remove about
> 19 inches of the outer cover; at that point separate the inner
> conductor from the copper braid and run them opposite to each other
> and perpendicular to the feedline, taping them to your rear window:
>
> inner cond. copper braid
> -------------||--------------
> ||
> ||
> || coax feedline
> ||
> ||
>
> It's nothing but a 2m dipole made entirely from the last 19 inches
> of your feedline, taped to your car's back window. If the horizontal
> orientation bothers you, run the two legs at a 45 degree angle from
> the vertex (where the conductors separate) with that point taped to
> the base of the window:
> \ /
> \ /
> \ /
> \ /
> \/
> ||
> ||
> ||
>
> No muss, no fuss, no damage to the car, and much better results than
> the glass-mounted "dummy load."
>
> It makes a fine indoor antenna at home, too; mount it as a vertical
> dipole taped to a window.
>
> 73, Jeff KH6O

--
GUNS, KITES, RADIOS, ROCKETS, TREBUCHET---
DARN! She's Right! I DO Play ALL The Time!

66. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D76EB6.49A44E6B@eznec.com>
Source record: 178849

These recent postings emphasize the importance of defining the system when one speaks of efficiency. Considering the system to be Ed's house, the efficiency of his heater is 100%. The efficiency of the system consisting of power plant, distribution system, and Ed's house, as Gary points out, is more in the 30% range. If you consider the system input to be the sunlight used to grow the plants which became coal or natural gas, the efficiency is a whole lot less. Then beginning with the Sun's nuclear fuel. . .

Roy Lewallen, W7EL

67. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <QWzXOQekkngSSUwQl7MX4YgGp1n=@4ax.com>
Source record: 178850

Hi Cecil,

>Richard Clark wrote:
>> Then why call it Rg?
>
>I might be a dissipative loss resistance in series with an non-
>dissipative source resistance.
is making Rg more complex than necessary, we already had a Z.

Who's on third?

>> What if RL is complex?
>
>Why make things more complex than necessary?

Making RL complex generalizes the problem, is certainly far closer to reality, and makes it simpler by discarding the false presumptions and artificial constraints to fit the special cases posed here. This perhaps is stealing the march on someone's presentation. And yet in the past 4 or 5 years I've yet to see this debate get halfway there (Zeno's paradox seems to be SOP).

73's
Richard Clark, KB7QHC

68. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <6kretskk5e008ge5ohqu5qbjo2varhlshv@4ax.com>
Source record: 178851

On 30 Sep 2000 23:46:21 GMT, matjake@aol.com (MatJake) wrote:
>I have been reading this newsgroup for a year and I was just wondering if
>anyone had any experience with helical antennas on HF. I like to experiment and
>was considering building one for ten or 15 meters. Does anyone have any hints
>or know of anyone who has been succesful with idea?

They start being rather large at HF, though they are quite practical at UHF.
An 8 turn helix would need a boom about 16 meters long on 10m. It does have
good gain, and it naturally gives circular polarization, which might be beneficial
to deal with the spin modulation of Mode A satellites. I don't think there are any
new Mode A birds in the works, however, so that might be a moot point. Frankly,
I'd just build a quad or yagi instead. That'd be mechanically simpler, and linear
polarization isn't a detriment for skywave HF propagation.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

69. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <a8setsg98csb6k0o77hjb93rr8890rklc9@4ax.com>
Source record: 178852

On Sun, 1 Oct 2000 00:08:41 -0400, "David" <k4zzrNONSPAM@gate.net> wrote:
>Can someone tell me which dissimilar metals will corrode when they are in
>contact with each other?

All of them, some more quickly than others.

>I'm using a solid copper gounding bar as a single
>point ground bulkhead for my tower and station equipment on the exterior
>wall of my house. I have ten 8' grounding rods surronding the tower and
>bonded together with the #2 copper wire which runs back to the bulkhead.
>I've got some large copper connectors to use with the #2 wire but what type
>of metal bolts can I use to attach the copper connectors to the copper bar?
>I looked everywhere for brass, bronze or copper bolts with no luck. Would
>stainless steel work? I just don't want to start corrosion using the wrong
>thing.

Copper bolts would be best, because there's no dissimilar metals issue
at all. But good luck finding copper bolts. Copper is a bitch to thread, and
copper bolts aren't a production item. Naval bronze would be second best.
Marine suppliers should have these. (It is also the material from which
good clamps intended to go on ground rods are made.) It'll last many years.
Brass isn't a good choice. It will corrode quickly in this application. Stainless
steel will corrode in this application, but it does so slowly. Bolts made of 316L
will last several years if properly passivated (dipped in nitric acid after forming).
That's standard practice for marine hardware.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

70. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <dnDXOTOkU75fbtqQOXWXKwvyCbks@4ax.com>
Source record: 178853

On 01 Oct 2000 13:34:16 GMT, w1rfi@aol.com (W1RFI) wrote:

>
>Over the years, I have noted that most who say this have not made such
>voluntary contributions personally. :-)
>

Hi All,

Consult the contributor's listing at the site:
http://www.qsl.net/donations.html

I was a volunteer during 'Nam too - wanna see my Discharge Papers? :-)

And - yes - I once was an ARRL card carrying member. Pity this fallen sinner. All of life's work and achievement have since turned to corruption. I have taken up with gaudy fractals as my self respect slipped away. (with apologies to Fields' "The Fatal Glass of Beer").

73's
Richard Clark, KB7QHC

71. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D77A65.A66BEA1C@bigfoot.com>
Source record: 178854

VE9SRB wrote:
> What you measure and "see" in the transmission line system are the steady
> state conditions, nothing else.

My point exactly - those steady-state conditions actually exist and
can be proven by measurements. They actually are what they are. You
would have us believe that there are invisible and undetectable
voltage and current waves flowing throughout the system with opposite
phases to each other. That's very close to the argument that people
use to try to prove that God exists.

> You need to look at the transient response
> to see what is really happening with wave reflections.

If you want to see how the steady-state condition evolved, then by
all means, study the transient buildup. But why does the average
ham need to bother himself with the transient buildup when the
basic principles of steady-state operation are so well known?

> I have no intension of turning this into an argument on points that I know
> to be so basic to understanding transmission line theory, so I will stop at
> this message.

Why? You would be predestined to win the argument if I were wrong.
Are you trying to tell us that you found holes in my steady-state
analysis and choose not to point them out? The basic problem with
your argument is that if it doesn't arrive at the known steady-state
conditions, it is worthless. If it does arrive at the known steady-
state conditions, there is no need for it (except as an academic
exercise in transient analysis). And I have pointed out a couple
of errors in your analysis. Please notice that neither you nor
anyone else is arguing with my steady-state voltage/current/power
numbers because all of them can be proven by measurement.

The way to cancel an unwanted voltage/current pair on a transmission
line is to supply another voltage/current pair with equal magnitudes
and of opposite phase. Once canceled down to nothingness, they cease
to exist. That's why there are no reflections on the coax going to
the generator and the forward power in the coax is exactly what
the generator is generating. Complimentary reflections from the
two impedance bumps have canceled each other out.
--
http://www.mindspring.com/~w6rca

72. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D77D8C.AE4B4FC6@bigfoot.com>
Source record: 178855

klocko@toad.net wrote:
> If new hams have no trouble
> accepting two fields cancelling, then why would they have any trouble
> with two wave components cancelling?

I don't have any trouble with two wave components canceling. In fact, that's exactly why there are no reflections on the coax looking into the Z0-match. Steve is saying they don't really cancel - that they continue to exist and are flowing down the coax even though it is impossible to measure them and their effects are undetectable. That's our bone of contention. He says they continue to exist after being canceled. I say they cease to exist after they've been canceled and that's why they cannot be measured and have no effect. There's a big difference between fields caused by currents in a wire canceling and the currents themselves canceling. In one case, the cause continues to exist. In the other, the cause ceases to exist.
--
http://www.mindspring.com/~w6rca

73. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D77FD8.2E65903F@bigfoot.com>
Source record: 178856

Dick Carroll wrote:
> If only Walt had thought to preface his use of the Conjugate Matching
> theorem with a mild disclaimer such as "While these remarks are not
> totally accurate from a purely scientific standpoint, here's essentially
> what happens..." he could have saved lots of bandwidth here and
> numerous trees from being pulped into paper to print all the
> protestations. I'd bet he would have, had he had any idea what the
> consequences of the omission would be.

Years ago, people were using reflections to "prove" that all transmitters re-reflect all of the incident reflections. That didn't make sense to me so I contacted Walt who freely admitted that he was talking about tube transmitters with built-in pi-net tuners that had achieved a match between the amplifier design load and the outside world. He expressly was not talking about fixed output solid-state transmitters which were just coming on the market when he first wrote the article. There are a number of similiar oversights in the first edition of "Reflections". Hopefully, most of them will be updated in the second edition.
--
http://www.mindspring.com/~w6rca

74. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <v2JB5.2998$mC.210273@monger.newsread.com>
Source record: 178857

Whoa! Hold on here for just a doggone moment!

I just received my QEX Sept 30, and didn't realize until now that this thread existed, which appears to be principally directed to the problem of conjugate matching.

I haven't read all of the posts, but from those I have read it is evident that those posters completely missed the point of my original Letter to the Editor. My point does not concern the conjugate match directly, only secondarily. The primary focus is to show that Steve Best's CommQuart article that assailed the entire basis of my book Reflections was based on an erroneous method of determining the output resistance of networks. The conjugate match comes into play only because Steve says it can't occur when a network has loss, and he makes this statement because he determined the network output resistance incorrectly. Obtaining the wrong value for the output resistance has led many otherwise knowledgeable people, including Steve, to make statements that are fundamentally untrue. This is the case in Steve's assailing Reflections. His statement that a lossy network cannot sustain a conjugate match is patently untrue. The following paragraph explains the basis prevalently used for obtaining the (erroneous) output resistance of a network, which is what Steve used in his CommQuart article.

It is fundamentally impossible to determine the correct output resistance of a non-symmetrical lossy network by measuring backward into the network. It is also impossible to determine the correct output resistance by calculating the transformation through the network if the same algorithm is used as in the backward measurement. Yet, many use this erroneous algorithm and backward measurement, deriving an erroneous answer without realizing it's erroneous.

I explained the reason for obtaining the wrong value of resistance in my original Letter to the Editor, and paraphrased it for emphasis in the Letter of Reply to Steve's, including the Rules for Transforming Impedances. Please re-read those two Letters. Steve's problem is in the incorrect use of attenuation. The problem is the same for lossy transmission lines, and it is easier to explain with lines. If one measures the impedance at the output of a transmission line, the line attenuation is being used in the wrong direction compared to that when the line is transferring energy from input to output. So let me demonstrate using a simple example of a 50-ohm half-wave line, attenuation 0.2 dB, and terminated in a resistive 100-ohm load. The SWR at the output is 2:1. With 0.2 dB positive attenuation the SWR at the input is 1.93:1 and the input resistance is 96.7 ohms. If we now start at the line input to calculate the output resistance, the correct answer must be 100 ohms. But let's see what happens if we attempt to measure the output resistance by looking back into the line from the output. We

terminate the line input with a 96.7-ohm resistor and measure the resistance at the output to be 93.6 ohms. Wrong answer! This is what Steve does, although it is obvious the correct answer is 100 ohms!

The reason for the error is that attenuation is positive during the backward measurement because the output is now a new input and the input is now a new output. When initially transforming from output to input, positive attenuation reduces the SWR and input resistance. Thus when calculating in the opposite direction, to determine the output resistance by transforming from the input resistance, NEGATIVE attenuation MUST be used to return to the values at the original starting point, the output resistance that actually exists, 100 ohms, not 93.6 ohms. This concept will become crystal clear if the calculation is performed on a Smith chart. As I stressed in my Letter to the Editor, Steve started out with a load impedance of 53.32 - j85.85 ohms and designed the network to match 50 ohms at the input. For this network to match the load, the output impedance must be 53.32 + j85.85 ohms. But then, not understanding that the true output impedance is 53.32 + j85.85 ohms, Steve attempted to determine the output impedance using the incorrect positive attenuation, obtaining the incorrect output impedance of 71.13 + j77.82 ohms. Because this incorrect impedance is not the conjugate of the load impedance Steve asserts incorrectly that no conjugate match can exist at the network output if the network has loss. This is the basis on which he assailed Reflections as presenting incorrect information. However, it is evident that when the network output impedance is the conjugate of the load impedance, a conjugate match does exist at the output.

Reflections 2, which is nearly ready for publication, discusses this problem in even greater detail.

I hope all posters will again review my Letters to the Editor to re-focus the thread back to the issue I originated.

I appreciate the confidence some of you have shown in my credibility, which has been tattered during this thread. Thanks also to all for your participation in this thread, it's a real learning experience.

Walt Maxwell, W2DU

75. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D75E3E.2C16@pacbell.net>
Source record: 178858

Peter O. Brackett wrote:
>
> Thread:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000923103850.19801.00000211@ng-mf1.aol.com...
> >
> > If it is random then it is a fractal.
> >
>
> Give a kid a hammer and the whole world becomes a nail!
>
> Peter K1PO

That's a troll, Peter. Ignore it.

Tom Donaly KA6RUH

76. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D771F9.6E16@pacbell.net>
Source record: 178859

Dick Carroll wrote:
>
> Richard Clark wrote:
>
> > On Sat, 30 Sep 2000 21:38:18 -0500, CAM <cam2338@bigfoot.com> wrote:
> >
> > >Richard Clark wrote:
> > >> Your allowing that
> > >> >a "virtual short" does not stand up under a rigorous
> > >> >mathematical treatment
> > >> is in marked contrast to Walt's rigorous mathematical treatment.
> > >
> > >I haven't read the CQ articles but I know the phasors don't act
> > >at a virtual short exactly the way they act at a dead short. But
> > >we know all about the steady state signals so we can make the
> > >"theory" fit the known circumstances. Maybe we can say it is
> > >virtually a short. :-) Maybe that's what Walt meant in the first
> > >place.
> >
> > Hi Cecil,
> >
> > Maybe.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Walt's book "Reflections" wasn't written for engineers, rather toward
> a ham radio hobby in which Walt clearly understood the need for easily
> understandable explanations for antenna and transmission line phenomena.
> Engineers and scientists don't need what he wrote, but a great many
> hams do. So he couched his comments in terms that they could much more
> easily understand. Rather than being a scientific treatise it was aimed
> directly at a populace of hobbyists who need the information but who for
> the most part certainly are not scientists nor engineers.
>
> It is easy to understand why engineers and scientists would not
> subscribe to any technical publication wherein they find any hint of
> technical inaccuracy-even the use of a theorem that is well known to
> apply strictly to only theoretical cases. But within the world of ham
> radio seems to me that it must be viewed on balance as a greatly
> positive result in that many hams who have studied "Reflections" find
> their understanding of its subject material is greatly enhanced. And
> clearly not all professionals find a need to criticise the seemingly
> minor technical liberties taken in the name of simplification and ease

> of understanding by a ham radio populace most of whom don't have the
> advanced math skills necessary to analyze the underlying science.
>
> If only Walt had thought to preface his use of the Conjugate Matching
> theorem with a mild disclaimer such as "While these remarks are not
> totally accurate from a purely scientific standpoint, here's essentially
> what happens..." he could have saved lots of bandwidth here and
> numerous trees from being pulped into paper to print all the
> protestations. I'd bet he would have, had he had any idea what the
> consequences of the omission would be. After all, he was writing to hams
> and I'm sure that he understands the science fully. Hopefully with the
> Worldradio edition some such disclaimer will be included. I'd hate to
> see this bru-haha go all over again.
>
> 73, Dick Carroll W0EX

It would be very nice if all engineers agreed on what constitutes
scientific knowledge. Given the history of the conjugate match
controversy between Warren Bruene and Walt Maxwell, and their
respective minions, one has to wonder if either side really
understands what it's talking about. Doing a crude, unscientific
survey of some of the old books lying around the house, I came
up with the following opinions written throughout the years by
various authors:
1. Power amplifiers should be terminated in a load
equalling Rp for the maximum transfer of power. This is from
Fred C. Jones book The Radio Handbook, circa 1936.
2. For maximum power transfer power amplifiers should be
terminated in a load equalling Rp. For maximum *undistorted*
power transfer they should be terminated in a load equalling
two or three times Rp. This from the text Electronic Communication,
by Robert L. Shrader, 1975.
3. No mention whatsoever of Rp in designing an amplifier, from
Care and Feeding of Power Grid Tubes by the laboratory staff of
EIMAC corporation.
4. Rp is a small-signal parameter, from The Radio Amateur's
Handbook, 1981.
5. Maximum power output is obtained when the load is the
complex conjugate of a dissipationless impedance Zs. John S. Belrose,
Walter Maxwell, and Charles T. Rauch writing in Comm Quart, Fall 1997.
6. Real amplifiers are terminated in an impedance about
five times Zs. Warren Bruene, responding to the above in Comm Quart
Spring 1998.

If people of the stature of Walt Maxwell and Warren Bruene can't
agree on what's right, what hope is there for the rest of us?

Tom Donaly KA6RUH

77. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8r81ek$1uq$1@iac5.navix.net>
Source record: 178860

Thank you for all your efforts directed towards Amateur radio. You are much appreciated for your knowledge and your wisdom.

I would hope that neither your reputation nor Steve's would suffer, from what in the grand scheme of things, amounts to how many angels can set on the head of a pin.

Reflections has been a reference in my library and is greatly appreciated.

Warmest regards
Fred W4JLE

"Walter Maxwell" <w2du@journey.com> wrote in message
news:v2JB5.2998$mC.210273@monger.newsread.com...
> Whoa! Hold on here for just a doggone moment!
>
> I just received my QEX Sept 30, and didn't realize until now that this
> thread existed, which appears to be principally directed to the problem of
> conjugate matching.
>
> I haven't read all of the posts, but from those I have read it is evident
> that those posters completely missed the point of my original Letter to
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> Editor. My point does not concern the conjugate match directly, only
> secondarily. The primary focus is to show that Steve Best's CommQuart
> article that assailed the entire basis of my book Reflections was based on
> an erroneous method of determining the output resistance of networks. The
> conjugate match comes into play only because Steve says it can't occur
when
> a network has loss, and he makes this statement because he determined the
> network output resistance incorrectly. Obtaining the wrong value for the
> output resistance has led many otherwise knowledgeable people, including
> Steve, to make statements that are fundamentally untrue. This is the case
in
> Steve's assailing Reflections. His statement that a lossy network cannot
> sustain a conjugate match is patently untrue. The following paragraph
> explains the basis prevalently used for obtaining the (erroneous) output
> resistance of a network, which is what Steve used in his CommQuart
article.
>
> It is fundamentally impossible to determine the correct output resistance
of
> a non-symmetrical lossy network by measuring backward into the network. It
> is also impossible to determine the correct output resistance by
calculating

> the transformation through the network if the same algorithm is used as in
> the backward measurement. Yet, many use this erroneous algorithm and
> backward measurement, deriving an erroneous answer without realizing it's
> erroneous.
>
> I explained the reason for obtaining the wrong value of resistance in my
> original Letter to the Editor, and paraphrased it for emphasis in the
Letter
> of Reply to Steve's, including the Rules for Transforming Impedances.
Please
> re-read those two Letters. Steve's problem is in the incorrect use of
> attenuation. The problem is the same for lossy transmission lines, and it
is
> easier to explain with lines. If one measures the impedance at the output
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> a transmission line, the line attenuation is being used in the wrong
> direction compared to that when the line is transferring energy from input
> to output. So let me demonstrate using a simple example of a 50-ohm
> half-wave line, attenuation 0.2 dB, and terminated in a resistive 100-ohm
> load. The SWR at the output is 2:1. With 0.2 dB positive attenuation the
SWR
> at the input is 1.93:1 and the input resistance is 96.7 ohms. If we now
> start at the line input to calculate the output resistance, the correct
> answer must be 100 ohms. But let's see what happens if we attempt to
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> the output resistance by looking back into the line from the output. We
> terminate the line input with a 96.7-ohm resistor and measure the
resistance
> at the output to be 93.6 ohms. Wrong answer! This is what Steve does,
> although it is obvious the correct answer is 100 ohms!
>
> The reason for the error is that attenuation is positive during the
backward
> measurement because the output is now a new input and the input is now a
new
> output. When initially transforming from output to input, positive
> attenuation reduces the SWR and input resistance. Thus when calculating in
> the opposite direction, to determine the output resistance by transforming
> from the input resistance, NEGATIVE attenuation MUST be used to return to
> the values at the original starting point, the output resistance that
> actually exists, 100 ohms, not 93.6 ohms. This concept will become crystal
> clear if the calculation is performed on a Smith chart. As I stressed in
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> Letter to the Editor, Steve started out with a load impedance of 53.32 -
> j85.85 ohms and designed the network to match 50 ohms at the input. For
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> network to match the load, the output impedance must be 53.32 + j85.85
ohms.
> But then, not understanding that the true output impedance is 53.32 +
j85.85

> ohms, Steve attempted to determine the output impedance using the
incorrect
> positive attenuation, obtaining the incorrect output impedance of 71.13 +
> j77.82 ohms. Because this incorrect impedance is not the conjugate of the
> load impedance Steve asserts incorrectly that no conjugate match can exist
> at the network output if the network has loss. This is the basis on which
he
> assailed Reflections as presenting incorrect information. However, it is
> evident that when the network output impedance is the conjugate of the
load
> impedance, a conjugate match does exist at the output.
>
> Reflections 2, which is nearly ready for publication, discusses this
problem
> in even greater detail.
>
> I hope all posters will again review my Letters to the Editor to re-focus
> the thread back to the issue I originated.
>
> I appreciate the confidence some of you have shown in my credibility,
which
> has been tattered during this thread. Thanks also to all for your
> participation in this thread, it's a real learning experience.
>
> Walt Maxwell, W2DU
>
>
>

78. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r81vk$m1c$0@208.207.71.162>
Source record: 178861

klocko@toad.net wrote:

> In article <8r7l1i$9qg$0@208.207.71.162>,
> Dick Carroll <dixie@townsqr.com> wrote:
> > Walt's book "Reflections" wasn't written for engineers, rather
> toward
> > a ham radio hobby in which Walt clearly understood the need for easily
> > understandable explanations for antenna and transmission line
> phenomena.
> > Engineers and scientists don't need what he wrote, but a great many
> > hams do. So he couched his comments in terms that they could much more
> > easily understand. Rather than being a scientific treatise it was
> aimed
> > directly at a populace of hobbyists who need the information but who
> for
> > the most part certainly are not scientists nor engineers.
> >
> > It is easy to understand why engineers and scientists would not
> > subscribe to any technical publication wherein they find any hint of
> > technical inaccuracy-even the use of a theorem that is well known to
> > apply strictly to only theoretical cases. But within the world of ham
> > radio seems to me that it must be viewed on balance as a greatly
> > positive result in that many hams who have studied "Reflections" find
> > their understanding of its subject material is greatly enhanced. And
> > clearly not all professionals find a need to criticise the seemingly
> > minor technical liberties taken in the name of simplification and ease
> > of understanding by a ham radio populace most of whom don't have the
> > advanced math skills necessary to analyze the underlying science.
> >
> > If only Walt had thought to preface his use of the Conjugate Matching
> > theorem with a mild disclaimer such as "While these remarks are not
> > totally accurate from a purely scientific standpoint, here's
> essentially
> > what happens..." he could have saved lots of bandwidth here and
> > numerous trees from being pulped into paper to print all the
> > protestations. I'd bet he would have, had he had any idea what the
> > consequences of the omission would be. After all, he was writing to
> hams
> > and I'm sure that he understands the science fully. Hopefully with
> the
> > Worldradio edition some such disclaimer will be included. I'd hate to
> > see this bru-haha go all over again.
> >
> > 73, Dick Carroll W0EX

> >
>
> Hi Dick,
> I realize you're trying to justify why Reflections is the way it is.

Bill, Walt Maxwell needs no justification from me. His lifetime of work, including "Reflectiosn", stands on its own. What I've given here is an analysis of the complaint against his book, distilled from much reading here and elsewhere. Finally, a couple days ago, it came out that the Conjugate Match theorm was useless outside theory, except for the little snippet that "Close" might be useful in describing matching. Problem was, Walt didn't mention that. Perhape he was distilling out everything uneeded to keep it basic for hams. I believe that was the case. If your mileage varies, well, I think I predicted it might.

> However, I absolutely disagree with the idea that ham radio publications
> should be dumbed down with inaccuracies in order that the typical ham
> can understand it.

As I mentioned in my earier post regarding the tuning of PI networks, inaccuracies are ubiquitous in ham radio, indeed in life itself. Fortunatley for most of us non-engineeers, close is almost always good enough. I'd imagine that in retrospect, Walt regrets ever borrowing the Conjugate Match theorm from the rest of you engineers for metaphorical use here, and especially so without so labelling it, as I mentioned.
If you think his doing so "dumbed down" ham radio you evidently never suffered much exposure to all the misinformation within the hobby that went before "Reflections", and is still way too predominant.
Mistakes are not unknown in engineering. I recall a new transmitter that fried a bank of receivers immediately when it first transmitted because it had in its design a tiny antenna change relay for the receiver bank that switched them on and off the transmit antenna line. The darn thing looked like it was designed for a 5 watt CB set, yet it had to isolate 3 KW of rf from the receivers on transmit mode, and it was way too tiny to do the job. I imagine the designer was thinking that since it didn't carry any voltage or power, only small signel reciever RF, why should it be any larger than necessary? Needless to say, that got redesigned posthaste.

> Difficult concepts can often be explained in a way
> that is technically accurate but that is easily understood by someone
> lacking an engineering background.

Bill, again, I know that engineers and scientists are, by nature and training, perfectionists, at least to a high degree, and your attitude here seems to demonstrate that. I certainly have no argument with you on your own level, but on my own it's a different matter. The difference is that Walt did it while everyone else is mostly just talking about it.
And criticising the few possible areas in his work where criticism is possible.

Many of us didn't get a good opportunituy to get a good math background. I attended a tiny high school where Trig, if you could even get into that

class, was considerered "advanced math". Most of us who played any sports didn't even get trig since the SINGLE class, with a single math teacher in the school, was held at the same class period when sports practice took place. So most of the math I learned was learned on my own and has been limited. I got no engineering degree, but that hasn't kept me from a 35 year career in the technical part of radio. I've had some pretty heavy duty electronic hardware completely disassembled, scattered all over the floor, and got it back together, problem solved and working right, on quite a number of occasions. To many hams including myself, antenna and feedline theory have been among the most obscure of radio subjects. Walt has helped considerably to illuminate the subject, and I have no qualms whatever in defending his excellent effort.

Did Walt make a mistake in using the Conjugate Match theorm as he did? Not from my point of view, now that I know that it's a theoretical concept only, evidently used mostly as a proof of systems. I confess I was wondering what the flap was all about when the criticism first surfaced, but decided to stay with it until the entire story came clear. I'm glad I did.

As Professer Mac Maclaughlin, former student of John Kraus, said earlier in this thread, "With hand grenades and antenna matching, close is good enough!" That's sufficient for amateur work and most -indeed nearly all- professional radio work too. And as far as I'm concerned, for a metaphorical use of the Conjugate Matching Theorem. If it's good enough for Walt Maxwell it's certainly good enough for me. James Clerk Maxwell won't know the difference.

73, Dick W0EX

79. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r82kkmdv0@208.206.142.93>
Source record: 178862

CAM wrote:

> Dick Carroll wrote:
> > If only Walt had thought to preface his use of the Conjugate Matching
> > theorem with a mild disclaimer such as "While these remarks are not
> > totally accurate from a purely scientific standpoint, here's essentially
> > what happens..." he could have saved lots of bandwidth here and
> > numerous trees from being pulped into paper to print all the
> > protestations. I'd bet he would have, had he had any idea what the
> > consequences of the omission would be.
>
> Years ago, people were using reflections to "prove" that all transmitters
> re-reflect all of the incident reflections. That didn't make sense to me
> so I contacted Walt who freely admitted that he was talking about tube
> transmitters with built-in pi-net tuners that had achieved a match
> between the amplifier design load and the outside world. He expressly was
> not talking about fixed output solid-state transmitters which were just
> coming on the market when he first wrote the article. There are a number
> of similiar oversights in the first edition of "Reflections". Hopefully,
> most of them will be updated in the second edition.

More clarification. Thank you. I imagine there'll be even more to come.

80. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8r8383$17qe$1@news.gate.net>
Source record: 178863

Thanks for the replies.....

I asked the same question on the electrical engineering newsgroup and was told to get Silicon Bronze bolts. You can picture the blank look on the stock boy's face when I asked for some of these at Home Depot. A web search for them turned up lots and lots of wholesale distributors for silicon bronze bolts, but they all failed to mention where Joe Public can actually purchase them. :-) Maybe I'll find them at an electrical contractors outlet.

I'll use the stainless steel one for the time being until I can find the kind I really need. I've never really tried making a good ground system until now. I'd usually just put a couple of rods at the base of the tower and pray. After reading about lightning on the Polyphaser website I've got a much better handle on what to do. And since I live in Florida it's pretty important to do it right. I don't want to lose my ham gear -or- my house!

73,
David, K4ZZR

| >Can someone tell me which dissimilar metals will corrode when they are in
| >contact with each other?
|
| All of them, some more quickly than others.
|
| >I'm using a solid copper gounding bar as a single
| >point ground bulkhead for my tower and station equipment on the exterior
| >wall of my house. I have ten 8' grounding rods surronding the tower and
| >bonded together with the #2 copper wire which runs back to the bulkhead.
| >I've got some large copper connectors to use with the #2 wire but what
type
| >of metal bolts can I use to attach the copper connectors to the copper
bar?
| >I looked everywhere for brass, bronze or copper bolts with no luck.
Would
| >stainless steel work? I just don't want to start corrosion using the
wrong
| >thing.
|
| Copper bolts would be best, because there's no dissimilar metals issue
| at all. But good luck finding copper bolts. Copper is a bitch to thread,
and
| copper bolts aren't a production item. Naval bronze would be second best.
| Marine suppliers should have these. (It is also the material from which

| good clamps intended to go on ground rods are made.) It'll last many
years.
| Brass isn't a good choice. It will corrode quickly in this application.
Stainless
| steel will corrode in this application, but it does so slowly. Bolts made
of 316L
| will last several years if properly passivated (dipped in nitric acid
after forming).
| That's standard practice for marine hardware.
|
| Gary
| Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
| 534 Shannon Way | We break it |
| Lawrenceville, GA | Guaranteed |

81. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001001154033.06591.00000082@ng-fl1.aol.com>
Source record: 178864

>
>I honestly believe that the purpose of all this is to draw attention to
>Chip, not to redress any kind of damage to him or Fractenna. It's
>succeeding in doing that as long as people respond. (And by this
>response I'm also guilty.)
>
>As I told Chip in response to his email, there is no material on my site
>which is copyrighted by Fractenna. To date, no suit has been filed, and
>I'm not holding my breath. If one is filed, it should certainly be
>interesting to anyone interested in copyright law, to say nothing of
>students of psychology. In the meantime, the content of my web site
>remains unchanged, and I join the growing list of people who Chip has
>threatened to sue but hasn't.
>
>So my request is to just ignore all the huffing and puffing, and not
>worry about it. It just plays into what I feel is the whole purpose of
>the exercise -- to draw attention to Chip. The more outrageous and
>bizarre the claims and threats, the more attention is drawn. I'm sure
>that this, rather than any sort of logic, is the reason for the level of
>claims and threats being put forth.
>
>Roy Lewallen, W7EL
>

To All Readers:

It has come to my attention that Roy Lewallen, W7EL, has posted an unauthorized copyrighted file on his

http://www.eznec.com

web site.

The file is of a fractal antenna, commonly dubbed 'MI2' . The copyright holder of this material is Fractal Antenna Systems, Inc., which has not been ask for , nor has granted, publication and distribution of this file by Mr. Lewallen.

The file was transcribed by Steven Best and thus is a derivative work of the aforementioned copyright material, in which the copyrighted material is at least substantially recognizable in Best's rendition.

It has been initially assumed that Mr. Lewallen was not aware of the copyright infringement, however in private correspondence he has chosen to deny that such copyright protection exists.

Mr. Lewallen is being formally sent a letter requesting that he cease and desist the further distribution of this copyright material and will have until

December 15, 2000 to comply. Failure to do so will lead to suit against Roy Lewallen d/b/a Lewallen consulting/EZNEC.

Those who have downloaded this file are so advised that this is copyrighted material with an intended controlled distribution; it is not in the public domain; its web-based distribution does not constitute 'fair use'.

Copies of the file are available--under held copyright--by request, to those members of the fractal antenna reflector:

fractalantenna-subscribe@egroups.com

In a few weeks, it will also be available as a conditional(licensed)download from the web site

http://www.fractenna.com

Readers are advised not to break copyright law by downloading said file from the EZNEC web site.

Thank you for your help and understanding.

Sincerely,

Nathan Cohen, Ph.D.
CTO
Fractal Antenna Systems, Inc.

82. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r850b$4t$1@plutonium.btinternet.com>
Source record: 178865

There would be far fewer arguments if the quantities
impedance and resistance were not considered to be
interchangeable. It makes me cringe !

W = I*I*Z is seldom correct.

W = I*I*R is always correct.

Reg

83. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001001160206.18386.00000063@ng-ci1.aol.com>
Source record: 178866

>From: Richard Clark

>>Over the years, I have noted that most who say this have not made such
>>voluntary contributions personally. :-)

>Consult the contributor's listing at the site:
>http://www.qsl.net/donations.html

Actually, the implication of your original post was that ARRL should emulate the qsl.net mo and operate on donations. I wonder if you have, since your membership expired, made such donation to ARRL personally?

So I went to qsl.net and entered a few searches. My first was RFI. The first valid page it sent me to was:

http://www.qsl.net/arrlsw

It then linked me (after a really cryptic search) to:

http://www.qsl.net/tvi/index.html

This page was "under construction" a year ago, and, unfortunately, the very excellent project really didn't get much support. The "publications" link sent me to:

http://www.arrl.org/

Compare this to ARRL's RFI information at:

http://www.arrl.org/tis/info/rfigen.html

The above is the third link off of the qsl.net RFI site.

The filters link brought me only to K1UHF's filters, excellent filters, but there are a lot more filters available. See http://www.arrl.org/tis/tisfind.html and scroll down to the filters listing.

I then compared the results of "education" to the into at http://www.arrl.org/ead.

I offer these contrasts because it is one that I am most familiar with, but it also illustrates a point; QSL.NET and ARRL are apples and oranges. I think they have done an excellent job of putting together a site that allows hams and clubs to post pages of information to share with others -- a very laudable goal. As their page says, qsl.net is funded by a combination of banner ad revenues, contributions and non-free services (member only? :-)). That funding can just about fund the web page -- unlike ARRL, they do not fund staff working on various educational, technical and regulatory projects. This weekend, I am doing some testing of the radiation potential of home electrical wiring,

determining whether a signal level of -80 dBm/Hz has much interference potential for ham radio. This is in response to a request from the HomePlug industry group. Next week, I am off to Phoenix to do some field testing to determine the interference potential from the VDSL system installed in Phoenix, then off to L.A. to meet with an industry representative about Ultra Wide Band technology.

>And - yes - I once was an ARRL card carrying member. Pity this fallen
>sinner.

It is unfortunate that ARRL and amateur radio lost this support. Every year, at budget time, I have to plan what I can, and cannot do, next year. I would love to attend the EMC Symposium next year, and go to a few more industry meetings and industry conferences. But the reality is that the funds are limited. If you feel that volunteerism is important, would you care to fund one of the trips?

Now, considering all of this response from two people, is this a case of no good deed going unpunished? I did feel that posting the site where some could download the tuner article would be helpful. I do realize that ARRL offers its product reviews on the members-only site, but it also offers over 500 technical articles for free download on the pages at http://www.arrl.org/tis. Perhaps you could volunteer yourself over that way for a more balanced view. :-)

73,
Ed Hare, W1RFI

73,
Ed Hare, W1RFI

84. Tuning Elevated Radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: Herb Rosenberg <kg6ok@pacbell.net>
Message-ID: <39D79EFE.91FADF18@pacbell.net>
Source record: 178867

I have just set up a shunt feed for my tower, with 4 elevated radials at about 8-10 high.

I cut the radials at about 70 feet each, and put them in place. I then used an MFJ 259 with a pair of opposite oriented radials made into a dipole (disconnected from the tower of course), to measure the resonance point, with the hope that I could use this to trim the radials. I was told that this was a good approach to doing this.

Well, the MFJ 259 shows the resonance freq of each pair of radials at about 2.300 MHZ. The best dip I get there is about 2:1 swr. If the radials are 70 feet each, I would have expected the resonance to be much higher, and I don't want to start cutting the radials as aggressively as they measurements would suggest.

Any help or ideas would appreciated.

Thanks.

85. ? on Icom IC-T7H

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 00:00:00 UTC
From: K4JDP@webtv.net
Message-ID: <9324-39D7A0A7-49@storefull-135.iap.bryant.webtv.net>
Source record: 178868

Just purchased this duo-band HT. I would like to use it as a beeper/pager. The manual doesn't give details on how to call from a home phone to the HT to use as a beeper/pager. Does anyone here know how?

Sincerely,
John

86. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 02:43:45 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <BxxB5.13018$tl2.923873@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178800

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D41991.4190DCE0@bigfoot.com...
> VE9SRB wrote:
> > The only energy "joining" the forward traveling wave is the energy that
is
> > partially re-reflected at the point of reflection, which, in the case of
the
> > tuner, is not at the match point.
>
> 100w-->--51.5 ohm coax--x--1/4WL 300 ohm line--51.5 ohm load
>
> P+
> --->100w--->----x---->200w----->-----+---51.5 ohms
> Pg ^ | 100 w
> | | Prad
> +----<--100w--<------+
> P-
>
> http://www.mindspring.com/~w6rca

Cecil: I started to check the example. I think the input impedance to the
1/4 WL line is 1748 ohms (approx) not 51.5 ohms. I think the section of 300
ohm line should be 1/2 WL long.

Steve

87. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 02:57:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r697i$6l7$0@208.207.71.173>
Source record: 178801

Donaly wrote:

> William E. Sabin wrote:
> >
> > Nick Kennedy wrote:
> >
> > > Is this shift in calculated
> > > resistance the non-dissipative resistance we're taking about? If it is, I
> > > still don't see how it's going to affect efficiency.
> >
> > Yes, it is a dynamic, lossless resistance. The output resistance of a tube or
> > transistor PA is actually an internal negative feedback effect. That is, the
> > variations of *plate voltage* produce variations of *plate current* because of
> > an inherent characteristic of the vacuum tube design, called its plate
> > resistance. This plate resistance is equivalent to a gain reduction. That is,
> > the voltage gain of the tube with plate resistance is *less* than the voltage
> > gain of the tube without the plate resistance "effect". Plate resistance itself
> > does not dissipate power. It is not a physical entity. For example, it does not
> > get hot and it is not a source of thermal noise, like an ordinary resistor.
> >
> > If a tube without the plate resistance effect is replaced with an almost
> > identical tube that does have a plate resistance effect, that effect can be
> > nullified by increasing the grid drive a little. This restores the tube to its
> > previous voltage gain and its previous power output and efficiency. This
> > verifies that plate resistance is a lossless "resistance" (dV/dI).
> >
> > Bill W0IYH
>
> The fact that you use a differential operator on the ratio
> of voltage to current means that the ratio isn't a constant as it is in
> say a lump of carbon - O.K., as long as the carbon doesn't get
> too hot. This is liable to cause some confusion in the minds of
> people who are looking for "the resistance" of the plate in question.
> Power amplifiers don't behave the same way passive devices do, and
> attempts to linearize them in order to understand them using
> circuit theory may eventually cause more confusion than understanding.
>

Boy, I'm sure confused. I always understood that the wattage dissapated across the plate resistance caused a bit part of that heat in the PA cavity. It sure doesn't come from the filament alone.

73, Dick W0EX

88. Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:08:41 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8r6dd8$o64$1@news.gate.net>
Source record: 178802

Can someone tell me which dissimilar metals will corrode when they are in contact with each other? I'm using a solid copper gounding bar as a single point ground bulkhead for my tower and station equipment on the exterior wall of my house. I have ten 8' grounding rods surronding the tower and bonded together with the #2 copper wire which runs back to the bulkhead. I've got some large copper connectors to use with the #2 wire but what type of metal bolts can I use to attach the copper connectors to the copper bar? I looked everywhere for brass, bronze or copper bolts with no luck. Would stainless steel work? I just don't want to start corrosion using the wrong thing.

Thanks for some advice,
David, K4ZZR
--
Please reply to: k4zzr@gate.net
REMOVE "NONSPAM"

89. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:18:53 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NWyB5.1504$0n.134437@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178803

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D694F4.FA2FF65B@bigfoot.com...
> VE9SRB wrote:
> > Tom:
> > One important point I forgot to mention.
> >
> > There is a formula for adding two forward traveling powers in a
transmission
> > line:
> >
> > Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) cos(theta)
>
> Hey, a perpetual motion machine. Use two phase-locked IC-706s to
> each put 100 watts into a transmission line with the angle between V1
> and V2 equal to zero and get 400 watts out - no SGC-500 required.
> Better get a patent on that thing, Steve.
> --
> http://www.mindspring.com/~w6rca

In the case of the re-reflected voltage at the match point, it adds to the driving voltage and the above formula is correct.

I may be wrong but I assume your statements above to be similar to feeding a coax with two 100 watts sources in parallel. Neglected the affects of the two source impedances , the voltages are combined in parallel. This is a different situation than we are discussing.

Steve

90. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:19:06 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_WyB5.1506$0n.133080@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178804

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D69E52.502398B5@bigfoot.com...
> VE9SRB wrote:
> > If you have two forward traveling waves in the transmission line where
both
> > have voltages that are in-phase, then the current must be in phase as
well.
> > If the current waves of each were 180 degrees out of phase, then the
> > voltages would be 180 degrees out of phase as well.
>
> When transfering power from a 50 ohm line to a 300 ohm line, the voltage
must
> increase and the current MUST DECREASE in order to honor the conservation
of
> energy principle. Therefore, the currents have to be out of phase to add
up
> to a lesser value. So your statement is prima facie false.
> --
> http://www.mindspring.com/~w6rca

The law of conservation of energy demands that the total power dissipated in the transmission line system be equal to the power delivered by the source. From the steady state conditions, we know this to be true. We deliver 100 watts of power, 100 watts of power is dissipated in the load. Transmission line theory and circuit theory requires that we establish the correct relationships between voltage, current and power.

In my next post I will discuss the current and voltage.

Steve

91. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:19:23 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <fXyB5.1507$0n.134109@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178805

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D698FA.D4C1CC3F@bigfoot.com...
>
> Don't know exactly how they combine, Steve, but the boundary conditions
> are 100% known and the results are 100% known. With a 50 ohm power meter
> and two 300 ohm power meters, you can read the generated power = 100w,
> forward power = 200w, and reflected power = 100w. The Z0-match doesn't
> get hot so we know that the conservation of energy principle applies.
> Therefore the generated energy combines with the reflected energy to
> yield the forward energy.
>
> Pg >>>> P+ >>>>
> 100w-->--51.5 ohm coax---x---1/2WL 300 ohm line---51.5 ohm load
> <<<< P-
>
> Pg is measured at 100w. P+ is measured at 200w. P- is measured at 100w.
> Vg/Ig = 51.5, V+/I+ = 300, V-/I- = 300, Vg*Ig=100, V+*I+=200, V-*I-=100
> That's six equations and six unknowns, Steve. A high school algebra
> student can solve for the results.
> --
> http://www.mindspring.com/~w6rca

Cecil:

In the example that you describe above, we know the following as fact. The forward power in the 51.5 ohm coax is 100 watts. The reflected power in the 51.5 ohm coax is 0 watts. The forward power in the 300 ohm line is 200 watts and the reflected power in the 300 ohm line is 100 watts.

The law of conservation of energy is satisfied because 100 watts is delivered to the system and 100 watts is dissipated in the load. Now we need to establish the correct relationships between voltage, current and power at the match point.

Looking at only the steady state power levels, most people would immediately conclude (really assume) that the 200 watts of forward power in the 300 ohm coax is a result of the 100 watts of reflected power adding to the 100 watts of source power, end of story. The only thing needed to make this all work is a total re-reflection of power at the match point. Believing our conclusion to be correct, we can easily manipulate the math to make it all work out.

Now, here's the two major problems:

1) 100 watts of forward power added in-phase with 100 watts of forward power does not equal 200 watts of forward power. In the 300 ohm line, 100

watts of forward power has a voltage magnitude of 173.2 volts. 200 watts of forward power has a voltage magnitude of 244.95 volts. So, for 100 watts + 100 watts to equal 200 watts, 173.2 volts + 173.2 volts would have to equal 244.95 volts. This math does not work. Multiple forward powers in a transmission line add as previously described.

2) Transmission line theory demands that the level of power reflection at *any* impedance junction be a function of the impedance discontinuity at the junction. In this example, we have an impedance discontinuity between a 51.5 ohm line and a 300 ohm line. Transmission line theory tells us that a total reflection of power cannot occur at this junction.

Now, let's look at the wave mechanics to see if we can determine the steady state power levels and satisfy issues 1 and 2 above.

First, does the generator really deliver 100 watts of forward power into the 300 ohm transmission line? the 100 watts of forward power in the 51.5 ohm line arrives at the 300 ohm line and sees a 300 ohm impedance. The reflection coefficient at this junction is +0.707. There must be some power reflected at this junction and some power transmitted into the 300 ohm line. The level of reflected power is 50 watts and the level of power transmitted into the 300 ohm line is 50 watts (rounded values). So, the correct source power delivered into the 300 ohm line is 50 watts not 100 watts.

Now, through a series of wave reflections between the load and the match point, the steady state levels of forward and reflected power in the 300 ohm line will develop. Let's now jump to the steady state. The level of reflected power in the 300 ohm line is 100 watts. This 100 watts of power arrives at the input to the 300 ohm line and sees a 51.5 impedance. The reflection coefficient is -0.707. The re-reflected power is 50 watts and the power transmitted into the 51.5 ohm line is 50 watts. So, the correct re-reflected power in the 300 ohm line is 50 watts not 100 watts.

The 200 watts of total forward power in the 300 ohm line is a result of 50 watts adding in phase to 50 watts. From the formula presented earlier:

Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) = 50 + 50 + 100 = 200 watts. Correct addition of in-phase power.

Now, let's look at the problem from the voltage and current perspective. From the steady state conditions, we know that the total forward voltage in the 300 ohm line is 244.95 volts and the total forward current is .816 amps. The source power delivered to the 300 ohm line is 50 watts. The forward source voltage and current in the 300 ohm line are 122.47 volts and .408 amps. The level of reflected power arriving at the match point is 100 watts and therefore, the reflected voltage is 173.2 volts and the reflected current is 0.577 amps. Looking at the wave reflection analysis in detail, the phase of the reflected voltage and current arriving at the match point are 180 degrees out of phase with the forward source voltage and current at the match point. As a result of the -.707 reflection coefficient at the match point for the reflected wave, the reflected voltage is 122.47 volts and the reflected current is 0.408 amps. This reflected voltage and current

add to the source voltage and current and the total forward voltage and current are 244.95 volts and .816 amps. This is 200 watts of total forward power.

Now, the impedance match. How does it occur? At the match point, there was a 50 watt reflection of source power. When the 100 watts of reflected power arrives at the match point, it transmitted 50 watts of power back into the 51.5 ohm line. These two powers are 180 degrees out of phase. As a result, the total rearward voltage and current at the match point become 0 and no reflected wave exists (wave cancellation).

73,
Steve

Aside: There are two mathematical methods used with reflection coefficients. In one, the reflected voltage is equal to the incident voltage * +rho and the reflected current is equal to the incident current * -rho. In the other convention the reflected voltage is equal to the incident voltage * +rho and the reflected current is equal to the incident current * +rho. Both can be correctly used so long as the math is consistent throughout the analysis. For example, in one, the total current at any point on the line is Itotal = Iforward + Ireflected and in the other it is Itotal = Iforward - Ireflected. I mention this because I think Cecil and I use different methods.

92. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:34:14 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r6erh$9vu$1@bob.news.rcn.net>
Source record: 178806

Even if there were grounds for this frivolous suit, the
practical aspects of this suit are quite interesting.

1) What court will have jurisdiction?, and how will it
be determined?
For example, a court in a given state has jurisdiction only if both
plaintiff
and defendant are residents or have a "link" to that state. How will fracky
serve the suit?

2) What are the damages? Fracky has NO revenue based upon the
design in contention and no way of establishing damages for said claim.

3) He is a pompous ass and when in front of a judge acting as his own
attorney as he has been doing all along, well, folks guess what....said
judge will figure it out just as we all have...see #4

4) No attorney will take this on given the DOCUMENTED history
of fracky's BS on this NG.(Exhibit #1). Fracky has not only shot
himself in the foot but has shot both feet off and is up to his belly
button. (The meat grinder is not needed)

5) Fracky is inept with the English language and in conveying a
coherent thought, even if he had one.

Hope this helps
73,
Chuck...

93. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:47:53 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r6fl1$g1a$1@bob.news.rcn.net>
Source record: 178807

This suit will never happen. It will cost fracky too much $$$
to even figure out how to do it, (if he can even find an attorney,
actually, 2 attorneys to cover both states, that will rep him after
all the crap he has put on this NG).

hope this helps even more...

94. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 04:49:26 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D6B447.110EB3DF@dvol.com>
Source record: 178808

John Burrell wrote:

> at least there was no
> chance to become an amateur operator and 'do the Morse someday soon....'
> We all know how easily the excuses appear when a little effort is required,
> hi.

>
Right on. heh . . . !
>
w3rv

95. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 05:07:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D6B866.57312B7D@dvol.com>
Source record: 178809

John Burrell wrote:

> Yep, metal roof, 6 feet off the road and quite large. It could be a problem
> with height and will certainly be a challenge to take down quickly, but an
> 'easy' location would surely compromise performance further. Who said life
> was meant to be simple....

>
I'm no HF mobile guru myself but despite the obvious inefficieny of the Hustlers
a clubmate of mine n2ss has worked well over 200 countries with a 706 and
Hustlers poking up from the trunk deck of his sedan. An SUV center-roof and
quick-disconnect installation should work even better. There are a lot of
"realtives" in these kinds of laborious discussions and quite often operator
skill, propogation and dumb luck prove to be more important factors than a dB or
two or three difference in antenna efficiencies.
>
w3rv

96. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 05:14:54 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D6BA3F.EB011F61@dvol.com>
Source record: 178810

MatJake wrote:

> Hi
>
> I have been reading this newsgroup for a year and I was just wondering if
> anyone had any experience with helical antennas on HF. I like to experiment and
> was considering building one for ten or 15 meters. Does anyone have any hints
> or know of anyone who has been succesful with idea?
>
> Thanks and 73,
> Matt

>
Unless you are extemely restricted for space you would be much bettter off using a simple 1/4 wave ground plane or 1/2 wave dipole. A 15m GP would be only 11.1 feet tall. A 10m version would be just 8.3 feet tall, etc., dipoles would be twice those lengths long and would be far more effective than a Slinky antenna.
>
w3rv

97. **Wanted: SGC SG-237 or SG-231 Smartuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 06:08:29 UTC
From: jhulet@aol.com
Message-ID: <20001001020829.02863.00000030@ng-fd1.aol.com>
Source record: 178811

Hello,

I am looking for a SGC SG-237 or SG-231 Smartuner...

Thanks

Jason S. Hulet
W1WOW

98. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 06:46:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r6mhl$g9o$1@neptunium.btinternet.com>
Source record: 178812

Matt, download programs HELICAL3 and MIDLOAD from my
website. Download in a few seconds. Not zipped up. Run
immediately.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Mat wrote
>
> I have been reading this newsgroup for a year and I was
just wondering if
> anyone had any experience with helical antennas on HF. I
like to experiment and
> was considering building one for ten or 15 meters. Does
anyone have any hints
> or know of anyone who has been succesful with idea?

99. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-01 06:54:21 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D6DF9D.B7ACF86B@oio.net>
Source record: 178813

David wrote:
>
> Can someone tell me which dissimilar metals will corrode when they are in
> contact with each other? I'm using a solid copper gounding bar as a single
> point ground bulkhead for my tower and station equipment on the exterior
> wall of my house. I have ten 8' grounding rods surronding the tower and
> bonded together with the #2 copper wire which runs back to the bulkhead.
> I've got some large copper connectors to use with the #2 wire but what type
> of metal bolts can I use to attach the copper connectors to the copper bar?
> I looked everywhere for brass, bronze or copper bolts with no luck. Would
> stainless steel work? I just don't want to start corrosion using the wrong
> thing.
>
> Thanks for some advice,
> David, K4ZZR
> --
> Please reply to: k4zzr@gate.net
> REMOVE "NONSPAM"

David,
Use the stainless steel bolts for corrosion resistance. Don't
worry about the dissimular metal thing, it isn't worth it on a
ground system.
'Doc

100. Dentron Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <39d93298_1@news1.prserv.net>
Source record: 178619

It seems there are more Dentron tuners put up for auction (on ebay) than equivalent sized MFJ tuners. Are the Dentrons generally considered inferior to MFJ? Any other thoughts as about their frequency on the auction site?

Bill Ogden W2WO

101. Re: Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Brooke Clarke <brooke@pacific.net>
Message-ID: <39D933ED.B9DA8C76@pacific.net>
Source record: 178620

Hello Brad:

Yes, it's a niticable help.

I had one made by Telewave in Mtn. View and used it with 9913 coax and a
Radio Shack tripod mounted on a single story flat roof.
In Califorania you will see them on some of the raod side cell phones used
for breakdown calls.

73,

Brooke, N6GCE

Brad wrote:

> Has anyone tried a beam antenna for cell service? I was camping in a
> marginal area over the weekend, and was wondering if something like this
> would have help.
>
> Brad

102. Re: Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39d938b6_3@news1.prserv.net>
Source record: 178621

You bet! Illegal, but works well.

--
Crazy George
Brad <brad@escapees.com> wrote in message
news:mauhtssp68dakquv9fcg3cmg9gtjlc47qn@4ax.com...
> Has anyone tried a beam antenna for cell service? I was camping in a
> marginal area over the weekend, and was wondering if something like this
> would have help.
>
> Brad
>

103. Re: Dentron Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39D95529.D861C52D@qth.com>
Source record: 178622
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Much better and will bring more,is my opinion...73 Murray

Bill Ogden wrote:

> It seems there are more Dentron tuners put up for auction (on ebay) than
> equivalent sized MFJ tuners. Are the Dentrons generally considered inferior
> to MFJ? Any other thoughts as about their frequency on the auction site?
>
> Bill Ogden W2WO

[One or more binary attachments are retained only in the source text.]

104. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D9293D.71DB@pacbell.net>
Source record: 178623

Jim Kelley wrote:
>
> CAM disputed the following concepts:
> > Power does not move from the power generator through the distribution
> > system to the load. Power cannot be measured entering and exiting a
> > boundary drawn around a system. If work is not done then power doesn't
> > exist. Remember those arguments?
>
> I remember them, and also find them defined and described in modern
> physics texts.
> 73, Jim AC6XG

Uh, oh. Another old argument that failed to die. Can't anyone
start any new arguments? (That one was particularly silly, since
it was based entirely on definitions.)

Tom Donaly KA6RUH

105. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39d943ff@news.planetc.com>
Source record: 178624

To whomever wrote: "10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)":

BFD.

I have worked JA from East Tennessee on 1/2 watt and less using 2N2222 xtal oscillator xmtr to trap dipole, 15 feet off the ground, running parallel to a house with aluminum siding.

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

106. Tennessee Hillbilly Antenna Research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39d948a3@news.planetc.com>
Source record: 178625

Branched Erect Ether Radiator, Cyclic Antenna Node
Published by: Ima Hogg, Ph. D, and Watt S. Updoc, MFIC
Upper East Tennessee Polyester Technical Research Institute

Our research into the Branched Erect Ether Radiator, Cyclic Antenna Node antenna (abbreviated BEERCAN) was initiated in response to this letter received at the Upper East Tennessee Polyester Technical Research Institute in early March 2000. I quote:

"Me and J. B. was wondering what we was gonna do with all them luminum cylinders piled up in the front yard of the trailer now that the recyclers done quit paying a quarter a pound for them. J. B. observed that luminum is a conductor of lectricity and, being as lectric is the same as radio, he figgered that luminum would carry radio.

"Now, J. B. comes up with stuff lack that when he's been coon huntin all night cause he never goes coon huntin without he has a mason jar full of homebrew. Only this time he had got some bad stuff; I reckon him and Leon had run it through that old Camaro radiator and it was plumb full of lead. I keep tellin J. B. that he's gonna get the lead poisonin from filtering homebrew through that radiator but he says that 69 Camaro was the best car he ever owned and he was gonna keep usin that radiator to condense his homebrew. I reckon his mind's gone.

"So, anyway, J. B. continued to look at them luminum cylinders and look at the ol busted up CB antenna that was laying down across the Camaro that was sittin in the side yard of the trailer where he had parked it when the engine blowed up in 1975.

"Reckon how we'd hook them things up so they'd be long enough to make a antenna, says J. B.

"J. B. , says I, they ain't no way you gonna turn them things into no antenna.

"Well, that was the wrong thing to say cause J. B. figgered I had done challenged him and he was bound and determined to build a antenna with them luminum cylinders. . . .

Due to US and international copyright restrictions, the remainder of this research report cannot be reproduced here. To read the entire report on the research into the BEERCAN antenna, visit this URL:
http://wow.fractalisacrock.com.edy

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

107. Re: Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <39D94F67.364DBDAC@aztek-eng.com>
Source record: 178626

If you drive thru Conejos county Colorado which is south of
Alamosa you will see several structures with stacked ~25 element
horizontally polarized yagis of a size for the cell band. This
area is very sparsely populated. I asked the proprietor of the
ranch where we stayed and he said they were for phone service
since USWest (now QWest) couldn't deliver standard phone service
and the cell tower was >15 miles distant. I'm sure these antennas
were legal. Just FYI. I don't know what gain you would get such
an antenna but 18 to 20dBd would seem about right.

73,
Larry, W0QE

Crazy George wrote:
>
> You bet! Illegal, but works well.
>
> --
> Crazy George
> Brad <brad@escapees.com> wrote in message
> news:mauhtssp68dakquv9fcg3cmg9gtjlc47qn@4ax.com...
> > Has anyone tried a beam antenna for cell service? I was camping in a
> > marginal area over the weekend, and was wondering if something like this
> > would have help.
> >
> > Brad
> >

108. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Jim <pinkston@networksplus.net>
Message-ID: <39d95f7e@news.networksplus.net>
Source record: 178627

David <k4zzrNONSPAM@gate.net> wrote in message
news:8r8hoglvc1@news.gate.net...
> Dick,
>
> I'm already using the bronze ground rod clamps and an anti-corrosive joint
> compound for the underground wire and rods. All I need is a couple of
3/8"
> bolts to hold a copper cable clamp to the copper bulkhead (a 20"x4"x1/8"
> grounding plate with several drilled holes) outside the house where all of
> the ground rod wires end at a single grounding point. The stainless
steel
> bolts will work for the time being since the clamp and bulkhead are both
> copper.

Hey David, I just had a thought. You have any starter generator rebuilders
in your area? If so, see if they have any copper bolts, like what comes out
of the end of a solenoid. I had to replace on in the starter of a Case skid
steer loader the other day. If you can't find anything, email me direct &
I'll check back with the place I got my copper bolt.
Jim
KC0GSX

109. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D964CB.E42075CF@bigfoot.com>
Source record: 178628

Jim Kelley wrote:
>
> CAM disputed the following concepts:
> > Power does not move from the power generator through the distribution
> > system to the load. Power cannot be measured entering and exiting a
> > boundary drawn around a system. If work is not done then power doesn't
> > exist. Remember those arguments?
>
> I remember them, and also find them defined and described in modern
> physics texts.

Unfortunately, there is a wide gap between pure physics and RF
engineering. In RF engineering and power engineering the mere
movement of electrical energy past a point is defined as power
with no work required. And the Power Flow Vector is defined at
a boundary.
--
http://www.mindspring.com/~w6rca

110. Re: Verical vs. Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D86F2A.479E5596@oio.net>
Source record: 178669

kb2sin wrote:
>
> I am looking for some constructive opinions on Beams Vs. Verticals on HF. I
> am looking to place either of the two on top of a 50 foot tower. If anyone
> has suggestions, Comments, or personal experiences with either or both,
> please e-mail me at:
> kb2sin@stny.rr.com
> thank you and 73's
> de kb2sin
> www.kb2sin.homestead.com/kb2sin.html
>
> --

It's been my experience that a beam will in most cases be of more
benifit than a vertical is. A beam, with it's nulls, gives you a way
to 'get rid' of' strong signals. Can't do that with a vertical.
'Doc

111. Re: CATV hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D86E20.820F6046@bigfoot.com>
Source record: 178670

MatJake wrote:
> Would this hardline be suitable for a set freq. or can I get away with using it
> on HF

There's nothing magic about 50 ohm coax. Years ago, most hams didn't
even own an SWR meter and just dipped and loaded their finals into
75 ohm coax if it were available. Since a dipole in free space is
a good match for 75 ohm line, many hams used 75 ohm coax in the 50s.
Even into a 50 ohm load, 75 ohm hardline with an SWR of 1.5:1 is
usually less lossy than ordinary 50 ohm coax. Go for it.
--
http://www.mindspring.com/~w6rca

112. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001002073141.10756.00000215@ng-fc1.aol.com>
Source record: 178671

>I don't think it's a case of not wanting to hear about fractal antennas, but
>lots of people are tired of hearing lots & lots of nothing. The main
>proponent for fractals on this NG won't divulge any info on this NG about
>his fractal antenna. You have to go join his NG. I know I am always willing
>to listen & learn but Fractenna won't give anything up here, he just keeps
>saying stuff like "I'm the greatest & my antenna is the greatest." But no
>data is shown to back it up. I honestly think that Fractenna might just know
>a thing or two worth passing on to people like me but if asked, he tends to
>get rude & tells people to "go look it up" like doesn't want anyone wasting
>his time. Maybe the NG should split, but not many people are gonna leave
>this NG & go to another one. In fact, I doubt Fractenna would leave this
>one. I think he actually enjoys stirring things & pissing people off.
>But to summarize, I don't think there's anyone here that wouldn't want a
>rational, logical discussion about fractal antennas. Too bad it ain't gonna
>happen.
>Jim
>KC0GSX
>

Actually, Jim, I have posted a considerable amount of data on this NG. Sometime back I realized that this was to no end , and instead placed it on the web pages at

http://www.fractenna.com

This, of course, after publication through the years.

Could you please state what is it you wanted to know? If it doesn't exist in some form that is available on the 'net, then I will be happy to put it up there.

73
Chip N1IR

113. Re: Verical vs. Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D870E1.D87B242F@bigfoot.com>
Source record: 178672

'Doc wrote:
> It's been my experience that a beam will in most cases be of more
> benifit than a vertical is. A beam, with it's nulls, gives you a way
> to 'get rid' of' strong signals. Can't do that with a vertical.

But it's difficult to be net control with a beam. That's why I asked
him what he wanted his antenna to do.
--
http://www.mindspring.com/~w6rca

114. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001002073910.10786.00000161@ng-fc1.aol.com>
Source record: 178673

>I think he said he had an attenuator in-line, so the JRC could have
>been putting out 5 watts and he stepped it down.
>
>--jeffrey

There is no ambiguity in what I said or what I did.

The JST-245 certainly will NOT put out (only) 1/2 watt TX (well, maybe on RX audio:-)), and has to be stepped down for QRPP work.

73
Chip N1IR

115. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <RE%B5.12459$s76.859802@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178674

"Walter Maxwell" <w2du@journey.com> wrote in message
news:v2JB5.2998$mC.210273@monger.newsread.com...
>
>

Hi Walt:

I have not been reading every post to this thread but I think it is important for everyone to understand that there is no effort here to tarnish the reputation of anyone. Period. I respect Walter very much and think that there is a tremendous amount of information in Walter's book that has great value to the amateur radio community. When the second edition is published, I will gladly put my money on the table for a copy.

There are topics in Walter's book where I would not even begin to argue with him because in these areas Walt simply knows more than I. No arguement on my part.

In the area of impedance matching and the conjugate match we disagree. In any technical field people will disagree with one another. As long as the discussion can stay at that level we all should be fine with it and we all should hope to learn something.

More below ..

> I explained the reason for obtaining the wrong value of resistance in my
> original Letter to the Editor, and paraphrased it for emphasis in the
Letter
> of Reply to Steve's, including the Rules for Transforming Impedances.
Please
> re-read those two Letters. Steve's problem is in the incorrect use of
> attenuation. The problem is the same for lossy transmission lines, and it
is
> easier to explain with lines. If one measures the impedance at the output
of
> a transmission line, the line attenuation is being used in the wrong
> direction compared to that when the line is transferring energy from input
> to output. So let me demonstrate using a simple example of a 50-ohm
> half-wave line, attenuation 0.2 dB, and terminated in a resistive 100-ohm
> load. The SWR at the output is 2:1. With 0.2 dB positive attenuation the
SWR
> at the input is 1.93:1 and the input resistance is 96.7 ohms. If we now
> start at the line input to calculate the output resistance, the correct
> answer must be 100 ohms. But let's see what happens if we attempt to
measure
> the output resistance by looking back into the line from the output. We

> terminate the line input with a 96.7-ohm resistor and measure the
resistance
> at the output to be 93.6 ohms. Wrong answer! This is what Steve does,
> although it is obvious the correct answer is 100 ohms!
>

I believe Walter is misinterpreting my methods of calculation.

In the above example, we have a 50 ohm 1/2 wave line with a total
attenuation of 0.2 dB, terminated with a 100 ohm resistor.

If we connect an analyzer to the input of the line, we will measure an
impedance of 96.7 ohms. This is the input impedance to the line.

Now, from here what are we trying to determine?

1) Knowing the input impedance to the line, we can determine the load
impedance at the output end of the line doing a reverse impedance
calculation with the "attenuation" and "phase" of the line reversed.
Starting with the input impedance of 96.7 ohms, we would find the load
impedance to be 100 ohms. (see my letter for the exact formula)

2) Now we want to determine the "output impedance" at the load end of the
line. This is not the same as the load impedance connected at the end of
the line. How do we do this, we connect an analyzer to the output end of
the line and measure the impedance looking in the rearward direction. The
result of this measurement (or calculation) will depend on the impedance
terminating the input end of the line looking in the rearward direction.
This "terminating" impedance IS NOT the input impedance of the line. Unless
the input end of the line is connected to something, the terminating
impedance will be an open circuit. (Again, see my letter)

> The reason for the error is that attenuation is positive during the
backward
> measurement because the output is now a new input and the input is now a
new
> output. When initially transforming from output to input, positive
> attenuation reduces the SWR and input resistance. Thus when calculating in
> the opposite direction, to determine the output resistance by transforming
> from the input resistance, NEGATIVE attenuation MUST be used to return to
> the values at the original starting point, the output resistance that
> actually exists, 100 ohms, not 93.6 ohms. This concept will become crystal
> clear if the calculation is performed on a Smith chart. As I stressed in
my
> Letter to the Editor, Steve started out with a load impedance of 53.32 -
> j85.85 ohms and designed the network to match 50 ohms at the input. For
this
> network to match the load, the output impedance must be 53.32 + j85.85
ohms.
> But then, not understanding that the true output impedance is 53.32 +
j85.85
> ohms, Steve attempted to determine the output impedance using the

incorrect
> positive attenuation, obtaining the incorrect output impedance of 71.13 +
> j77.82 ohms. Because this incorrect impedance is not the conjugate of the
> load impedance Steve asserts incorrectly that no conjugate match can exist
> at the network output if the network has loss. This is the basis on which
he
> assailed Reflections as presenting incorrect information. However, it is
> evident that when the network output impedance is the conjugate of the
load
> impedance, a conjugate match does exist at the output.
>

As I have said, the output impedance of a network is not the same as the impedance connected at the network output.

In the discussion above, Walt simply states that I am wrong because he believes that the output impedance is the conjugate of the load impedance, therefore I must be wrong. Rather than simply stating this position I think it would be valuable for everyone to see the details of our calculations.

At this point, I would respectfully ask Walt to take the network as described in my example and detail the calculations he uses (step by step) to determine that the output impedance is the conjugate of the load impedance.

I will respond in kind and everyone can see how our calculations differ.

Steve

116. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001002090601.06621.00000106@ng-fl1.aol.com>
Source record: 178675

Hi Ed--

There's no question League reviews carry an especially high onus of accountability. For that reason alone, I think it extremely important for technical tests to be conducted in-house, at the Lab, by Lab staffers. Some tasks just shouldn't be "outsourced" out of fairness to the manufacturers and advertisers whose products may be mis-represented.

Now, if we could only convince the Editor to include a box or sidebar in the Review section for reporting test erata from the previous issue....

Rick K1BQT

117. RV-6-WARC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: okie2u@usa.COM
Message-ID: <381909565.970497485180.JavaMail.root@web538-mc.mail.com>
Source record: 178676

I purchased a Mosely RV-6-WARC Vertical antenna in May. Reports I have received are from very strong to weak depending on the distance. The antenna is installed at ground level. It is mounted to a 2" pipe, 4 ft in the ground the antenna is about 8" above ground and grounded to a 8" ground stake. I attached a counterpoise on 10 M, 12, 17 and 40 meters, (not grounded). The antenna is approx 100" from any building in a pasture, with dry sandy soil, it hasn"t rained about 50 days. The transmission line is approx 125" of RG213 coax. The SWR on 15 meters is>3.5, the rest are between 1.7 and >2.5 which is not close to the spec"s Mosley claims. I can tune it with my TS440/AT so I"m not worried about hurting my rig. The shack is on the second floor of my house and I don"t get any RF in the shack. I have not been able to get any help from Mosely, called three times and the engineer was to busy to talk, and I also sent him a complete run down of the setup in July with a SASE still no response. I thought of changing the length of the coax, or raising the antenna up to about 10" in the air and putting down about 8 to 16 " wave radials, I don"t want to waste my time or money if this won"t help. All help would be appreciated. Chip N1IR, please do not respond to this post.

_____
FREE Personalized Email at Mail.com
Sign up at http://www.mail.com/?sr=signup

118. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <WG1C5.12703$s76.869805@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178677

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D73AE4.38796A95@bigfoot.com...
>
> You forgot to take the difference in Z0s into account.
> One of the 100w values is into a Z0 of 51.5 ohms and the
> other is into a Z0 of 300 ohms. Going from a 51.5 ohm environment to a 300
ohm
> environment requires a transformation. You are ignoring the transformation
> of voltage and current that Mother Nature insists upon when the Z0
changes.

This transformation is determined through the reflection coefficient. The total voltage reflected at an impedance discontinuity is equal to the incident voltage times the reflection coefficient. The total voltage transmitted through the impedance discontinuity is equal to the incident voltage + the reflected voltage. Simple transmission line theory.

>
> For 100 watts into 51.5 ohms plus 100 watts into 300 ohms to equal 200
watts
> into 300 ohms, 71v plus 173v would have to equal 244v and, WONDER OF
WONDERS,
> it does exactly that. 71^2/50=100 173^2/300=100 244^2/300=200
> 71+173=244 Funny how that works.

This is a misinterpretation of the steady state conditions. You are looking at the *total* voltages in the steady state, not the individual components that make up the total. You forgot to take into account the impedance discontinuity at the junction.

+71.8 v in the 51.5 ohm line (100 watts) arrives at the 300 ohm line and sees an impedance discontinuity. As a result, a voltage reflection occurs. The reflection coefficient is 0.707. The reflected voltage is equal to +50.7 volts (50 watts reflected in the 51.5 ohm line). The total voltage transmitted into the 300 ohm line is equal to +122.5 volts (50 watts on a 300 ohm line).

Continuing, we know that the reflected voltage arriving at the impedance junction is equal to -173.2 volts (100 watts in a 300 ohm line). It too sees the impedance discontinuity. The reflection coefficient in this direction is -0.707. The re-reflected voltage at the junction is +122.5 volts (50 watts in a 300 ohm line). As a result, the total forward voltage in the 300 ohm line is 245 volts, which is the total 200 watts of *total* steady state forward power. The rearward voltage transmitted back into the 51.5 ohm line is equal to -50.7 volts (50 watts ina a 51.5 ohm line). This rearward voltage adds to the original reflected voltage (+50.7 volts) and

the two cancel to a net *total* rearward voltage of 0 volts. Hence, no rearward traveling wave past the match point - the steady state match.

The impedance discontinuity between the 51.5 and 300 ohm lines never changes. The effective steady state line or input impedance at that point is 51.5 ohms only because the rearward voltages cancel each other leaving a total voltage at that point equal to 71.8 volts:

Total voltage at match point = (forward V in 51.5 ohm line + reflected V in 51.5 ohm line) + (reflected V in 300 ohm line + re-reflected V in 300 ohm line) = (71.8 + 50.7) + (-173.2 + 122.5) = 71.8 v

Total current is found in a similar manner. The total impedance (line impedance) is simply Vtotal/Itotal which, in this case, equates to 51.5 ohms at the match point. Again, a steady state condition. Funny how transmission line theory and circuit theory work.

>
> > 2) Transmission line theory demands that the level of power reflection at
> > *any* impedance junction be a function of the impedance discontinuity at the
> > junction. In this example, we have an impedance discontinuity between a
> > 51.5 ohm line and a 300 ohm line. Transmission line theory tells us that a
> > total reflection of power cannot occur at this junction.
>
> Transmission line theory tells us that a reflection will occur at a 51.5/300
> ohm junction but there are no reflections on the coax. This says that *total
> acceptance* of forward power occurs at a 51.5/300 ohm junction when it is
> Z0-matched. If you have total acceptance of forward power on one side of the
> Z0-match then you must have total rejection of reflected power on the other
> side. This model is consistent, simple, and useful. Why do we need to talk
> about an infinite series of interference patterns? What is wrong with assuming
> the 1/2WL series section has transformed the impedance to 51.5 ohms thus
> making the impedance discontinuity effectively disappear? What mistake have
> amateurs been making when they used this concept over the past 70 years.
> Would they have radiated any more power if they had adopted your approach?
>

The issue is simply technical truth. The truth is that a total re-reflection of power does not occur at the match point. Why not just explain it correctly instead of using a model that does not represent the physics of what is truly happening in the system?

> > So, the correct source
> > power delivered into the 300 ohm line is 50 watts not 100 watts.
>
> This is simply not true because we can measure otherwise. We know all the
> generated power is delivered to the load in a lossless Z0-matched system.
> Source power delivered to the Z0-match is measured at 100w and continues
> to be 100w. No amount of words is going to change the meter reading.

Again, you are only measuring the steady state *totals*, not the individual components.

>
> We know there are no reflections at the 51.5/300 ohm junction because there
> are no reflections on the coax. The generator power has nowhere to go except
> into the 300 ohm line. The thing that makes this possible is the impedance
> transformation going on in the 300 ohm line. The reflections from the load
> arrive at exactly the right phase and magnitude to cancel any reflections
> that try to happen on the coax. Even your infinite series of interference
> patterns shows this to be true. THERE IS NO REFLECTED POWER ON THE COAX.
>
> > The source power delivered to the 300 ohm line is 50 watts.
>
> Nope it's not because we can measure otherwise. You cannot
> source 50 watts and get 100 watts to the load. Are you really
> pulling our legs with all this perpetual motion stuff?
>

Again, you are only measuring the *total* forward power not the individual components.

Perpetual motion??? How about circuit theory. 122.474 volts (50 watts in a 300 ohm line) adds to another 122.474 volts (50 watts in a 300 ohm line) resulting in a total voltage of 244.94 volts (200 watts in a 300 ohm line). In any impedance, if the voltage doubles, the power goes up by a factor of 4. This is not perpetual motion, it is simple circuit theory.

> Don't you understand that the phasor addition of two voltages can result in zero
> voltage and the phasor addition of two currents can result in zero
> current? There is zero reflected voltage and zero reflected current on
> the coax after steady-state conditions are reached.
>

Funny, but this is exactly what I said in my post:

"Now, the impedance match. How does it occur? At the match point, there was
a 50 watt reflection of source power. When the 100 watts of reflected power arrives at the match point, it transmitted 50 watts of power back into the 51.5 ohm line. These two powers are 180 degrees out of phase. As a result, the total rearward voltage and current at the match point become 0 and no

reflected wave exists (wave cancellation)."

73,
Steve

119. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <SS1C5.12755$s76.870658@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178678

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D77A65.A66BEA1C@bigfoot.com...
>
> My point exactly - those steady-state conditions actually exist and
> can be proven by measurements. They actually are what they are. You
> would have us believe that there are invisible and undetectable
> voltage and current waves flowing throughout the system with opposite
> phases to each other. That's very close to the argument that people
> use to try to prove that God exists.

Hi Cecil:

We both agree on the steady state conditions. They are measurable and they are fact. Knowing these steady state conditions we know only the following:

1) The *total* forward power traveling in the 300 ohm line. It is 200 watts.

2) The *total* rearward power traveling in the 300 ohm line. It is 100 watts.

3) The *total* forward power traveling in the 51.5 ohm line. It is 100 watts

4) The *total* rearward power traveling in the 51.5 ohm line. It is 0 watts.

With these measurements alone, we know nothing of the true source power delivered to the 300 ohm line (more on this shortly) and we know nothing of the re-reflected power at the 300 ohm line input. Any other assumptions at this point are meaningless.

>
> If you want to see how the steady-state condition evolved, then by
> all means, study the transient buildup. But why does the average
> ham need to bother himself with the transient buildup when the
> basic principles of steady-state operation are so well known?
>

The average ham does not need to bother himself with any of this. The real question is do you, I and other interested parties want to understand wave behavior. It is an academic exercise but one that many enjoy discussing.

The steady state conditions are well known but they are a result of the transient behavior of the system. Some of the conclusions drawn from only looking at the steady state conditions are incorrect and do not correctly describe the behavior of wave reflections in the system.

> Why? You would be predestined to win the argument if I were wrong.
> Are you trying to tell us that you found holes in my steady-state
> analysis and choose not to point them out? The basic problem with
> your argument is that if it doesn't arrive at the known steady-state
> conditions, it is worthless. If it does arrive at the known steady-
> state conditions, there is no need for it (except as an academic
> exercise in transient analysis). And I have pointed out a couple
> of errors in your analysis. Please notice that neither you nor
> anyone else is arguing with my steady-state voltage/current/power
> numbers because all of them can be proven by measurement.

First, you may want to check my response to your previous post.

Second, my transient analysis does arrive at the correct steady state conditions. Third, (IMHO) it has value because it correctly describes the behavior of wave reflections at the match point. Note that I can not claim my transient analysis as original. It is clearly described in several texts but these works have been misinterpreted.

I will agree with you that your description of the steady state condition is correct as it relates to the forward and rearward traveling power in each line. Where I disagree is in your description relating these forward and rearward traveling powers to the wave reflections at the match point.

>
> The way to cancel an unwanted voltage/current pair on a transmission
> line is to supply another voltage/current pair with equal magnitudes
> and of opposite phase. Once canceled down to nothingness, they cease
> to exist. That's why there are no reflections on the coax going to
> the generator and the forward power in the coax is exactly what
> the generator is generating. Complimentary reflections from the
> two impedance bumps have canceled each other out.
> --

This is correct and *exactly* what I said in my previous post. This is how the impedance match works. Given that you understand wave cancellation I don't understand why you insist that a total re-reflection of power is required to describe the impedance match? These are contradictory positions. If a total power re-reflection occurs, no power is available for wave cancellation.

Back to the example:

I tried to think of a simple way to come to agreement on the true source power delivered into the 300 ohm line (I.e. 50 watts rather than the 100 watts). What I came up with is this.

Assume that the 300 ohm line is infinitely long so that no reflections from the 51.5 ohm load ever make it back to the match point. What is the source power delivered to the 300 ohm line? It is 50 watts, not 100 watts.
Now make the line 1/2 WL. The only thing that has changed is that reflections arrive back at the match point from the load. Re-reflections occur at the match point and in the transition to the steady state, the total forward power changes from 50 watts to 200 watts.

73,
Steve

120. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rab48$d9o$1@plutonium.btinternet.com>
Source record: 178679

I have to apply a correction.

The ALC on my rig (and very likely Roy's and Cecil's) tries to keeps the forward VOLTS constant versus changes in load impedance - not constant forward power.

It is impossible for the ALC to keep the forward power constant under varying load conditions.

In any case, what we might like to see is OUTPUT power into the load for a varying load but that can be accomplished only by human intervention. And if intervention is to occur obviously it would be better to intervene in the tuner.

Furthermore it involves large variations in efficiency. But this should not worry anybody unduly because in order to obtain a constant load power it is necesssary for the experimenter to accept that the PA has to be set to underperform even when the load is at its optimum design value and swr is 1:1.

That changes in load angle will have an entirely different effect on load power from changes in load magnitude, even for the same shift in swr, appears to have been overlooked.

Thank heavens control of PA drive changes over to reflected volts before the PA blows up.
--
Reg.

121. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001002115920.12347.00000401@ng-ch1.aol.com>
Source record: 178680

>Subject: Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and
>Desist' Notification of Copyright Violation
>From: "Mike Camp" mikerobin@home.com
>Date: 9/28/00 10:34 PM Eastern Daylight Time
>Message-id: <JcTA5.261353$i5.3597481@news1.frmt1.sfba.home.com>
>
>Hello-
>
>At the bottom of the Yahoo news item that Dr. Cohen sent to the group, there
>was an opportunity to comment to Yahoo on the piece. Does anyone care to
>share their personal opinion of the facts of the case with Yahoo? Besides
>me, of course!
>
>Usual caveat: This may move you up in the line to be sued by Fractenna
>Antenna Systems...
>
>Mike Camp KI7FQ
>El Cerrito, CA.

Excuse me;

I never, ever,ever, sent this or anything else relating to this press release to this NG.

Any attempt to attribute this posting to me is incorrect and intentionally malicious.

Nathan Cohen, Ph.D.

122. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D89EAC.537C@pacbell.net>
Source record: 178681

CAM wrote:
>
> klocko@toad.net wrote:
> > Why is there a big difference between fields canceling and currents
> > canceling?
>
> Because currents *cause* fields. If there is zero current, the fields
> do not continue to exist. IMO, all these phantom currents and phantom
> fields border on a religion that takes us away from reality.
>
> > The partial reflection/partial transmission representation results in
> > the expected impedance (as computed using E/I) on each section of line,
> > and exactly the right amount of power delivered to the load. And all the
> > wave components can be easily visualized, even by the new inexperienced
>
> How about the components that were there yesterday? Are you going to
> continue to visualize them? Are you going to carry the noise from the
> Big Bang along in your model? Dropping the canceled signals from the
> visualization simplifies the model. Maintaining an infinite number
> of reflections complicates the model. The results are the same either
> way. It seems like a no-brainer to me. Can you explain exactly why
> "phantom reflections" is a superior concept to a "virtual short"?
> --
> http://www.mindspring.com/~w6rca

This illustrates the difficulty inherent in trying to explain
something like a quarter wave transformer by keeping track of
the incident and reflected voltage and current waves. Such an
approach leads to concepts such as two waves traveling through
a transmission line which, if 180 degrees out of phase with one
another, carry no energy; have no momentum; create no fields;
don't reflect; don't refract; have no photons;
and, because of the above, are
totally undetectable. This is only one difficulty. There is
also the problem of how this produces what amounts to a virtual
check-valve for energy, and the question of how the energy that
is originally reflected from the plane of intersection of the
two transmission lines has its direction reversed, and how it is
carried to the load. Perhaps the geniuses on the electromagnetics
newsgroup can decipher all this; I can't.

Fortunately, there's another explanation that only
relies on one's ability to believe that a quarter wave piece of
transmission line transforms its terminating impedance by Zo^2/Zl.
Anyone can look in any book on transmission lines, and, in a couple of

minutes,
find out how transmission line transformers work in terms of impedance transformation. This sure beats trying to understand a reflection analysis, and, it's just as valid, because all the assumptions are derivable from Maxwell's equations.

73

Tom Donaly KA6RUH

123. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <gO2C5.1857$ai4.532190@news.ntplx.net>
Source record: 178682

Rick Littlefield <k1bqt@aol.com> wrote:

> Now, if we could only convince the Editor to include a box or sidebar in the
> Review section for reporting test errata from the previous issue....

Can you cite any issue for which such errata would be required? It remains to be seen as to whether an errata is needed for the tuner review, but, to date, the number of Feedbacks on the test results has been very small. Not one has been required due to a testing error in the ARRL Lab -- they was a mixup of graphs once, a typo and some other error that the Lab should have caught on the Finals.

If you can offer anything specific that you believe to have been an error, please let me know.

73,
Ed Hare, W1RFI
ARRL Lab

124. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8raf37$4mt$1@news.tribune.com>
Source record: 178683

I purchase electrical switchgear from a local equipment manufacturer. They supply copper bolts with some of the switch gear. Perhaps a switchgear company would sell to you retail.
JD

David <k4zzrNONSPAM@gate.net> wrote in message news:8r6dd8$o64$1@news.gate.net...
> Can someone tell me which dissimilar metals will corrode when they are in
> contact with each other? I'm using a solid copper gounding bar as a single
> point ground bulkhead for my tower and station equipment on the exterior
> wall of my house. I have ten 8' grounding rods surronding the tower and
> bonded together with the #2 copper wire which runs back to the bulkhead.
> I've got some large copper connectors to use with the #2 wire but what type
> of metal bolts can I use to attach the copper connectors to the copper bar?
> I looked everywhere for brass, bronze or copper bolts with no luck. Would
> stainless steel work? I just don't want to start corrosion using the wrong
> thing.
>
> Thanks for some advice,
> David, K4ZZR
> --
> Please reply to: k4zzr@gate.net
> REMOVE "NONSPAM"
>
>

125. Re: Standards

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39D8C18E.854C8545@uci.edu>
Source record: 178684

Richard Clark wrote:
> But the "yardstick" is still in Paris.

We went to see the Volt at a museum in Paris. They mighta had the Farad there too - can't remember for sure. Or maybe it was the Ampere. :-)

73 de ac6xg

126. Re: Help with FM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ragtc$u6k$1@nnrp1.deja.com>
Source record: 178685

You may want to try Radio Shack part number 15-1843.

It is on sale now for $12.99. If this particular one doesn't work,
they have several others. Many of the indoor TV antennas also work
with FM. Just ask the salesperson to help you with your needs.

In article <vcpfts0mvidbl55vklgtcjkmke47ht00ne@4ax.com>,
Emmanuel Sopeju <esopeju@istar.ca> wrote:
> I am looking for help in finding an indoor antenna for FM reception on
> my audio receiver. I visited the local Radio Shack today and saw some
> indoor antennas, but mostly for TV reception.
>
> I tried to connect my Cable TV coax cable to the receiver, but the
> signals shot-out (no reception at all) . I'm I doing something
> wrong ?
>
> Please help.
>
> Thanks
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

127. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D8C85E.45F2D9EA@eznec.com>
Source record: 178686

If the forward power is 100 watts and the reflected power is 15 watts,
the generator is generating 85 watts.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > So my rig is behaving like Reg's, and like my homebrew rig -- it's
> > keeping the forward power constant.
>
> Classic analysis would say that when the forward power is 100w and
> the reflected power is 15w, then the generator is generating 85w.
> Do you think that's an absolute truth or do you think that the
> generator may still be generating 100w and turning the 15w reflected
> into heat? Or somewhere in between?
> --
> http://www.mindspring.com/~w6rca

128. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d8c630.13921470@news.akorn.net>
Source record: 178687

On Mon, 2 Oct 2000 12:32:36 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>If you can offer anything specific that you believe to have been an error,
>please let me know.
>
>73,
>Ed Hare, W1RFI
>ARRL Lab

Hi Ed,

Frank miscalibrated the SWR meter he used during his tests. I have a
letter here somewhere to that effect. Frank felt it should have been
corrected.

Also, there should have been some mention of the sensitivity of the
measurements and how they affect the measured values.

I can site an example of an AL-1200 amplifier that was tested, and how
the ARRL power source was bad in the lab was bad. The ARRL never
corrected that error, and the even published the bad data despite the
fact I pre-warned tem they there was a problem somewhere in their
supply system.

Also the IMD measurements on an AL-800H first came out many dB better
than I measured here, then they came out worse, then I checked the PA
here it it came out the same as all other 800H PA's which are back
with the first measurements.

Let's face it Ed, you guys are like anyone else. Your measurements are
never perfect.

The problem isn't with making an error, we all do that. The problem is
in never correcting the error.

73 Tom

129. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d8c8c8.14585160@news.akorn.net>
Source record: 178688

On Mon, 2 Oct 2000 16:37:19 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Thank heavens control of PA drive changes over to reflected
>volts before the PA blows up.
>--
>Reg.

What about reflected amps?

73 Tom

130. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D8CAFA.38C4FC5C@eznec.com>
Source record: 178689

Reg Edwards wrote:
>
> I have to apply a correction.
>
> The ALC on my rig (and very likely Roy's and Cecil's) tries
> to keeps the forward VOLTS constant versus changes in load
> impedance - not constant forward power.

As the impdance of my antenna changed from 1:1 to 3:1, the forward power changed only about 2%. The magnitude of the impedance had to have changed much more than this. So I don't believe this is correct.
>
> It is impossible for the ALC to keep the forward power
> constant under varying load conditions.

Why is that? In my homebrew rig I have a simple Bruene-type directional coupler monitoring the forward power. I detect its output and use it to control the drive to the final stage. Works fine. Without looking at the schematic, I'd guess that the ICOM uses the same method.

Of course, this only works over a limited range of SWR.

>. . .

> Furthermore it involves large variations in efficiency. But
> this should not worry anybody unduly because in order to
> obtain a constant load power it is necesssary for the
> experimenter to accept that the PA has to be set to
> underperform even when the load is at its optimum design
> value and swr is 1:1.

When I get a chance I'll check the efficiency of my homebrew rig when driving various loads. My feeling is that it doesn't change a great deal up to an SWR of 2 or 3:1 or so, but I might be wrong. It has a class C output stage, though, so will behave differently than the Icom.

>. . .

Roy Lewallen, W7EL

131. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D8C7F9.E0E03920@bigfoot.com>
Source record: 178690

Roy Lewallen wrote:
> If the forward power is 100 watts and the reflected power is 15 watts,
> the generator is generating 85 watts.

How about if the 15 watts is being dissipated in a resistive load
attached to a circulator as in a signal generator. Is the generator
still generating 85 watts?
--
http://www.mindspring.com/~w6rca

132. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D8CCC1.16009C7F@eznec.com>
Source record: 178691

CAM wrote:
>
> Nick Kennedy wrote:
> > ... the value can be as low as you want it to be, all the way
> > down to zero.
>
> Say Nick, would you send me one of those amps with a source impedance
> of zero? That would be a cool amp in more ways than one.
> --
> http://www.mindspring.com/~w6rca

It's really not hard to do with feedback. My power supply has an output impedance of very nearly zero, as does my stereo. It's even possible to create a negative output impedance, although the result is generally undesirable.

A real world zero ohm output impedance amplifier can still operate properly into a limited range of impedances, however.

Roy Lewallen, W7EL

133. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001002140653.29166.00000379@ng-cg1.aol.com>
Source record: 178692

>Microstrip fractal patch antenna for multi-band
>communication
>
>Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
>
>Defense Electronics Research Lab, Hyderabad, India
>
>Abstract
>
>A novel square microstrip fractal patch antenna in a
>Sierpinski carpet is proposed for three-band operation.
>Measured results indicate that the return loss is better
>than 10 dB and that the gain is greater than 7 dB in
>each band. This antenna is an attractive candidate for
>wireless, satellite and mobile communication
>applications. [Author abstract; 6 Refs; In English]
>
>Index Terms: Microstrip antennas; Fractals; Wireless
>telecommunication systems; Satellite communication
>systems; Mobile telecommunication systems; Microstrip
>fractal patch antennas
>
>
>Electronics Letters
>Volume 36, Issue 14 2000
>Pages 1179-1180
>
>--
>Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
>via Mailgate.ORG Server - http://www.Mailgate.ORG
>

As of tomorrow, said descriptions are covered by patent.

With best regards,

Nathan Cohen, Ph.D.

134. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D8D149.16723863@eznec.com>
Source record: 178693

My rig puts out 100 watts forward and 15 watts reverse, resulting in 85 watts at the load. The cable loss is negligible. If the rig's not putting out 85 watts, how much is it putting out? And where's the difference between this amount and the 85 watts in the load going?

If you want to dissipate 85 watts in a load and 15 in a circulator, well, then, you'd better put out 100 watts. Move the circulator into the rig, and, voila! the rig is putting out 85 watts again.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > If the forward power is 100 watts and the reflected power is 15 watts,
> > the generator is generating 85 watts.
>
> How about if the 15 watts is being dissipated in a resistive load
> attached to a circulator as in a signal generator. Is the generator
> still generating 85 watts?
> --
> http://www.mindspring.com/~w6rca

135. wtb commodore monitor 1702, thanks.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <3jlhts4e3blbdu95d6tas0fhd30bi5jq5q@4ax.com>
Source record: 178694

I am looking for a Commodore video monitor, model 1702 in good
working order,near or around the San Antonio, Tex. area.
If you have one or know where one may be 'had' at a
reasonable cost, would appreciate your input. Thank you for your time.
Chuck Lorentson al & "73"
ps email

136. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D8D697.8EACA709@bigfoot.com>
Source record: 178695

VE9SRB wrote:
> The average ham does not need to bother himself with any of this. The real
> question is do you, I and other interested parties want to understand wave
> behavior. It is an academic exercise but one that many enjoy discussing.

The laws/rules governing wave behavior are pretty well understood and
we usually simplify the equations as much as possible by dropping
terms that cancel or are negligible.

We do that with Maxwell's equations. We have one simplified
set that works for small loops and another simplified set that works
for large loops. Should we not simplify by dropping out the negligible
terms? Should we always work with the full set of equations?

> The steady state conditions are well known but they are a result of the
> transient behavior of the system. Some of the conclusions drawn from only
> looking at the steady state conditions are incorrect and do not correctly
> describe the behavior of wave reflections in the system.

There are not many conclusions to be drawn. Every steady-state parameter
can be measured and they must satisfy the conservation of energy
principle. Please state a steady-state conclusion that is incorrect.

> Second, my transient analysis does arrive at the correct steady state
> conditions. Third, (IMHO) it has value because it correctly describes the
> behavior of wave reflections at the match point. Note that I can not claim
> my transient analysis as original. It is clearly described in several texts ...

Exactly, I studied them in EE in the 50s. Nothing I have said disagrees
with those concepts.

> I will agree with you that your description of the steady state condition is
> correct as it relates to the forward and rearward traveling power in each
> line. Where I disagree is in your description relating these forward and
> rearward traveling powers to the wave reflections at the match point.

Again, every parameter can be measured and must satisfy the conservation
of energy principle. What is there to disagree with?

> Given that you understand wave cancellation I
> don't understand why you insist that a total re-reflection of power is
> required to describe the impedance match? These are contradictory
> positions.

Nope, they're not, Steve. The end result is identical in each case.
Nothing in the steady-state solution contradicts anything in the
transient solution. The steady-state solution is simply easier to

understand. The magnitude of the reflected energy certainly does
a turnaround and joins the forward energy.

> If a total power re-reflection occurs, no power is available for
> wave cancellation.

No power is consumed in wave cancellation so none is required for
wave cancellation. After the cancellation, we have power coming into
the Z0-match from the generator and there are no reflections on the
coax. We know we have reflected power (energy) coming towards the
Z0-match from the load. We know that reflected power doesn't make
it through the Z0-match and doesn't warm up the Z0-match. We know
that reflected power changes directions and joins the forward wave.
It is certainly not much of a conceptual stretch to say it was "re-
reflected" from the Z0-match.

We have generated waves, reflected waves, and forward waves that all
add up consistently to actual steady-state conditions. Adding in the
additional reflection phasors that cancel out completely before they
can actually come into existence long enough to be measured seems to
be an academic exercise of no practical value. Can you give an example
of why the average ham should be able to calculate the magnitude and
phase of the phasors that cancel out?

> Assume that the 300 ohm line is infinitely long so that no reflections from
> the 51.5 ohm load ever make it back to the match point. What is the source
> power delivered to the 300 ohm line? It is 50 watts, not 100 watts.

Of course, the same thing could be accomplished with a 300 ohm load. In
fact, using my previous example and switching the load from 300 ohms to
50 ohms will show exactly how the reflections build up so the transmitter
sees a virtual 51.5 ohms looking into the Z0-match. If the impedance seen
by the transmitter changes during transient buildup to steady-state, why
is it so difficult to conceive of the impedance seen by the reflections
changing during the same period?

> Now make the line 1/2 WL. The only thing that has changed is that
> reflections arrive back at the match point from the load. Re-reflections
> occur at the match point and in the transition to the steady state, the
> total forward power changes from 50 watts to 200 watts.

But after the transient response time is over, the transmitter sees 51.5 ohms
and thus delivers all of its power (energy) into the 300 ohm line. At that
point, the transmitter cannot tell the 300 ohm line from a 51.5 ohm resistor.
The reflections that would have occured to decrease the forward power in the
coax have been cancelled by complimentary reflections from the load. No power
is consumed in the cancellation because the Z0-match doesn't get hot. There are
no reflections on the coax so the reflected energy cannot go that way. The
reflected energy has no choice but to change directions and join the forward
wave.

Notice that we have no argument over fundamentals. We are disagreeing on
making something as simple as necessary, but no simpler. Funny how dropping

the words "virtual short" to describe the reflected energy turnaround, has allowed us to agree on the fundamentals.

You realize, of course, if one doesn't see a virtual 51.5 ohms looking into a Z0-match, then transmission lines are incapable of transforming impedances, those SWR circles on a Smith Chart are meaningless, and stubs don't work. :-)
--
http://www.mindspring.com/~w6rca

137. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7V4C5.1858$ai4.539999@news.ntplx.net>
Source record: 178696

Tom W8JI <2w8ji@contesting.com> wrote:

> Frank miscalibrated the SWR meter he used during his tests. I have a
> letter here somewhere to that effect. Frank felt it should have been
> corrected.

> Also, there should have been some mention of the sensitivity of the
> measurements and how they affect the measured values.

Thanks for that info, Tom; that is the first I had heard about that. I will talk to Frank forthwith. If the published data in that review are not good, I want to see a Feedback. If the error is higher than would be expected, as a minimum, I want to see some public disclosure of the measurement uncertainty.

> I can site an example of an AL-1200 amplifier that was tested, and how
> the ARRL power source was bad in the lab was bad. The ARRL never
> corrected that error, and the even published the bad data despite the
> fact I pre-warned tem they there was a problem somewhere in their
> supply system.

I can't speak with any authority on this one, Tom; the testing happened before my time here in the Lab. (I started in 1986.) I do note that the Review states:

"We experienced some problems with our AL-1200. According to the manufacturer, these problems existed with only a few of the earlier serial numbers.(ours is no.33), and they have been taken care of on later units. The first problem, low high voltage, was causd by an improperly wound plate transformer. The second, low power output, was caused by a defective tube. Tom Rauch, W8JI, of Ameritron was exceptionally responsive in helping us track down the problems. He promptly replaced both defective parts and the AL-1200 worked as specified."

I will add that we still have that AL-1200 serial # 033 in the ARRL Lab; if I get a chance, I will retest it, ensuring that it goes onto the Lab's stiffly regulated power supply. I think it would be interesting to take a look. BTW, the fact that this has been in the Lab, subject to all sorts of use and a bit of misuse by inexperienced ops, for almost 15 years speaks well for its design.

> Also the IMD measurements on an AL-800H first came out many dB better
> than I measured here, then they came out worse, then I checked the PA
> here it it came out the same as all other 800H PA's which are back
> with the first measurements.

> Let's face it Ed, you guys are like anyone else. Your measurements are
> never perfect.

I agree wholeheartedly, Tom, we are NOT perfect. Fortunately, at least under my oversight, and with the full approval, no, mandate, from the editorial side of the team, the ARRL Lab works closely with manufacturers to resolve such differences. I remember the IMD tests well, and your input helped prevent the need for a Feedback. I discovered that an error was being made in the way the tests were being performed and we were able to correct the error. The ARRL Lab IMD test fixture is now good to about -65 dB PEP on 3rd order and better than -70 dB PEP on the higher order. To my knowledge, only the correct IMD data from our series of exchanges was published.

> The problem isn't with making an error, we all do that. The problem is in never correcting the error.

I cannot speak for the time before I was involved in Product Review, but if I know that the Lab makes an error, I want to correct that error. Our internal processes are all designed to trap such errors before they happen, internally and, even more importantly, by working closely with manufacturers to resolve any questions about the test results. Had the ARRL Lab not been willing to do that, QST *would* have published a few of the test errors made in the Lab. My thanks go to the manufacturers, yourself included, who helped spot potential problems. OTOH, in most of the cases, the Lab's test data has withstood the manufacturer test, and was resolved as such to the satisfaction of the manufacturers involved.

The one area where I don't think we have satisfactory resolution, especially in light of what you mentioned in your first paragraph, is in the testing of the tuners. I would hope that my candor in raising the issue wrt the tuner testing in the first place helps demonstrate that I take the publishing of correct information seriously.

WRT the tuner testing, I want to know what the measurement uncertainty in that original set of measurements was and I want to share the results. If you are interested, I will extend an invite to you, Tom, to come to Newington and work with Mike Tracy, our test engineer, if you like. If you can get yourself here, I will pick up a night's stay in the local Holiday Inn and treat you to dinner.

73,
Ed Hare, W1RFI

138. San Jose towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Scott Moore <samiam@cisco.com>
Message-ID: <39D8DEF2.E0D2DD9@cisco.com>
Source record: 178697

Sorry if this is the wrong place to post this but:

Does anyone know the city policy on towers for San Jose, California ?
I suspect it is not good, since I can't see any towers from my roof, but
would like to know.

--
Scott A. Moore is samiam@cisco.com

I like long walks, especially when they are taken by people
who annoy me.
- Fred Allen

139. Re: Wanted: Plans to Build Weather Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <D%2C5.3528$mC.227043@monger.newsread.com>
Source record: 178698

Hi Robbie,

You will find ny tutorial with dimensions in wavelengths for the quadrifilar helix, for which I did the R&D research at in the 1970's. My R&D led to the development of all the antennas flying on NOAA's TIROS polar-orbiting weather satellites. My web page is www.iag.net/~w2du. There are two PDF files, one is a copy of my R&D report. Both appear in the new 2nd edition of Reflections, soon to be released by Worldradio Magazine.

73,

Walt Maxwell, W2DU

140. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D8E136.3D24A26E@bigfoot.com>
Source record: 178699

VE9SRB wrote:
>
> "CAM" <cam2338@bigfoot.com> wrote in message
> > For 100 watts into 51.5 ohms plus 100 watts into 300 ohms to equal 200 watts
> > into 300 ohms, 71v plus 173v would have to equal 244v and, WONDER OF WONDERS,
> > it does exactly that. 71^2/50=100 173^2/300=100 244^2/300=200
> > 71+173=244 Funny how that works.
>
> This is a misinterpretation of the steady state conditions. You are looking
> at the *total* voltages in the steady state, not the individual components
> that make up the total. You forgot to take into account the impedance
> discontinuity at the junction.

I didn't forget to, Steve, it is just not necessary. All of the values are
perfectly consistent without taking the impedance discontinuity into account.
Things should not be made overly complicated.

If I told you that there are two one million volt waves on every transmission
line but they are out of phase and cancel each other, would you believe me?

> +71.8 v in the 51.5 ohm line (100 watts) arrives at the 300 ohm line and
> sees an impedance discontinuity.

That's one way to look at it. An equally valid way to look at it is that
it sees a virtual 51.5 ohms and there are no reflections. This is the way
we have looked at it for 70 years or so. This is the way a Smith Chart
looks at it. This is the way stubs work. "If it ain't broke, don't fix it."
The older model works just fine. Good luck in trying to get wide acceptance
for something that doesn't work any better, is a lot more complicated,
and is impossible to understand by the majority of hams.

> Continuing, ...

I know this works, Steve, but so what? The earlier way of doing
things works just as well, is easier to understand, and lends itself
to fewer mistakes in calculation. I understand what you are saying
but I'm not going to throw away my Smith Chart which is based on
virtual impedances.

> The issue is simply technical truth. The truth is that a total
> re-reflection of power does not occur at the match point. Why not just
> explain it correctly instead of using a model that does not represent the
> physics of what is truly happening in the system?

The "truth" of religion is a God that cannot be detected. The "truth"
of your treatment is waves that cannot be detected. What's the difference?

100% of the magnitude of the measured reflected energy changes directions
at the Z0-match point. Since that gives the correct answer, why complicate
things with undetectable, unprovable "technical truth"? I submit that you
don't know the technical truth and quantum physics will someday revolutionize transmission
line
theory.

The technical truth is that the sun doesn't rise. Yet, every day on the TV
weather report we see the weathercasters giving the sunrise time.

> Again, you are only measuring the steady state *totals*, not the individual
> components.

I have to side with Aristotle on this one. "A is A". A thing is what it is.
If it cannot be proven to exist, then for scientific purposes, it doesn't exist.
If the components cannot be broken out and measured, the only place they
continue to have an independent existence is in your mind. It's like mixing
a glass of water from California and a glass of water from Texas and
claiming that California molecules and Texas molecules still exist.

> Perpetual motion??? How about circuit theory. 122.474 volts (50 watts in a
> 300 ohm line) adds to another 122.474 volts (50 watts in a 300 ohm line)
> resulting in a total voltage of 244.94 volts (200 watts in a 300 ohm line).
> In any impedance, if the voltage doubles, the power goes up by a factor of
> 4. This is not perpetual motion, it is simple circuit theory.

So if I phase lock my IC-706s and drive the same 50 ohm load with both of
them outputting 100 watts, I can deliver 400 watts to the load. If so, I
can use 200 watts of the 400 watts to power the IC-706s. That's perpetual
motion, Steve.

> When the 100 watts of reflected power
> arrives at the match point, it transmitted 50 watts of power back into the
> 51.5 ohm line. These two powers are 180 degrees out of phase.

If there were any reflections, we would be able to measure them on an SWR
meter which is capable of seperating out two powers that are out of phase.
Please put your SWR meter on your coax and prove the existence of out of
phase powers. My SWR meter indicates only a single phase of power on the
coax. That reflected power needle doesn't move at all.
--
http://www.mindspring.com/~w6rca

141. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001002154105.10792.00000166@ng-fc1.aol.com>
Source record: 178700

>If you can offer anything specific that you believe to have been an error, please let me know.<

Tom has mentioned some specific examples involving the Lab. Another problem appears to occur because of inadequate communication between the staff reviewer and the Lab staff in preparation of the Review.

Specifically, the IF filter in the MFJ-9406 was criticized for having marginal selectivity because splatter could be heard from nearby stations during a contest (obviously, the reviewer was unfamiliar with how "dirty" signals get in VHF contesting). So the filter was criticized, but it's actual selectivity and shape factor were never tested by the lab to verify the claim.

In the MFJ 40-meter Cub review, the rejection of out-of-band SWBCI signals was criticized by the reviewer. During the subsequent lab eval, it was found that the wrong caps were supplied and 68 rather than 6.8pF coupling caps were used in the passband filters (the receiver and transmitter filters use the same value coupling cap). No wonder out-of-band signals were heard! But, there's no good mechanism for correcting situations like this.

Of all the League reviews of my designs, I've enjoyed good rapport with the Lab commend their willingness to take a second look and to solve problems if there are any. And, sometimes I'm sure I've gotten the benefit of the doubt! But, I still think there should be an erata box in the Review section for when something goes wrong or when the Lab finds something blatently counter to the reviewer's observation.

Rick K1BQT

142. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <BD5C5.3324$0n.285713@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178701

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D8D697.8EACA709@bigfoot.com...
>
> <snip>
>
>
> No power
> is consumed in the cancellation because the Z0-match doesn't get hot.
There are
> no reflections on the coax so the reflected energy cannot go that way. The
> reflected energy has no choice but to change directions and join the
forward
> wave.
>

Cecil:

You are correct that the ZO match does not get hot. You are also correct that there is no rearward energy flow in the 51.5 ohm line. We agree on this.

Rearward energy flow on the 51.5 ohm line ceases because of wave cancellation not because the *total* reflected energy (in the 300 ohm line) has no choice but to change direction. A *total* re-reflection of this energy does not occur, ever. This statement contradicts basic transmission line theory. Look at any of the texts you have (ex. Walt's), I would appreciate a reference to someone actually stating this.

The rearward flow of energy in the 51.5 ohm line ceases because of a wave cancellation process that continues throughout the steady state. It is always occurring. It is a continuous process. At all times in the steady state, there is 50 watts reflected at the match point and 50 watts delivered back into the 51.5 ohm line from the 300 ohm line. The *net* rearward power flow at the match point is 0 watts.

The law of conservation of energy. I'm not sure why you think there is a problem with this in my discussion.

Conservation of energy at the match point:

Transmitter delivers 100 watts to the match point. 50 watts reflected, 50 watts delivered to 300 ohm line.

100 watts of reflected power arriving at the match point. 50 watts re-reflected, 50 delivered to 51.5 ohm line.

The 50 watts delivered into the 300 ohm line adds to the 50 watts re-reflected at the match point and the *total* forward power is 200 watts. Vtotal = V1 + V2. Power = |Vtotal|^2. As I said, 100 watts forward + 100 watts forward cannot equal 200 watts forward. This is all simple circuit theory, demonstrating why the 100 watts is *not* totally re-reflected.

Cecil, we are again starting to go around in circles.

73,
Steve

143. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D8E59A.67921E45@bigfoot.com>
Source record: 178702

Roy Lewallen wrote:
> If you want to dissipate 85 watts in a load and 15 in a circulator,
> well, then, you'd better put out 100 watts. Move the circulator into the
> rig, and, voila! the rig is putting out 85 watts again.

Really? Whether a generator is generating 100w or 85w depends upon
the location of the circulator? What if the circulator is halfway
inside the generator box? Does the generator then generate 92.5
watts? :-)
--
http://www.mindspring.com/~w6rca

144. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D8EDFD.1AF9823@eznec.com>
Source record: 178703

At this point, I'll leave the discussion. You're much more fond of deep philosophical arguments than I.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > If you want to dissipate 85 watts in a load and 15 in a circulator,
> > well, then, you'd better put out 100 watts. Move the circulator into the
> > rig, and, voila! the rig is putting out 85 watts again.
>
> Really? Whether a generator is generating 100w or 85w depends upon
> the location of the circulator? What if the circulator is halfway
> inside the generator box? Does the generator then generate 92.5
> watts? :-)
> --
> http://www.mindspring.com/~w6rca

145. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Hg6C5.3368$0n.288225@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178704

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D8E136.3D24A26E@bigfoot.com...
>
> I know this works, Steve, but so what? The earlier way of doing
> things works just as well, is easier to understand, and lends itself
> to fewer mistakes in calculation. I understand what you are saying
> but I'm not going to throw away my Smith Chart which is based on
> virtual impedances.
>

The Smith Chart works great, it is pure genius. It is a graphical tool used to perform *steady state* design with *steady state* impedances.

>
> So if I phase lock my IC-706s and drive the same 50 ohm load with both of
> them outputting 100 watts, I can deliver 400 watts to the load. If so, I
> can use 200 watts of the 400 watts to power the IC-706s. That's perpetual
> motion, Steve.
>

I know you must be enjoying this more than I.

Lets connect the two IC-706's to the same 50 ohm load (not recommended for those without very good isolation circuits). So, I hope that each has some very good internal protection to take the power delivered to it by the other. When you connect two to the same load, the load impedance seen by each would be the 50 ohm load in parallel with the output impedance of the other transformed to the 50 ohm load. Let's forget about all that and assume that each sees a 50 ohm load and each "delivers" 100 watts to this load.

In this case Cecil, you would be driving the 50 ohm load with two equal voltages in parallel. 100 watts into 50 ohms translates to a voltage of 70.71 volts. The total voltage at the load resulting from connecting the two in parallel would still be 70.71 volts and the total power delivered to the load would still be 100 watts. No perpetual motion machine, still simple circuit theory. Does help the current drain on the IC-706's though (unless you fry them of course)

>
> If there were any reflections, we would be able to measure them on an SWR
> meter which is capable of seperating out two powers that are out of phase.
> Please put your SWR meter on your coax and prove the existence of out of
> phase powers. My SWR meter indicates only a single phase of power on the
> coax. That reflected power needle doesn't move at all.
> --

I was unaware that the SWR meter could independently detect two steady state powers traveling in the same direction simultaneously and then present a relative measure of both via the meter reading. I thought that the SWR meter presented a relative measure of two steady state power levels traveling in the opposite direction - like a ratio of reflected power to forward power. In the steady state, all we can measure is the *total* power in each direction.

Try this again with a TDR.

As this discussion starts to deviate from the subject, I will respectfully bow out.

73,
Steve

146. Re: San Jose towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CJ <cjr@visi.com>
Message-ID: <39D8F21E.A3D67357@visi.com>
Source record: 178705

Um, why not call city hall and ask?

73, CJ K0CJ

Scott Moore wrote:
>
> Sorry if this is the wrong place to post this but:
>
> Does anyone know the city policy on towers for San Jose, California ?
> I suspect it is not good, since I can't see any towers from my roof, but
> would like to know.
>
> --
> Scott A. Moore is samiam@cisco.com
>
> I like long walks, especially when they are taken by people
> who annoy me.
> - Fred Allen

147. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rasft$450$1@plutonium.btinternet.com>
Source record: 178706

Tom asked -
>
> What about reflected amps?
>
==========
I have fitted a fast-acting smoke detector inside the PA
compartmemt. This turns on a water spray.

Reg.

148. Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Brad <brad@escapees.com>
Message-ID: <mauhtssp68dakquv9fcg3cmg9gtjlc47qn@4ax.com>
Source record: 178707

Has anyone tried a beam antenna for cell service? I was camping in a marginal area over the weekend, and was wondering if something like this would have help.

Brad

149. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39D90213.728D@bellsouth.net>
Source record: 178708
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Scott Townley wrote:
>
> See http://www.primenet.com/~nx7u/mobile/noise.html

The easiest "cure" for noise in a Ford was to trade it for a Chevrolet!
LOL! No offense meant! That's how I cured my noise. I have have rarely
had noise probs in GM vehicles like I did Fords.

Jerry
K4KWH

150. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Chas <chas0001@my-deja.com>
Message-ID: <8rb3ce$f7v$1@nnrp1.deja.com>
Source record: 178709
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

I think that you are right. I have had 3 Fords and they all had problems with noise. 92 Bronco with the 5.0 V8, 98 Exploder with the V6 and now a 98 F150 with the V6. Put the fuel pump kit in the Bronco and that was a waste of time. The other 2 vehicles had ignition noise. Maybe I will learn one of these days. Go with a Ford and get the noise or go with a chevy and get mechanical problems(that should get a rise)

Chuck
KC0GUK

Sent via Deja.com http://www.deja.com/
Before you buy.

151. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39D916E0.9A08D680@uci.edu>
Source record: 178710

CAM disputed the following concepts:
> Power does not move from the power generator through the distribution
> system to the load. Power cannot be measured entering and exiting a
> boundary drawn around a system. If work is not done then power doesn't
> exist. Remember those arguments?

I remember them, and also find them defined and described in modern
physics texts.
73, Jim AC6XG

152. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Dan <dano@truvalue.com>
Message-ID: <8rb5d1$n9r$1@news.xmission.com>
Source record: 178711
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Chas" <chas0001@my-deja.com> wrote in message
news:8rb3ce$f7v$1@nnrp1.deja.com...
> I think that you are right. I have had 3 Fords and they all had
> problems with noise. 92 Bronco with the 5.0 V8, 98 Exploder with the V6
> and now a 98 F150 with the V6. Put the fuel pump kit in the Bronco and
> that was a waste of time. The other 2 vehicles had ignition noise.
> Maybe I will learn one of these days. Go with a Ford and get the noise
> or go with a chevy and get mechanical problems(that should get a rise)
>
> Chuck
> KC0GUK

Ok Chuck, I'll bite.

It's not mechanical problems with GM vehicles, it's all those damned squeaks and rattles that drive a guy crazy. I have owned a handful of GM vehicles and all of them were well over 150K miles before needing any serious repair. My current driver is a '93 Ford Explorer. Man, what an RFI nightmare. Ignition hasn't been the problem, it's that cheapo, wanna-be a real fuel pump that's the trouble. If I didn't like the vehicle so darned much, I'd trade it.
I like the new GM Jimmy/Blazer but when I sit in one sardines come to mind, not to mention the bump I got when I banged my head getting out of it. =)

Oh well, I sold the MKIIG and got a nice base rig. If I am going to take HF on the road, I'll just wait until I setup camp and then break out the laptop for a little PSK31...

73 Dan
N7SLC

153. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Edward Dowdy <ellhatespamdowdy@home.com>
Message-ID: <WP8C5.97186$Qx4.3096410@news1.rdc1.il.home.com>
Source record: 178712
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Go with a Dodge and have neither! :)

--
Please reply to eldowdy@home.com. Spam is a pain!

"Chas" <chas0001@my-deja.com> wrote in message
news:8rb3ce$f7v$1@nnrp1.deja.com...
> I think that you are right. I have had 3 Fords and they all had
> problems with noise. 92 Bronco with the 5.0 V8, 98 Exploder with the V6
> and now a 98 F150 with the V6. Put the fuel pump kit in the Bronco and
> that was a waste of time. The other 2 vehicles had ignition noise.
> Maybe I will learn one of these days. Go with a Ford and get the noise
> or go with a chevy and get mechanical problems(that should get a rise)
>
> Chuck
> KC0GUK
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

154. Interesting antenna site :>)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8rb5rk$ad0$1@bob.news.rcn.net>
Source record: 178713

Makes as much sense as the fractena site!

http://www.pyradyne.com/

At the top click on "Mega Orb and Irradiation" for
their fractal design!!!

enjoy....
73,
Chuck...K1KW

155. Re: Interesting antenna site :>)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8rb7blikn1@nnrp1.deja.com>
Source record: 178714

Now Chuck, that is JUST NOT TRUE! It makes MORE sense than FRACS site!

In article <8rb5rk$ad0$1@bob.news.rcn.net>,
"Chuck O'Neal" <coneal@ultranet.com> wrote:
> Makes as much sense as the fractena site!
>
> http://www.pyradyne.com/
>
> At the top click on "Mega Orb and Irradiation" for
> their fractal design!!!
>
> enjoy....
> 73,
> Chuck...K1KW
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

156. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Dan <dano@truvalue.com>
Message-ID: <8rb6pq$nn6$1@news.xmission.com>
Source record: 178715
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Edward Dowdy" <elIhatespamdowdy@home.com> wrote in message
news:WP8C5.97186$Qx4.3096410@news1.rdc1.il.home.com...
> Go with a Dodge and have neither! :)
>
>

Yeah, and hope you don't have to sell it. Resale values are terrible...

157. Re: San Jose towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Scott Moore <samiam@cisco.com>
Message-ID: <39D92191.800650EC@cisco.com>
Source record: 178716

I already consulted the planning documents for the city. I wrote here to get
the experiences of hams in the area. I don't know why you wrote here.

CJ wrote:

> Um, why not call city hall and ask?
>
> 73, CJ K0CJ
>
> Scott Moore wrote:
> >
> > Sorry if this is the wrong place to post this but:
> >
> > Does anyone know the city policy on towers for San Jose, California ?
> > I suspect it is not good, since I can't see any towers from my roof, but
> > would like to know.
> >
> > --
> > Scott A. Moore is samiam@cisco.com
> >
> > I like long walks, especially when they are taken by people
> > who annoy me.
> > - Fred Allen

--
Scott A. Moore is samiam@cisco.com

I like long walks, especially when they are taken by people
who annoy me.
- Fred Allen

158. Re: How to get a 20m diapole resonant on 40 and 10 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D90AA1.449BD44@dvol.com>
Source record: 178717

Ralph Blach wrote:

> I have installed a 20 meter diapole at my house. I only have room for
> this antenna and I was wondering how to get it resonant on 40m and 10
> meters.
>
> Any help or ideas would be appreciated.

>
For 40 and 10 tie the coax shield and center conductor together and it
becomes what is known as a "tee vertical". Sort of. It won't be resonant
on 40 & 10 but it will radiate. You'll have to use a wire tuner to get the
swr under control.
>--

> Ralph "Chip" Blach
> KF4WBK
> Chapel Hill, North Carolina

>
w3rv

159. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D9088F.2D36BEBC@dvol.com>
Source record: 178718
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Don Putnick wrote:

> Don Putnick wrote in message ...
> >One of the bills Gov. Davis vetoed today was SB 1714 Zoning Ordinances:
> >Radio Antennas, introduced by Senator James Brulte (R-Cucamonga). Oh,
> well,
> >let's try it again come next session.
>
> Here's the Governor's statement:
>
> To Members of the California State Senate:
>
> I am returning Senate Bill 1714 without my signature.
>
> This bill would require the Office of Planning and Research to: (1) prepare
> and publish a technical assistance bulletin for use by local planners in the
> preparation of local ordinances regulating amateur radio antennas; (2)
> prepare a model ordinance suitable for local regulation of those antennas;
> (3) and report by July 1, 2001, regarding any recommendations for changes to
> the state statutes regarding regulation of amateur radio antennas.
>
> This bill may encourage local officials to accommodate the needs of amateur
> radio operators when adopting ordinances. The cost of this bill however, is
> not included in the Budget Act of 2000. Additionally, this is a local rather
> than a state issue.
>
> Sincerely,
> GRAY DAVIS

>
The feds wimped out, the most populous state in the country wimped out, now it's
down to the neighborhood no-clues. Get educated on stealth antennas . .
>

> --
> Don Putnick KK6DP

>
w3rv

160. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: ve3lll@my-deja.com
Message-ID: <8r9bkt$113$1@nnrp1.deja.com>
Source record: 178762

try it
In article <39D2C989.9C18D752@hiwaay.net>,
Bill Aycock <baycock@hiwaay.net> wrote:
> Wayne, I am not an expert here, but, I have an opinion, based on a
> lifetime of Engineering experience- The approach you desribe is not
> likely to hold up for very long, especially in the climate you
> mention.(4 ft frost line)
> 1. Conduit is not meant to carry much load- it is designed to be
easily
> bent, to conform to the path needed for wiring. It is intended to
carry
> very light loads, but to provide impact protection to electrical wire.
> 2. most "house" wire is soft and is easily stretched. In your climate-
> the load in winter is expected to get pretty high, due to ice
formation.
> expect some stretch.
> Why not spend just a little more and get better poles, and better
wire?
> it will hold up lots longer.
>
> Good luck- Bill-W4BSG
>
> Wayne Jones wrote:
> >
> > I want to put up a budget 30 foot 20m dipole suspended by 2 masts.
One will
> > be against my house and the other will be close to and guyed from
the corner
> > of my back fence.
> > I am planning on using 3 10foot sections of electrical conduit,
each section
> > smaller than the next so the sections will telescope and can be
clamped with
> > about a foot of overlap. I think the sizes I saw at Home Depot were
1 1/4,
> > 1, and 3/4 inches diam
> >
> > Does anyone know if the conduit is strong enough and how much
guying is
> > needed for a 30 foot mast?
> > Also how would I secure the base of the mast taking into
consideration that
> > there will be frost down to 4 feet below ground in winter.
> >

> > I also saw post where someone suggested stripping electrical house
wire to
> > use for the antenna wire. I assume he meant stripping the outer
casing
> > containing the coated wires and not the insulation on the
individual wires.
> > Do you think this wire is strong enough to hang 30ft without
stretching or
> > breaking? Does anyone have any info or opinions on this?
> >
> > tnx
> > Wayne Jones
> > ve3gqx
>

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Before you buy.

161. Re: Verical vs. Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D84BE3.1273@wt.net>
Source record: 178763

kb2sin wrote:
>
> I am looking for some constructive opinions on Beams Vs. Verticals on HF. I
> am looking to place either of the two on top of a 50 foot tower. If anyone
> has suggestions, Comments, or personal experiences with either or both,
> please e-mail me at:
> kb2sin@stny.rr.com
> thank you and 73's
> de kb2sin
> www.kb2sin.homestead.com/kb2sin.html
>
> --

You don't say what bands. So I'll assume 20 though 10. A good beam will
eat a good vertical for lunch overall. It's that simple. But a good
vertical can still do a good job. And much cheaper and easier to put up.
But once you compare a beam with a vertical and see the difference in
F/B capability and gain you will be spoiled and probably dump the
vertical. It really is that much difference if you are using a good 3-4
el yagi or so. And remember it's reciprical. You receive much better
also. A barely readable signal on the vertical will be Q-5 on the beam.
Or 95% of the time anyway... MK
--
http://web.wt.net/~nm5k

162. Re: F,R.E-E` ,C.A-B`L*E~ *T_V, .L`E-G`A-L D`E-S,C.R-A,M.B-L,E.R-`B,U.I-`L,D. -Y`O,U.R, `O,W`N, `C,A`B,L`E, `B,O`X,..... 6581 [1/3]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <F%YB5.46696$ux3.4949@newsfeed.slurp.net>
Source record: 178764
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Isn't this theft-of -service?

K3BHJ

163. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D867FA.2DCD6650@bigfoot.com>
Source record: 178765

Roy Lewallen wrote:
> So my rig is behaving like Reg's, and like my homebrew rig -- it's
> keeping the forward power constant.

Classic analysis would say that when the forward power is 100w and
the reflected power is 15w, then the generator is generating 85w.
Do you think that's an absolute truth or do you think that the
generator may still be generating 100w and turning the 15w reflected
into heat? Or somewhere in between?
--
http://www.mindspring.com/~w6rca

164. Re: How to get a 20m diapole resonant on 40 and 10 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001002070104.13404.00000103@ng-cf1.aol.com>
Source record: 178766

>From: Ralph Blach rblach@intrex.net

>I have installed a 20 meter diapole at my house. I only have room for
>this antenna and I was wondering how to get it resonant on 40m and 10
>meters.

There are a number of techniques you could try. One is to make a loaded, trap dipole. I don't recall any articles that show how to design a loading coil and a trap into the same antenna, though.

See:

http://www.arrl.org/tis/info/trapped.html

One other way that will work reasonably well is to feed the dipole with ladder line and use an antenna tuner to load it up on all bands. There is no need to have the dipole be resonant on 20 meters, so put up as much wire as you can and feed it in the center with ladder line. Longer is better and it is okay to bend the antenna around a bit, but try to keep the bends at angles > 90 degrees.

If you can go a bit longer than the ~33 feet your 20 meter antenna takes up, perhaps with some wire bending, the article at:

http://www.arrl.org/tis/info/pdf/9506059.pdf

might be of interest.

RRAA readers might enjoy the large number of antenna articles available for download from the ARRL TIS pages:

73,
Ed Hare, W1RFI

165. Re: CATV hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D86D0C.D20A2BA4@oio.net>
Source record: 178767

MatJake,
Yes, you can use it on HF. Connectors might be a problem,
but other than that, it ought to work fine.
'Doc

166. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D86C8A.F43627B1@bigfoot.com>
Source record: 178768

klocko@toad.net wrote:
> Why is there a big difference between fields canceling and currents
> canceling?

Because currents *cause* fields. If there is zero current, the fields
do not continue to exist. IMO, all these phantom currents and phantom
fields border on a religion that takes us away from reality.

> The partial reflection/partial transmission representation results in
> the expected impedance (as computed using E/I) on each section of line,
> and exactly the right amount of power delivered to the load. And all the
> wave components can be easily visualized, even by the new inexperienced

How about the components that were there yesterday? Are you going to
continue to visualize them? Are you going to carry the noise from the
Big Bang along in your model? Dropping the canceled signals from the
visualization simplifies the model. Maintaining an infinite number
of reflections complicates the model. The results are the same either
way. It seems like a no-brainer to me. Can you explain exactly why
"phantom reflections" is a superior concept to a "virtual short"?
--
http://www.mindspring.com/~w6rca

167. Re: F,R.E-E` ,C.A-B`L*E~ *T_V, .L`E-G`A-L D`E-S,C.R-A,M.B-L,E.R-`B,U.I-`L,D. -Y`O,U.R, `O,W`N, `C,A`B,L`E, `B,O`X,..... 6581 [10/3]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:26:55 UTC
From: Robert <spam@less.com>
Message-ID: <jDQB5.15534$O95.1153282@typhoon.tampabay.rr.com>
Source record: 178749
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

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http://www.hackerscatalog.com/plans.htm

<nufkuy@dfdfdgdf.com> wrote in message
news:8HlB5.123996$LH4.614603@telenews.teleline.es...
> L.EGAL C.A.B.L.E TV DE-S.C.R.A.M.B.L.E.R
>
> Want to watch Sporting Events?--Movies?--Pay-Per-View

SPAM Snipped!

168. Re: F,R.E-E` ,C.A-B`L*E~ *T_V, .L`E-G`A-L D`E-S,C.R-A,M.B-L,E.R-`B,U.I-`L,D. -Y`O,U.R, `O,W`N, `C,A`B,L`E, `B,O`X,..... 6581 [1/3]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 00:27:09 UTC
From: Robert <spam@less.com>
Message-ID: <xDQB5.15536$O95.1152881@typhoon.tampabay.rr.com>
Source record: 178750
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Save your money. Get it for free here:

http://www.hackerscatalog.com/plans.htm

<nufkuy@dfdfdgdf.com> wrote in message
news:8HlB5.123996$LH4.614603@telenews.teleline.es...
> L.EGAL C.A.B.L.E TV DE-S.C.R.A.M.B.L.E.R
>
> Want to watch Sporting Events?--Movies?--Pay-Per-View

SPAM Snipped!

169. Verical vs. Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 01:49:18 UTC
From: kb2sin <kb2sin@stny.rr.com>
Message-ID: <yQRB5.201$355.231392@typhoon.nyroc.rr.com>
Source record: 178751

I am looking for some constructive opinions on Beams Vs. Verticals on HF. I
am looking to place either of the two on top of a 50 foot tower. If anyone
has suggestions, Comments, or personal experiences with either or both,
please e-mail me at:
kb2sin@stny.rr.com
thank you and 73's
de kb2sin
www.kb2sin.homestead.com/kb2sin.html

--

170. RE: Television Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 01:57:51 UTC
From: w1rfi@aol.com
Message-ID: <20001001215751.10817.00000140@ng-fy1.aol.com>
Source record: 178752

>From: AlainMV@aol.COM

>This is not an antenna question, as much as it is a reception question. My
>wife and I have just moved into our first home; the only place in the garage
>where I could put my R-71A receiver is on the other side of the living room
>wall. Right! Just behind the rear of the t.v!

It is an antenna question because the biggest factor in all this is not the distance from the TV to the receiver, but from the TV, its antenna and electrical system and your receiver's antenna.

I know of two main sources of noise from TVs. The first is caused by harmonics of the TV's horizontal circuitry. This is characterized by a buzzy, somewhat broad (2-3 kHz) interference every 15.75 kHz. It can be radiated directly by the TV, but is often radiated by the antenna/cable connection or the AC line cord. First, try a high-pass filter on the TV's input lead. You can then try a common-mode choke on the TV antenna connection (use a Palomar F-240-43 core, about 10 turns of wire. Do not sub ferrite beads or one of those Radio Shack clamp-on ferrites). Next, I would try a common-mode choke and an AC line filter (Radio Shack catalog 15-1111) on the TV's ac line cord.

If at all possible, an even easier cure might be to locate your antenna farther away from the TV and its wiring. If you are using an end-fed wire for an antenna, consider putting a coax-fed antenna outdoors.

See http://www.arrl.org/tis/info/rfigen.html for more info. The ARRL RFI Book, http://www.arrl.org/catalog/6834 also has some good info.

73,
Ed Hare, W1RFI

171. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 02:24:32 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39D7F190.FA6CFE52@att.net>
Source record: 178753

Roy, your experimental results confirm what I have observed over the years with my IC-730 (vintage 1982) used in several mobile installations with a variety of antennas.

The rig seems remarkably tolerant of high-SWR loads up to a sensible level. I will be using a new IC-756 PRO on the next motorhome jaunt, instead of the 730, and it will be interesting to compare its tolerance level with the 730.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Roy Lewallen wrote:
>
> I want to thank you for running the numbers. It spurred me to get some
> more quantitative values myself, and I found I was mistaken in the way
> the IC730 ALC works.

172. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 02:28:27 UTC
From: klocko@toad.net
Message-ID: <8r8rs6$m0f$1@nnrp1.deja.com>
Source record: 178754

In article <39D77D8C.AE4B4FC6@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> I don't have any trouble with two wave components canceling. In fact,
> that's exactly why there are no reflections on the coax looking into
> the Z0-match. Steve is saying they don't really cancel - that they
> continue to exist and are flowing down the coax even though it is
> impossible to measure them and their effects are undetectable. That's
> our bone of contention. He says they continue to exist after being
> canceled. I say they cease to exist after they've been canceled and
> that's why they cannot be measured and have no effect. There's a
> big difference between fields caused by currents in a wire canceling
> and the currents themselves canceling. In one case, the cause
continues
> to exist. In the other, the cause ceases to exist.

Why is there a big difference between fields canceling and currents canceling? For the balanced line, picture two plane waves, one from each wire, at some distant point. The E-fields are anti-parallel. Since the waves are going in the same direction, the Poynting vectors are parallel. That makes the H-fields also anti-parallel. The E-fields cancel, the H-fields cancel, and the line doesn't radiate. For the transformer, there are two sets of voltage waves and two sets of current waves on the line prior to the transformer. One voltage wave is due to partial reflection at the impedance junction and one is due to partial transmission. The same with the two current waves. Both sets are traveling back toward the transmitter. The voltage waves are 180 degrees out of phase and the current waves are 180 degrees out of phase. The voltage waves cancel, the current waves cancel, and the transmitter is happy. An exact analogy.

The partial reflection/partial transmission representation results in the expected impedance (as computed using E/I) on each section of line, and exactly the right amount of power delivered to the load. And all the wave components can be easily visualized, even by the new inexperienced ham.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

173. HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 02:44:53 UTC
From: nx7u@primenet.com
Message-ID: <39d7f67b.184272884@news.primenet.com>
Source record: 178755
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

See http://www.primenet.com/~nx7u/mobile/noise.html

174. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 03:22:25 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39D7FF94.257D774E@bellatlantic.net>
Source record: 178756

"Ed Hare, W1RFI" wrote:

> As an aside to the data, what is the present state of your earth? Wet? Dry?
> Do you have an estimate of the characteristics of your soil?

Here's a gardener's answer: the soil here is about half way between dry
and damp. There is a lot of rock, left here (NY) by a glacier way back
when. I hit clay when I dig down about 12" - if I can get past the rock :-)

When I built the dipole out of #6 wire - the one that was attached to the
8' 2x4, I tried it over the lawn, and then tried it over the blacktop driveway
and couldn't detect a difference on the MFJ.

Yesterday, I assembled an MQ-2 (Mini quad from TQM). It
covers 6 bands (20 - 6). I measured the swr at 5' above ground, and it
matched almost exactly the swr charts provided by the manufacturer.
I put the results into a lotus 123 spreadsheet - I can send it to you
if it would be of any use. What bearing it has on our discussion is
not apparent to me, except that it at least shows that the MFJ seems
to be working as it should. But I worked Brazil on the MQ2 it - off the side -
on 20 today, right after I installed it on the roof. K2GUC (I think
that's close to his call) another poster on this NG who lives about
5 miles from me, may have heard me do it - I heard him. But I digress.

If I can figure out how to accurately measure R vs Z, I'll try to do a
number of measurements of a dipole at various heights above ground.
That, and the other experiments I mentioned earlier, aren't going to
happen soon, but I'll post them when they do. A friend - WB2UAQ -
has seen a pretty wide swing in the impedance of his horizontal loop
(about 260 feet, roughly square) with change in height. I can ask him
if he has a record of the values he got when messing with it.

175. CATV hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 04:34:24 UTC
From: matjake@aol.com
Message-ID: <20001002003424.00291.00000082@ng-mg1.aol.com>
Source record: 178757

Ok I have another question. Since you guys were very helpful in helping me with my Helical antenna question, maybe you can help me with this one.

I have some CATV hardline. I remember a few years back articles and people selling transformers and the like. I was wondering if any one had any thoughts good, bad etc on the use of 75 ohm hardline.

Would this hardline be suitable for a set freq. or can I get away with using it on HF
etc.

.

Thanks and 73
Matt

176. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 04:38:06 UTC
From: Richard Miles <k7rnz@worldnet.att.net>
Message-ID: <39D81135.DCA6C033@worldnet.att.net>
Source record: 178758

Sorry David. I misunderstood your original problem.
You might check with a marine supply company and see if they have the bronze bolts you need in stock. They are used sometimes to connect rudders to the rudder posts of boats. I don't know where you live however in Seattle there are plenty of such outlets for this type of hardware.

Also your concern about dissimilar metals is a good one. Galvanic joints can cause rectification and TVI. Stainless against copper or bronze may result in a galvanic joint in the presence of moisture.

Good luck

Dick K7RNZ

177. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 04:41:52 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <39d910c3.8867293@nntp.mindspring.com>
Source record: 178759

I truly believe that Boston University has a mentally ill employee.
Perhaps if we all forwarded the ravings of said mentally ill employee
to:
Dean of the Metropolitan College at Boston
University, Dr. John Ebesole <jeber@bu.edu>
The subject employee could get the help he so desperately needs.

I accidently emailed this directly to Fractenna@aol.com for this gaff
I most profoundly apologize, not for the content just the misaddress.

I most sincerely hope this helps, a mind is a terrible thing to lose.

On 01 Oct 2000 19:40:33 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>I honestly believe that the purpose of all this is to draw attention to
>>Chip, not to redress any kind of damage to him or Fractenna. It's
>>succeeding in doing that as long as people respond. (And by this
>>response I'm also guilty.)
>>
>>As I told Chip in response to his email, there is no material on my site
>>which is copyrighted by Fractenna. To date, no suit has been filed, and
>>I'm not holding my breath. If one is filed, it should certainly be
>>interesting to anyone interested in copyright law, to say nothing of
>>students of psychology. In the meantime, the content of my web site
>>remains unchanged, and I join the growing list of people who Chip has
>>threatened to sue but hasn't.
>>
>>So my request is to just ignore all the huffing and puffing, and not
>>worry about it. It just plays into what I feel is the whole purpose of
>>the exercise -- to draw attention to Chip. The more outrageous and
>>bizarre the claims and threats, the more attention is drawn. I'm sure
>>that this, rather than any sort of logic, is the reason for the level of
>>claims and threats being put forth.
>>
>>Roy Lewallen, W7EL
>>
>
>To All Readers:
>
>It has come to my attention that Roy Lewallen, W7EL, has posted an unauthorized
> copyrighted file on his
>
>http://www.eznec.com
>

>web site.
>
>The file is of a fractal antenna, commonly dubbed 'MI2' . The copyright holder
>of this material is Fractal Antenna Systems, Inc., which has not been ask for ,
>nor has granted, publication and distribution of this file by Mr. Lewallen.
>
>The file was transcribed by Steven Best and thus is a derivative work of the
>aforementioned copyright material, in which the copyrighted material is at
>least substantially recognizable in Best's rendition.
>
>It has been initially assumed that Mr. Lewallen was not aware of the copyright
>infringement, however in private correspondence he has chosen to deny that such
> copyright protection exists.
>
>Mr. Lewallen is being formally sent a letter requesting that he cease and
>desist the further distribution of this copyright material and will have until
>December 15, 2000 to comply. Failure to do so will lead to suit against Roy
>Lewallen d/b/a Lewallen consulting/EZNEC.
>
>Those who have downloaded this file are so advised that this is copyrighted
>material with an intended controlled distribution; it is not in the public
>domain; its web-based distribution does not constitute 'fair use'.
>
>Copies of the file are available--under held copyright--by request, to those
>members of the fractal antenna reflector:
>
>fractalantenna-subscribe@egroups.com
>
>In a few weeks, it will also be available as a conditional(licensed)download
>from the web site
>
>http://www.fractenna.com
>
>Readers are advised not to break copyright law by downloading said file from
>the EZNEC web site.
>
>Thank you for your help and understanding.
>
>Sincerely,
>
>Nathan Cohen, Ph.D.
>CTO
>Fractal Antenna Systems, Inc.
>

178. California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 04:53:57 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <FxUB5.1191$TP6.5507@newsread2.prod.itd.earthlink.net>
Source record: 178760
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

One of the bills Gov. Davis vetoed today was SB 1714 Zoning Ordinances:
Radio Antennas, introduced by Senator James Brulte (R-Cucamonga). Oh, well,
let's try it again come next session.

179. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 04:57:52 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <kBUB5.1325$TP6.8490@newsread2.prod.itd.earthlink.net>
Source record: 178761
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Don Putnick wrote in message ...
>One of the bills Gov. Davis vetoed today was SB 1714 Zoning Ordinances:
>Radio Antennas, introduced by Senator James Brulte (R-Cucamonga). Oh,
well,
>let's try it again come next session.

Here's the Governor's statement:

To Members of the California State Senate:

I am returning Senate Bill 1714 without my signature.

This bill would require the Office of Planning and Research to: (1) prepare and publish a technical assistance bulletin for use by local planners in the preparation of local ordinances regulating amateur radio antennas; (2) prepare a model ordinance suitable for local regulation of those antennas; (3) and report by July 1, 2001, regarding any recommendations for changes to the state statutes regarding regulation of amateur radio antennas.

This bill may encourage local officials to accommodate the needs of amateur radio operators when adopting ordinances. The cost of this bill however, is not included in the Budget Act of 2000. Additionally, this is a local rather than a state issue.

Sincerely,
GRAY DAVIS

--
Don Putnick KK6DP

180. Comparisions of "innovative" antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 12:41:51 UTC
From: wgewald@att.net
Message-ID: <20001002124134.UTYI18564.mtiwmhc23.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178629

Some one mentioned the Cross Field Antenna in the context
of the fractal discussion. I found a couple of
interesting items in that regard.

http://www.antennex.com/general/_general/00000021.htm

"My issue is not one of whether the so-called 'CFA'
works, or even how well, but that the theory with which
it is credited is unfounded and quite ridiculous - as
anyone genuinely knowledgable in EM theory will tell you.
There is nothing remarkable about the anatomy of this
device - it can be modelled using finite element methods
as can any other conducting structure purporting to be
an antenna. A finite element model would soon reveal the
true comparative performance of this structure versus
other more established designs. I'm not sure if anyone
has actually done this since those acquainted with these
methods would immediately see the folly of the 'CFA' and
give it a wide berth..."

Could "fractal" be substituted for "CFA" in the above?

Here is an amusing link, where the phrase "April Fool's
joke" is applied to the CFA. (A common theme with
unappreciated inventors?)

http://www.ibiblio.org/pub/academic/agriculture/agronomy/
ham/CFA/rebut/rebut.html

Others:

http://www.lbagroup.com/technology/app13.htm
Greenville, NC firm acquires CFA rights

http://www.antennex.com/Stones/st0700/scfa.htm
CFA revival!

http://www.luminet.net/~wenonah/cfa/
Fractal and CFA linked.

--
Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
via Mailgate.ORG Server - http://www.Mailgate.ORG

181. Korean antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 17:40:11 UTC
From: WGEWALD@att.net
Message-ID: <20001002174004.UCDT22058.mtiwmhc24.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178630

Microwave and Optical Technology Letters

Volume 25, Issue 6 2000
Pages 429-435
Chang, Jungmin; Lee, Sangseol
Hanyang Univ, Seoul, South Korea

Abstract

A new fractal geometry of the cross antenna, which belongs to the traveling-wave antenna class and follows the contour of a cross, is presented. In the conventional type of traveling-wave antenna, the total length of the radiating conductor increases as the order of fractal expansion increases, but this increase of the length of the current path degrades the performance of the antenna. To reduce the antenna performance degradation, a hybrid fractal antenna is presented, which divides the entire fractal structure into some smaller ones, and connects each smaller fractal group with a power divider circuit. The secondarily, thirdly, and fourthly expanded hybrid fractal cross antennas are fabricated, and their performances are examined by measurements. The influences of the fractal order on the antenna performance are examined. [Author abstract; 10 Refs; In English]

Index Terms: Traveling wave antennas; Fractals; Power integrated circuits; Dielectric materials; Directional patterns (antenna); Electromagnetic wave polarization; Hybrid fractal cross antenna; Power divider circuits; Cross antenna; Fractal antenna

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Posted from mtiwmhc24.worldnet.att.net [204.127.131.49]
via Mailgate.ORG Server - http://www.Mailgate.ORG

182. Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 17:44:24 UTC
From: WGEWALD@att.net
Message-ID: <20001002174418.YMSX18564.mtiwmhc23.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178631

Microstrip fractal patch antenna for multi-band
communication

Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.

Defense Electronics Research Lab, Hyderabad, India

Abstract

A novel square microstrip fractal patch antenna in a
Sierpinski carpet is proposed for three-band operation.
Measured results indicate that the return loss is better
than 10 dB and that the gain is greater than 7 dB in
each band. This antenna is an attractive candidate for
wireless, satellite and mobile communication
applications. [Author abstract; 6 Refs; In English]

Index Terms: Microstrip antennas; Fractals; Wireless
telecommunication systems; Satellite communication
systems; Mobile telecommunication systems; Microstrip
fractal patch antennas

Electronics Letters
Volume 36, Issue 14 2000
Pages 1179-1180

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Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
via Mailgate.ORG Server - http://www.Mailgate.ORG

183. French antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 17:48:01 UTC
From: WGEWALD@att.net
Message-ID: <20001002174746.ULDV9211.mtiwmhc21.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178632

Multiband and wideband properties of printed fractal
branched antennas

Sindou, M.; Ablart, G.; Sourdois, C.

Universite Paul Sabatier, Toulouse, France

Abstract

The presented numerical and experimental results show
that the input reflection coefficient relative to
50 of a fractal tree antenna exhibits a multiband
behaviour generated by the elements of successive
iteration levels as well as a wideband response produced
by the large number of elements of the last iteration
level. [Author abstract; 7 Refs; In English]

Index Terms: Antennas; Electromagnetic wave reflection;
Fractals; Trees (mathematics); Iterative methods; Printed
fractal branched antennas

Electronics Letters
Volume 35, Issue 3
4 February 1999
Pages 181-182

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Posted from mtiwmhc21.worldnet.att.net [204.127.131.46]
via Mailgate.ORG Server - http://www.Mailgate.ORG

184. Recent antenna papers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 18:06:06 UTC
From: WGEWALD@att.net
Message-ID: <20001002180555.FWKZ5657.mtiwmhc26.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178633

High directivity fractal boundary microstrip patch
antenna
Electronics Letters, Volume 36, Issue 9, 2000
Pages 778-779
Borja, C.; Font, G.; Blanch, S.; Romeu, J.

Hybrid fractal cross antenna
Microwave and Optical Technology Letters, Volume 25,
Issue 6, 2000
Pages 429-435
Chang, Jungmin; Lee, Sangseol

Multiband and wideband properties of printed fractal
branched antennas
Electronics Letters, Volume 35,
Issue 3, 4 February 1999, Pages 181-182
Sindou, M.; Ablart, G.; Sourdois, C.

Optical excitations in fractal antenna supermolecules
with conjugated electrons: extended dendrimers
Chemical Physics Letters, Volume 300, Issues 1-2
29 January 1999, Pages 33-36
Kikuo Harigaya

Active zone self-similarity of fractal-Sierpinski antenna
verified using infra-red thermograms
Electronics Letters, Volume 35, Issue 17, 1999
Pages 1393-1394
Gonzalez, J.M.; Navarro, M.; Puente, C.; Romeu, J.;
Aguasca, A.

Fractal antenna engineering: the theory and design of
fractal antenna arrays
IEEE Antennas and Propagation Magazine
Volume 41, Issue 5, 1999, Pages 37-59
Werner, Douglas H.; Haupt, Randy L.; Werner, Pingjuan L.

Fractal volume antennas
Electronics Letters, Volume 34, Issue 16, 6 August 1998,
Pages 1536-1537
Walker, G.J.; James, J.R.

On the behavior of the Sierpinski multiband fractal
antenna
IEEE Transactions on Antennas and Propagation
Volume 46, Issue 4, April 1998, Pages 517-524

Puente-Baliarda, Carles; Romeu, Jordi; Pous, Rafael;
Cardama, Angel

Red sprites: lightning as a fractal antenna
Geophysical Research Letters, Volume 24, Issue 24
15 December 1997, Pages 3169-3172
Valdivia, J.A.; Milikh, G.; Papadopoulos, K.

Multiband properties of a fractal tree antenna generated
by electrochemical deposition
Electronics Letters, Volume 32, Issue 25
5 December 1996, Pages 2298-2299
Puente, C.; Claret, J.; Sagues, F.; Romeu, J.;
Lopez-Salvans, M.Q.; Pous, R.

Frequency-independent features of self-similar fractal
antennas
Radio Science, Volume 31, Issue 6
November - December 1996, Pages 1331-1343
Werner, D.H.; Werner, P.L.

Fractal multiband antenna based on the Sierpinski gasket
Electronics Letters, Volume 32, Issue 1, 4 January 1996,
Pages 1-2
Puente, C.; Romeu, J.; Pous, R.; Garcia, X.; Benitez, F.

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Posted from mtiwmhc26.worldnet.att.net [204.127.131.51]
via Mailgate.ORG Server - http://www.Mailgate.ORG

185. Spanish antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-02 18:09:28 UTC
From: WGEWALD@att.net
Message-ID: <20001002180918.SZVW23816.mtiwmhc22.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178634

High directivity fractal boundary microstrip patch
antenna
Borja, C.; Font, G.; Blanch, S.; Romeu, J.
Universitat Politecnica de Catalunya, Barcelona, Spain

Abstract

A novel patch antenna with a fractal boundary condition
is proposed. Experimental and numerical results
corroborate the fact that the fractal characteristic of
the perimeter produces localised modes. This property is
utilised in the design of a microstrip patch antenna with
a measured directivity of 12.7 dB. [Author abstract; 4
Refs; In English]

Index Terms: Microstrip antennas; Fractals; Current
density; Antenna arrays; Frequencies; Directional
patterns (antenna); Bandwidth; Antenna radiation;
Microstrip patch antenna; Fractal boundary condition;
Directivity of antenna

Electronics Letters
Volume 36, Issue 9 2000
Pages 778-779

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Posted from mtiwmhc22.worldnet.att.net [204.127.131.47]
via Mailgate.ORG Server - http://www.Mailgate.ORG

186. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA34C2.85341723@uci.edu>
Source record: 178519

CAM wrote:

> Jim Kelley wrote:
> > The only point I wanted to dispute here Cecil was that you implied that
> > Gary was incorrect in his comments regarding these definitions. That is
> > not a fair or accurate characterization.

> He first called me "childish". Do you think that is a fair or accurate
> characterization? On second thought, never mind. :-)

I don't think you're childish, Cecil. Children don't drink alcohol to the point of excess while posting to newsgroups. I think that might be the explanation for your occasional foray into the realm of irrationality. I also think you know that I have a great deal of respect for your knowlege, intelligence, and sense of humor. Although I don't particularly cherish bearing the brunt of them. :-)

73, Jim AC6XG

187. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e02ff0.335836687@news.seanet.com>
Source record: 178520

On Tue, 3 Oct 2000 13:55:46 -0400, "W4JLE" <w4jle@alltel.net> wrote:

>I am somewhat curious as to how you can patent a fractal antenna,
>particularly when you have stated here in the newsgroup and in your white
>paper that Yagi's are fractals as well. In fact, have you not stated that
>any random antenna is a fractal? How did you get around the "prior art"?

Hi OM,

You are probably under a false assumption as to "what" is patented (read the claims - the only content that counts). After all, this patent you speak of is NOT a design patent (that would protect a particular form), but is rather a method patent (that protects how something is done).

There is no one here practicing that art by any stretch of the imagination. I can't imagine why anyone would, either - especially at HF.

You will note that once the patent issued, the claims of "possible" infringement dropped to ZERO and the bogus notion of copyright moved into its place in this wobbly logic. That was why it was so amusing that I "might" be subject to legal action (as we all "might" be if we live long enough - duh, sure and as Ed McMahon would say "you may already be a winner!").

For other amusing insight, compare the statements made before and after publication by the Patent Office. It certainly appears the patentee hadn't a clue as to what was in the patent, what was protected, or what the coverage was. You may see pictures of several familiar fractal forms, but NONE of them has been patented by Fragile Antennas in this last round - only a method to tune them. I will stick with EZNEC to perform this loathsome chore. The publication was a tremendously boring non-event.

73's
Richard Clark, KB7QHC

188. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA3480.D0B74FE3@bigfoot.com>
Source record: 178521

Tom W8JI wrote:
> Nothing is clear yet to me.

Then stop drinking my scotch through that straw reaching from
your CRT to mine.

> I want to build a system to prove you are correct. Can you help me
> build one?

He refused to do that for me, Tom, why would he do it for you?
--
http://www.mindspring.com/~w6rca

189. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da3405.36413326@news.akorn.net>
Source record: 178522

At great risk of diverting the topic, let me make one comment.
Hopefully it will just pass without discussion.

On Tue, 03 Oct 2000 13:35:05 -0500, CAM <cam2338@bigfoot.com> wrote:

>> Cecil, you're misquoting me again. I never said hook up two IC-706's and
>> you would get 400 watts.
>
>I'm pulling your leg, Steve, but you did say that you could get 400w
>out of two 100w waves.

I can do that. If I set the 706's at 100 watts on different
frequencies and combine them, the PEP power will be 400 watts. The
average or effective power would be 200 watts, and the individual
radio power 100 watts.

I sure hope that isn't what we are doing!

190. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <oSqC5.16304$tl2.1159897@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178523

I will respond to this post.

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DA26D9.67876F2B@bigfoot.com...
>
> No we don't, Steve. We agree on the transient conditions. What we
> disagree on is the nature of the steady-state condition. You believe
> in phantom voltages, phantom currents, and phantom powers. I say if
> they are undetectable, they don't exist. You are appealing to
> Faith-in-the-Unmeasurable to try to prove your point. I put my faith
> in the measuring equipment. IMO, the only place your phantom signals
> exist is in your mind.
>

What exactly are you talking about? Could you be more technically specific
than "If I can't measure them they don't exist". The steady state is the
net result of all wave transients in the transmission line system. The
transient signals are not undetectable, nor are they unmeasureable. Your
power meter is just not the right equipment.

I have never spoken of phantom waves. Do you understand the concept of wave
cancellation in a transmission line? Rearward transient waves combine to
cancel at the match point such that there is no net rearward flow of power.
Why is this unbelievable simply because your steady state power meter can't
measure this? A steady state power meter will only measure the sum of the
transients.

>
> > In the 300 ohm transmission line, a forward source power of 100 watts
has a
> > forward voltage of 173.2 volts. A re-reflected power of 100 watts would
> > also have a forward voltage of 173.2 volts. If these voltages are in
phase,
> > the total forward voltage would be 346.4 volts and the total forward
power
> > would be 400 watts. These concepts are fundamental to basic circuit
> > theory.
>
> Given A + B = C, you are saying that B + C = D, and that is true
> but completely irrelevant to reality. Adding a cause to an effect
> is just ridiculous.
>

Cecil, try this. Drive a matched load with 100 watts of forward power in
the transmission line. Measure the voltage at the matched load. Now
increase the power output on the transmitter until the voltage across the

matched load doubles. Measure the forward power in the transmission line.
Is it 200 watts or 400 watts?

>
> > There is no doubly-phantom power in my description.
>
> Of course there is, Steve. When coherent V1+V2=0 and I1+I2=0, power
> equals zero. You are saying power equals V1*I1 + V2*I2 and that's
> two terms of phantom power. (I left out phase to simplify.)
>

You seem to be developing a habit of misquoting me.

In the steady state, the net rearward voltage is equal to 0 volts at the match point. The net rearward current is equal to 0 amps at the match point. Therefore, the net rearward power flow is 0 watts.

In the forward direction, total power is *not* equal to V1*I1 + V2*I2. I *never* said this, you did. I.e, you claim 100 watts + 100 watts = 200 watts. The summation of power is found from Vtotal * Itotal (phase = 0). Votal = V1 + V2. In our example, the value of V1 is the driving source voltage (which does not change) and the value of V2 is the summation of the transient re-reflections occurring at the match point.

I think this will be my last response.

Thanks Cecil.

Regards,
Steve

191. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA3877.FE951812@bigfoot.com>
Source record: 178524

Tom W8JI wrote:
> All I want to do is understand what Steve is saying, and he is the
> only one who can tell me what he means.

Since you two seem to be having communications problems, maybe I can tell you better than he. All kidding aside - he says the 100w of *generated* power would cause 173 volts in the 300 ohm line if it simply flowed unmolested through the Z0-match - as if it had encountered a 6:1 transformer. I don't know why he thinks it should act as if it had encountered a 6:1 transformer because no such transformer exists.

But he takes that non-existant 173 volts, adds it to the existing 173 volts from the reflections, and gets 346v, a result that is too high since the actual forward voltage in the 300 ohm twinlead is 244v.

Truth is, the generated voltage does not magically jump from 71v to 173v as if a 6:1 transformer existed. And 71v + 173v actually does equal the 244v forward voltage on the 300 ohm twinlead. The generated energy waves continue to see approximately 50 ohms for some short distance into the 300 ohm line. They do not see a 6:1 transformer.
--
http://www.mindspring.com/~w6rca

192. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA3AED.BBF65660@uci.edu>
Source record: 178525

CAM wrote:
>
> Jim Kelley wrote:
> > Why do you think physics and engineering should
> > disagree? One of them would have to be wrong.

> Not necessarily, both could be wrong. :-)

Profoundly true. But from a practical standpoint, it's most likely
that they are both right and that there are some misconceptions about
one or the other.

73 de ac6xg

193. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <m%qC5.16310$tl2.1160463@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178526

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DA3877.FE951812@bigfoot.com...
> Tom W8JI wrote:
> > All I want to do is understand what Steve is saying, and he is the
> > only one who can tell me what he means.
>
> Since you two seem to be having communications problems, maybe I can
> tell you better than he. All kidding aside - he says the 100w of
> *generated* power would cause 173 volts in the 300 ohm line if it
> simply flowed unmolested through the Z0-match - as if it had
> encountered a 6:1 transformer. I don't know why he thinks it
> should act as if it had encountered a 6:1 transformer because
> no such transformer exists.
>
> But he takes that non-existant 173 volts, adds it to the existing 173
> volts from the reflections, and gets 346v, a result that is too high
> since the actual forward voltage in the 300 ohm twinlead is 244v.
>

This is *not* what I am saying at all. Thank you for misquoting me again.
Good defense strategy though.

Steve

194. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA3CA1.965548C6@uci.edu>
Source record: 178527

CAM wrote:

> Jim Kelley wrote:
> > Light does not annihilate. Matter and anti-matter annihilate. In a
> > scenario where two coherent beams of parallel light cross paths at a
> > point at which they are out of phase, the area of intersection would
> > appear not to be illuminated. The light beams would each then continue
> > to propagate unperterbed on their respective trajectories. But I expect
> > you knew all that. ;-)

> Would you believe my physics book had a dangling participle?

Shoot. I was hoping you might be trying to make a point by stating an
absurdity. ;-)

73, Jim AC6XG

195. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001003163009.21147.00000053@ng-fq1.aol.com>
Source record: 178528

W4JLE wrote:
>
>I am somewhat curious as to how you can patent a fractal antenna,
>particularly when you have stated here in the newsgroup and in your white
>paper that Yagi's are fractals as well. In fact, have you not stated that
>any random antenna is a fractal? How did you get around the "prior art"?

The fract is that Clintonistas "streamlined" the patent laws to the point that one can get patent for any garbage (just read the incoherent freaky patent) and then it is up to the patentee to defend it in the court. (Thank you lawyers for your election fund contributions!) Just like Clinton vetoed the law on limiting frivolous law suit "rewards".
The dismantling of America continues. Give your hard drives to Chinese, you will "find" them behind the copier.
Standby for more crap.

Yuri

196. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA40CE.AB2A986A@bigfoot.com>
Source record: 178529

VE9SRB wrote:
> The transient signals are not undetectable, nor are they unmeasureable.

Some become undetectable and unmeasureable after steady-state has been reached and IMO have therefore ceased to exist. The steady-state reflected power(s) that you propose on the coax of a Z0-matched system exist only during the transient buildup to steady-state. After steady-state has been reached destructive interference eliminates all reflections on the coax. You say they are still there even though they are undetectable and un-measureable. Thus the phantom signals label. My Mother says there are unmeasurable and undetectable angels watching me all the time.

> I have never spoken of phantom waves.

I don't blame you. If I had invented the concept, I wouldn't call them by their correct name either.

> Do you understand the concept of wave
> cancellation in a transmission line? Rearward transient waves combine to
> cancel at the match point such that there is no net rearward flow of power.
> Why is this unbelievable simply because your steady state power meter can't
> measure this? A steady state power meter will only measure the sum of the
> transients.

During steady-state, **NOTHING KNOWN TO MAN** can measure or detect them so you cannot even prove that they exist. Do you understand that there is zero power when the voltages and currents all cancel to zero?

Voltages, currents, and powers don't squirt out of the Z0-match and then cancel. They cancel at the impedance bump point and nothing squirts out of the Z0-match back toward the transmitter.

> Cecil, try this. Drive a matched load with 100 watts of forward power in
> the transmission line. Measure the voltage at the matched load. Now
> increase the power output on the transmitter until the voltage across the
> matched load doubles. Measure the forward power in the transmission line.
> Is it 200 watts or 400 watts?

Nobody is arguing anything remotely resembling the above so it must be a straw man. Your basic problem is thinking there exists a virtual 6:1 voltage transformer at the Z0-match and it does NOT exist. The 71v generated voltage in the 50 ohm coax is not magically transformed into 173v in the 300 ohm line. It remains 71v as it flows unmolested through the virtual 50 ohms at the Z0-match. The impedance seen by the generated waves changes slowly away from 50 ohms as predicted by the Smith Chart. The virtual impedance has completely overshadowed the Z0. In fact, on a line with reflections, one can guarantee that Z0 will NEVER be encountered by an incident wave

with a different characteristic impedance.

> I.e, you claim 100 watts + 100 watts = 200 watts.

Earth to Steve - Earth to Steve - Power is a scalar.
100w + 100w *IS* equal to 200w
--
http://www.mindspring.com/~w6rca

197. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da41b2.39915144@news.akorn.net>
Source record: 178530

On Tue, 03 Oct 2000 19:57:08 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>I will respond to this post.

Hi Steve,

Please don't be distracted.

I'd like to know how you arrive at the conclusions you reached
regarding voltage doubling in the transmission like and power
increasing by four.

I assume you mean actual power, and not VAR power. If you do mean VAR
power, then I can't follow how we can ignore the phase angle when
talking about actual power.

I can't follow why the voltage doubles, without talking about a
specific point in the system.

I'm really trying to understand this and need a practical example.

73 Tom

198. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Wim ELBERS <wimelbers@skynet.com>
Message-ID: <8rdg25ukm1@news1.skynet.be>
Source record: 178531

Afishing rod (DK9SQ Fiberglass Telescopic Tower) plus a SG230smartuner and
about 12m wire and there you go on the air!
ON6TZ Wim

199. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA41B4.6F71AF08@bigfoot.com>
Source record: 178532

VE9SRB wrote:
> > But he takes that non-existant 173 volts, adds it to the existing 173
> > volts from the reflections, and gets 346v, a result that is too high
> > since the actual forward voltage in the 300 ohm twinlead is 244v.
>
> This is *not* what I am saying at all. Thank you for misquoting me again.
> Good defense strategy though.

Would you like for me to dig up your past postings and prove that is what
you said? You said 173v + 173v doesn't add up to 244v. You're right, it
doesn't, but one of your 173v values is bogus.
--
http://www.mindspring.com/~w6rca

200. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA4248.FC030C42@bigfoot.com>
Source record: 178533

F6BOM wrote:
> The power dissipated in the 300 ohms ohms line is the same as if
> an energy flux of 400 watts was flowing through it.

Is that true with a forward power of 200w and a reflected power of 100w?
--
http://www.mindspring.com/~w6rca

201. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da4309.40257721@news.akorn.net>
Source record: 178534

Hi Richard,

I have excluded you from my filter, so this is the first F-word post I have seen in a week. I have a question.

On Tue, 03 Oct 2000 19:41:23 GMT, rwclark@seanet.com (Richard Clark) wrote:

>protected, or what the coverage was. You may see pictures of several
>familiar fractal forms, but NONE of them has been patented by Fragile
>Antennas in this last round - only a method to tune them. I will
>stick with EZNEC to perform this loathsome chore. The publication was
>a tremendously boring non-event.

That was my conclusion also. The patent essentially said if you place one fractal thing in front of another and rotate it or alter the length of wires, it might be used to "tune" the system in a few non-amazing ways.

I couldn't find any other claim.

I suspect if someone wanted to tune an antenna that way, the whole patent could easily be tossed out. Mutual coupling effects are well known, and have been for years.

IMO, it is another one of these nuisance patents designed to be a fake feather in the cap of the holder or a slight thorn in the side of someone who wants to use what is an obvious system of tuning.

It was a method of tuning that was patented, nothing more. Unless I missed something in all the technobabble. Has anyone else found anything other than this one single claim?

73 Tom

202. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <xCrC5.4272$0n.355387@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178535

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39da2a06.33854461@news.akorn.net...
>
> >My discussion differs from Cecil's
> >in that I state that the forward source power in the 300 ohm line is 50
> >watts, not 100 watts and that the re-reflected power is 50 watts not 100
> >watts. 50 watts, added in phase with 50 watts is 200 watts. I assume
this
> >is where the problem is, ie. how does 50 watts + 50 watts equal 200
watts?
>
> You state that, but the reason isn't clear to me yet why you say that.
>

I state this for a very simple reason. The transmitter is energized, it sees the ZO of the 51.5 ohm line and delivers a forward traveling voltage to that line equal to 71.764 volts. This is a forward traveling power in the 51.5 ohm line equal to 100 watts.

This forward voltage arrives at the junction between the 51.5 ohm line and the 300 ohm line. It sees the 300 ohm impedance as a discontinuity. A reflection is created at this impedance junction. The reflection coefficient is equal to +0.707. The voltage reflected at the junction is +50.737 volts. This is a reflected power in the 51.5 ohm line of equal to 49.985 watts. The total voltage transmitted into the 300 ohm line is the total voltage developed at the impedance discontinuity. This total voltage is equal to 122.501 volts (71.764 + 50.737). This is the forward driving source voltage in the 300 ohm line. The forward driving source power in the 300 ohm line is therefore 50.02 watts.

The rest has been explained in several of my previous posts.

>
> I understand the VAR power can be any value, but I haven't noticed use
> of the term VAR power. What type of power are you talking about, and
> how would I measure it?
>

With a watt meter.

>
> What I need to know is how I can convert 100 watts of source power
> into 400 watts of actual power using a phase-coherent source. (That
> will keep two non-coherent generators of 100 watts effective power
> from being combined to produce a power level that varies from zero to
> 400 watts PEP out of the discussion.)

>

I did not say that you could convert 100 watts of source power into 400 watts of actual power. Cecil misquoted me and misinterpreted my statements and asked how he could hook up two 100 watt transmitters and get 400 watt of power. I did not once claim that you could do this.

> >Another way to think of this is connecting batteries in series across a
> >resistor. Connect a 12 volt battery across 12 ohm resistor, the power
> >dissipation is 12 watts. Now connect two batteries in series, should the
> >power dissipation be 24 watts? No, it is 48 watts.
>
> Only when the currents also double, and now the power from each
> battery is 200 watts. You have changed the source power.
>

In this case the current does double in the load, since the voltage in the load doubled. When this occurs, the V*I product goes up by a factor of 4. In this case, the power from each battery would be 24 watts. We cannot violate the principles of conservation of energy. If we deliver 48 watts to the load, the source can only be delivering 48 watts. In each battery, the effective V*I product is 12 V * 2 A = 24 watts.

>
> You claimed, if I'm not mistaken, a single 100 watt transmitter could
> produce 400 watts of power at multiple points in the system...none of
> which were described to be VAR power measurements.
>

I did not claim this at all.

Cecil claimed that in his example, that the forward source power to the 300 ohm line was 100 watts. He then claimed that the re-reflected power in the 300 ohm line was 100 watts. He said that they then added together to be 200 watts. I said, that *if* the source power were 100 watts and *if* the re-reflected power were 100 watts, the forward power would actually be 400 watts.

The point being that the actual forward source power in the 300 ohm line is 50 watts and the actual re-reflected power in the 300 ohm line is 50 watts. 50 watts forward + 50 watts forward equals 200 watts. Back to adding voltages. In this case, the transmitter is delivering 100 watts of power to the match point, 50 watts into the 300 ohm line and 50 watts reflected. The reflected power into the match point is 100 watts, 50 watt re-reflected and 50 watts delivered back into the 51.5 ohm line.

Cecil took my comments and applied them incorrectly to another example.

> Let me ask my original question again:
>
> Can you give me an example of how, by changing only the line match, I
> can cause the voltages to double and current to double at any single
> point in the line while they remain in-phase (so power is multiplied

> by four) WITHOUT doubling the power of the generator?
>
> I want to build a system to prove you are correct. Can you help me
> build one?
>

I did not say that you could do this in this manner. What I did say was that when the driving forward source voltages adds to a re-reflected forward voltage having the same value, the total forward voltage increases by a factor of 2 and the total forward current increases by a factor of 2 and the total forward power increases by a factor of 4. The source power does not change in this case at all.

73,
Steve

203. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8rdi1s$f3u$1@nnrp1.deja.com>
Source record: 178536

In article <39D96EB6.79C7FE@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> Nowhere in my Antenna Book does it say zero current can cause fields
> that cancel. Try running those differential currents through the same
> single wire and see what happens.

It's obvious you haven't bothered to read the analogy I posted several days ago.

> Please give a reference [snip]

I'm glad you're looking for references. Here's one: A description for the quarter-wave transformer is presented in Electromagnetics by Kraus and Carver, p 509 to 520 in the second edition. This description is based on *standard* transmission line theory and your so-called "phantom waves" are an integral part of it.

Here's a quote from another reference: From the first paragraph of Section 5 of Slater, "Thus we see that at a discontinuous boundary between two lines a reflection will be set up... If a wave approaches such a boundary from the left, there will be reflected wave in the line to the left, a transmitted wave in the line to the right. Similarly, a wave approaching a boundary from the right will give rise to a reflected wave on the right, a transmitted wave on the left. [Here's the good part]-> By assuming both a reflected and a transmitted wave in each section of line and imposing the boundary condition ... we have enough equations to determine all the amplitudes of the waves and to solve the problem completely." Notice that Slater sez "each section of line", not "some sections". He doesn't add "(except for inputs to a transformer)." This quote is directly applicable to the partial reflection/transmission model of the transformer.

The Kraus model has been around at least since 1973. The Slater quote is from a Dover reissue of the original first published in 1942. So for at least 58 years, partial reflection and partial transmission have been fully accepted concepts. I believe people on this NG are savvy enough to follow and fully comprehend this concept.

I want to thank you again for giving me the opportunity to get the word out to a LOT of people.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

204. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g1v4zw1.pminews@ca.news.verio.net>
Source record: 178537
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Mon, 02 Oct 2000 23:13:36 GMT, Brian Kelly wrote:

>>
>> I am returning Senate Bill 1714 without my signature.
>>
>> This bill would require the Office of Planning and Research to: (1) prepare
>> and publish a technical assistance bulletin for use by local planners in the
>> preparation of local ordinances regulating amateur radio antennas; (2)
>> prepare a model ordinance suitable for local regulation of those antennas;
>> (3) and report by July 1, 2001, regarding any recommendations for changes to
>> the state statutes regarding regulation of amateur radio antennas.
>>
>> This bill may encourage local officials to accommodate the needs of amateur
>> radio operators when adopting ordinances. The cost of this bill however, is
>> not included in the Budget Act of 2000. Additionally, this is a local rather
>> than a state issue.

>The feds wimped out, the most populous state in the country
>wimped out, now it's down to the neighborhood no-clues. Get
>educated on stealth antennas . .

We who were on the "SB-1714" Task Force were amazed that the
Governor vetoed the Bull because both the State Senate and the
Assembly passed the Bill UNANIMOUSLY.

In typical California style the legislators decided to make a
"study project" out of what all the other states with similar
legistation did as a "done deal", and the veto was solely on
the basis of "no funds allocated".

The issue was the "costs" involved ... heck, I could sit down
and crank out the "Technical Assistance Bulletin" and Model
Ordinance over a weekend at no cost to the taxpayers - I did
both for a client county two years ago and it's still on my
wordprocessor.

We'll try next year.

73 de Phil Kane - K2ASP
ARRL Volunteer Counsel

205. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <oRrC5.894$Pw1.55597@bgtnsc04-news.ops.worldnet.att.net>
Source record: 178538

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DA40CE.AB2A986A@bigfoot.com...

> Nobody is arguing anything remotely resembling the above so it must be
> a straw man. Your basic problem is thinking there exists a virtual 6:1
> voltage transformer at the Z0-match and it does NOT exist. The 71v
generated
> voltage in the 50 ohm coax is not magically transformed into 173v in the
> 300 ohm line. It remains 71v as it flows unmolested through the virtual 50
> ohms at the Z0-match.
>

Really??? - 71 volts in a 300 ohm line is 16.8 watts of power, not 100
watts of power. If your 100 watts of forward source power were correct, the
71 volts would have to be transformed into 173 v.

The impedance discontinuity at the junction is a function of the reflection
coefficient at the junction. The reflection coefficient is +.707. The 71 v
is transformed into 122 volts in the 300 ohm line - 50 watts of power.

An impedance discontinuity always exists at the junction between the two
transmission lines. The steady state match is a result of rearward voltage
cancellation that only occurs because the impedance discontinuity always
exists.

>
> > 100w + 100w *IS* equal to 200w
> --

Really??? Like 71 v in a 300 ohm line is equal to 100 watts of power. Take
the voltage associated with 100 watts of power in a 300 ohm line. Double it
and calculate the total forward power.

206. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DA4C43.9E33451E@mwci.net>
Source record: 178539

CAM wrote:

> "William E. Sabin" wrote:
> > Imagine a transmission line connected to a resistor at one end. At the other end
> > two ac generators of equal volts but opposite phase. Zero power is delivered to
> > the load and each generator delivers zero power.
>
> That's because no energy is being moved. No movement of energy equals
> no power. But a photon already possesses moving energy.
>
> > In the case of light waves, since no power is delivered because of phase
> > cancellation, no power is delivered by the light sources to a load, so no power is
> > delivered by either light source.
>
> This is different. Moving photons possess energy. During atomic annihilation
> of two gamma ray photons, a positron and an electron are created indicating
> that power is delivered to the load. What happens to a photon if its energy
> cannot be delivered? Doesn't the photon have to go somewhere?
>
> > A power source delivers power to a load only if the load is accepting power.
>
> That's true, if a photon doesn't encounter a load it keeps on going. So
> where do the photons go when a destructive interference pattern is
> established? They seem to disappear. Where did they disappear to?

The problem is that we cannot think of light or radio waves as *just* waves or *just* objects (like tiny little bb's). If two waves cancel, as in my example, then photons cancel also, not by some kind of violent explosion or annihilation, but because the waves are out of phase.

This is a difficult idea, but it really is important to wear two different hats when we talk about electromagnetic wave and photons. They must both obey the same rules. The tough part is this: they are not in reality *different* entities, but two different ways of expressing the same set of rules.

I am sure this is right.

Bill W0IYH

207. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Back Door Man <echurch@triad.rr.com>
Message-ID: <031020001715199583%echurch@triad.rr.com>
Source record: 178540
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

I'm very interested if it's still available.

E Church
echurch@triad.rr.com

In article <2HmC5.16253$XV.816954@nntp3.onemain.com>, Victor and
Lisbeth Trucco <trucco@teleport.com> wrote:

> trucco@teleport.com

208. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001003173541.07656.00000034@ng-cf1.aol.com>
Source record: 178541

>
>Hi Richard,
>
>I have excluded you from my filter, so this is the first F-word post I
>have seen in a week. I have a question.
>
>On Tue, 03 Oct 2000 19:41:23 GMT, rwclark@seanet.com (Richard Clark)
>wrote:
>
>>protected, or what the coverage was. You may see pictures of several
>>familiar fractal forms, but NONE of them has been patented by Fragile
>>Antennas in this last round - only a method to tune them. I will
>>stick with EZNEC to perform this loathsome chore. The publication was
>>a tremendously boring non-event.
>
>That was my conclusion also. The patent essentially said if you place
>one fractal thing in front of another and rotate it or alter the
>length of wires, it might be used to "tune" the system in a few
>non-amazing ways.
>
>I couldn't find any other claim.
>
>I suspect if someone wanted to tune an antenna that way, the whole
>patent could easily be tossed out. Mutual coupling effects are well
>known, and have been for years.
>
>IMO, it is another one of these nuisance patents designed to be a fake
>feather in the cap of the holder or a slight thorn in the side of
>someone who wants to use what is an obvious system of tuning.
>
>It was a method of tuning that was patented, nothing more. Unless I
>missed something in all the technobabble. Has anyone else found
>anything other than this one single claim?
>
>73 Tom
>

Hi Tom!

I believe the phrase is 'patent pending'. Do you understand what that means? Or you under the impression that a new technology may only be awarded one patent?

Actually, it's PATENTS and patents pending.

Hope that helps. If not, please consult a patent attorney as I find many incorrect statements in your comments, even here.

73
Chip n1IR

209. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e14d2e.343322842@news.seanet.com>
Source record: 178542

On Tue, 03 Oct 2000 18:06:41 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>Hi Richard,
>
>I have excluded you from my filter, so this is the first F-word post I
>have seen in a week. I have a question.
>
>On Tue, 03 Oct 2000 19:41:23 GMT, rwclark@seanet.com (Richard Clark)
>wrote:
>
>>protected, or what the coverage was. You may see pictures of several
>>familiar fractal forms, but NONE of them has been patented by Fragile
>>Antennas in this last round - only a method to tune them. I will
>>stick with EZNEC to perform this loathsome chore. The publication was
>>a tremendously boring non-event.
>
>That was my conclusion also. The patent essentially said if you place
>one fractal thing in front of another and rotate it or alter the
>length of wires, it might be used to "tune" the system in a few
>non-amazing ways.
>
>I couldn't find any other claim.
>
>I suspect if someone wanted to tune an antenna that way, the whole
>patent could easily be tossed out. Mutual coupling effects are well
>known, and have been for years.
>
>IMO, it is another one of these nuisance patents designed to be a fake
>feather in the cap of the holder or a slight thorn in the side of
>someone who wants to use what is an obvious system of tuning.
>
>It was a method of tuning that was patented, nothing more. Unless I
>missed something in all the technobabble. Has anyone else found
>anything other than this one single claim?
>
>73 Tom

Hi Tom,

All claims appear to be bloated and ambiguous except to a lawyer
(something about an ugly child only a mother could love). I speak
from the experience of having some 300+ claims allowed among my 5
patents and having had to read more than one action to dismiss, and
then writing appeals. The key factor to this fractal patent list of

claims is found in the first one, which through the successive claims is constrained and reduced in scope for this patent (not remarkably written either). In effect, there is only one claim with subordinating clauses for a process to tune an antenna. Not much to speak of. I would suggest my own patents for pointers, but I hesitate to impose that soporific on anyone.

If you read the text and read the claims you will notice a disconnect between the two. Simple fact of the matter is that the original claims (suggested by the textual content) have NOT survived and the review process whittled down the application to the method now patented. This is, no doubt, a source of great disappointment for the patentee. My original patents probably totaled 1000 claims (easy to lose track when the Patent Office sends you a final notice of rejection four or five times for each application - ah! the process of appeal, what a game). The difference is that my text and illustrations probably exhibit more coherence with the surviving claims than most patents (it takes the master's hand to accomplish this).

In general, the text and the images are of no particular merit, except where the images are referenced specifically in the claims. Many naive readers would assume that upon seeing those familiar fractal designs, that those same images and their application as antennas were covered by the patent publication. NOPE, NADA, NOT IN YOUR LIFETIME.

This would not be possible as those topics were revealed here in this forum more than 2 years before the patent was applied for. Many of these images where published at my various web sites more than 4 years ago. This created prior art which now disallows the patentability for anyone. I would suggest that being demanded to provide notice that the design elements were "patent pending" are now exposed to have been a fraudulent statement (base stupidity works as a defense - maybe). But to be fair, I am sure that upon examination of the exact statements made, these were inferences (as much of that correspondence is), with the ambiguity leveraged to present the illusion of legal authority.

Another point, you can LOSE your patent if you are aware of infringement and fail to act (and act means more than posting a "notice" :-> to a newsgroup).

And yes, I have consulted a patent attorney, my partner. He smiles and informally extends his regrets to the aggrieved party. He is one sharp dude who averages 4 times the claims as the patent we are currently considering. He is the one with the master's touch. Claims are the asset - nothing else.

73's
Richard Clark, KB7QHC

210. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da4e81.43194886@news.akorn.net>
Source record: 178543

Be warned, I don't have spell check and this is hastily typed.

On Tue, 03 Oct 2000 20:48:29 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>> >is where the problem is, ie. how does 50 watts + 50 watts equal 200
>watts?

I replied:
>> You state that, but the reason isn't clear to me yet why you say that.
>
>I state this for a very simple reason. The transmitter is energized, it
>sees the ZO of the 51.5 ohm line and delivers a forward traveling voltage to
>that line equal to 71.764 volts. This is a forward traveling power in the
>51.5 ohm line equal to 100 watts.

OK, we can round numbers if you like. I like to only use my fingers
and toes whenever possible. We have about 70v RMS and 1.4 amperes.

The problem is, we don't have that as a transient on a conventional
transmitter unless it has a problem like a slow TR relay.

What we have is a slowly changing voltage that gradually builds over
many RF cycles from zero to about 70 volts (in a perfect transmitter).

If the transmitter has a bandwidth many times the operating frequency,
we can have a situation where the output appears close to full voltage
instantly. Like a TDR would generate.

I assume this discussion centers around a system with an extermely
wide bandwidth transmission, much wider than conventional TV
transmitters. Amateur radios and even TV BC transmitters certainly
can't deliver such a signal.

But let's get past this, and assume a transmitter does behave that
way. I'll assume we have a transmitter up and running, and then at
some point after the tank circuit and harmonic filtering we have a
bounceless switch we open and close. That would allow me to create
the outgoing wave you describe.

I assume also we are working with lines that have very long delay
times compared to the rise time of the transcient.

Because that isn't something I do not consider in my normal line of
work, I'll have to ask questions as we go along. But then that's how I
learn things, and that's what I really enjoy and appreciate about this
newsgroup.

>This forward voltage arrives at the junction between the 51.5 ohm line and
>the 300 ohm line. It sees the 300 ohm impedance as a discontinuity. A
>reflection is created at this impedance junction. The reflection
>coefficient is equal to +0.707.

I assume the angle of the reflection is zero degrees so you are able
to just ignore it? ...and the reason phase angle is zero is because
the 300 ohm line is infinitely long for the high-speed transient pulse
we are considering...which is nothing like anything from a real
transmitter we would use?

Now here's what I don't quite remember. Does the reflected voltage add
to the incident voltage at that point? What about the current?

As I recall, when the load impedance is higher than the sourcing
impedance at a mismatched junction the voltage reflection is more
in-phase while the current caused by the reflection is to some extent
out-of-phase with the arriving wave. The end result is the voltage
increases while the current decreases.

That's why an open lossless transmission lossless line steps up
voltage to infinity, while a shorted lossless line has zero voltage
and infinite current...if we could somehow feed power into a line with
voltage and current 90 degrees out-of-phase.

I'm lost at this point. How do we double the voltage without reducing
the current?

>The rest has been explained in several of my previous posts.

I haven't had time to follow all the posts until now, and I know your
not going to be like someone else would be and tell me to go back and
read them all! I need to understand the stuff above before going on!

>> I understand the VAR power can be any value, but I haven't noticed use
>> of the term VAR power. What type of power are you talking about, and
>> how would I measure it?
>
>With a watt meter.

Great. What kind of meter? I have all types.

>I did not say that you could convert 100 watts of source power into 400
>watts of actual power. Cecil misquoted me and misinterpreted my statements
>and asked how he could hook up two 100 watt transmitters and get 400 watt of
>power. I did not once claim that you could do this.

OK, I came in too late.

>> >Another way to think of this is connecting batteries in series across a
>> >resistor. Connect a 12 volt battery across 12 ohm resistor, the power
>> >dissipation is 12 watts. Now connect two batteries in series, should the
>> >power dissipation be 24 watts? No, it is 48 watts.
>>
>> Only when the currents also double, and now the power from each

>> battery is 200 watts. You have changed the source power.

Ooops I had 100 watts on my mind. I should have said 24 watts.

Now we are back to 100 watts.

>> You claimed, if I'm not mistaken, a single 100 watt transmitter could
>> produce 400 watts of power at multiple points in the system...none of
>> which were described to be VAR power measurements.
>
>I did not claim this at all.

OK.

>Cecil claimed that in his example, that the forward source power to the 300
>ohm line was 100 watts. He then claimed that the re-reflected power in the
>300 ohm line was 100 watts. He said that they then added together to be 200
>watts. I said, that *if* the source power were 100 watts and *if* the
>re-reflected power were 100 watts, the forward power would actually be 400
>watts.

My mind goes numb at that thought, and it isn't necessary at this
point to think through that arguement.

>The point being that the actual forward source power in the 300 ohm line is
>50 watts and the actual re-reflected power in the 300 ohm line is 50 watts.
>50 watts forward + 50 watts forward equals 200 watts. Back to adding
>voltages. In this case, the transmitter is delivering 100 watts of power to
>the match point, 50 watts into the 300 ohm line and 50 watts reflected. The
>reflected power into the match point is 100 watts, 50 watt re-reflected and
>50 watts delivered back into the 51.5 ohm line.
>
>Cecil took my comments and applied them incorrectly to another example.

OK.

It's beginning to make some sense to me now. It seems like the results
would agree with the more simple method of considering the reflected
wave in a steady-state condition....which for virtually all of us is
good enough.

So what is the argument about? With a typical HF transmitter, envelope
rise time is limited to 200 uS or longer. That's 360 full RF cycles on
160 meters, the lowest amateur band in the USA. With CW transmissions,
it is longer yet.

Even if the transmitter has a severe bandwidth problem, rise time
would still take many dozens of RF cycles.

Few of us have five mile transmission lines in use with defective
transmitters that are hundreds of kHz wide, so what's wrong with using
the more simple reflected wave analysis method?

I'm just trying to get a handle on what the fuss is all about.

Now if I was running phase sensitive broadband transmissions up lines that were many many wavelengths long, I'd worry about transient responses.

73 Tom

211. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001003183441.25114.00000057@ng-da1.aol.com>
Source record: 178544

Hi Bart--

Actually, Tom suggested pretty much the same thing by combining two 100 watt 706's operating on different frequencies.

Rick K1BQT

212. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DA6819.85DDCEC6@west.raytheon.com>
Source record: 178545

CAM wrote:
>
> VE9SRB wrote:
> > Does a total re-reflection really occur?
>
> Does a destructive interference pattern occur in one direction along with
> a constructive interference pattern in the other direction?

Yes, that's why the voltages, currents and energy distribution is
different on the two sides of the boundary.

bart
wb6hqk

213. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DA67CC.E7BE027C@oio.net>
Source record: 178546

J.T.,
The first thing to do is to elevate the hamstick above
the roof line of the vehicle. That should 'get' you heard
with the hamstick.
'Doc

214. Re: San Jose towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn8tkq3p.i7c.X@animas.frontier.net>
Source record: 178547

On Tue, 03 Oct 2000 02:44:26 GMT, Sam Severs / WS6S scribbled:
>
>I used to live in San Jose and had a 40" tower.

I can't foresee any zoning/code problems with
a 3.333 foot tower in *any* city! <BG>

Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

215. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <39DA6C15.1698@tc.umn.edu>
Source record: 178548

Dennis Ferguson wrote:
>
> Henry Knoll <knoll003@tc.umn.edu> wrote:
> >> > As of tomorrow, said descriptions are covered by patent.
> >> >
> >> > With best regards,
> >> >
> >> > Nathan Cohen, Ph.D.
> >> >
> >
> >Not trying to practice law, but:
> >
> >That's a crock. Either a patent is issued or it isn't. The Patent
> >Office will not tell you if or when your patent will issue, so "As of
> >tomorrow....." has no meaning. He doesn't know that any more than any
> >of the rest of us.
>
> That isn't quite true. The patent office publishes data about new
> patents on Tuesdays. Patent number 6,127,977 showed up today.
>
> Dennis Ferguson

That's true, but his statement was about what was going to happen
tomorrow. If the Patent was issued today, it takes effect today.

Henry WA0GOZ

216. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001003193108.14398.00000061@ng-cu1.aol.com>
Source record: 178549

> What a real nutball troll. Now he claims that a computer analysis of his
>"invention" is copyright infringment. HE is a fringe lunatic troll
>troublemaker.
>

That's not what it says.

> If you plan to lock horns with W7EL you'd better get your nose out of this
>NG and
>into the books.

Fractal Antenna Systems, Inc. has an 'issue' over copyright infringement. There are no other issues, especially personal ones, with respect to Roy Lewallen.

> Your Phd may impress you but if you're counting on it to
>impress
>the rest of hte world you'd best reconsider a little further.

The last person I tried to impress was my mother at age 13.

Many of us
>remember
>that about the time you went through school lots of Phd's were handed out
>like
>admission tickets, to anyone who paid the fees and showed up often enough in
>attendance to parts of the program.

If you have evidence that this is the case with respect to my doctorate from Cornell University, then it may be worth your while to pursue it and report your findings, publicly here.

The more you toss it in people's face the
>more
>suspect it becomes.
>

Then resolve the issue by presenting the supporting data. What's stopping you? Why leave us up in the air?

You have made the insinuation that I received my Ph.D. by paying someone off and putting in my time. OK; so show this is the case.

>Fractenna wrote:
>
>> >
>> >
>> >Fractenna,
>> > Why don't you take your silliness somewhere else for a while?

>> >All of this crap is really getting old. If your going to sue him,
>> >them sue him. I certainly don't need to hear about it, and I really
>> >doubt if anyone else wants to either.
>> > Pesonally, I don't see how you can stand to look at yourself
>> >in a mirror...
>> > 'Doc
>> >
>> >
>>
>> Excuse me;
>>
>> First, I have no reason personally to even think of Roy Lewallen or his
>> company. So what you state is not only not possible, but not relevant.
>>
>> Second, this public notice was posted--appropriately--on the same public NG
>as
>> Roy Lewallen's public announcement about his (unauthorized) publication and
>> distribution of the MI2 file.
>>
>> Fractal Antenna Systems, Inc., which is the copyright holder, see no reason
>at
>> present to pursue a lawsuit. That will change depending on what actions are
>> taken before December 15, 2000 by Mr. Lewallen.
>>
>> But, so you know, Mr. Lewallen has privately corresponded in words that
>> indicate that ANY public disclosure of Mr. Lewallan's unuathorized
>publication
>> and distribution will be interpreted as a basis for actions against Fractal
>> Antenna Systems, Inc.
>>
>> Copyright holders commonly, indeed must, inform the public when
>unuathorized
>> use of copyright material is occurring in a very public and accessible
>medium
>> such as the internet. If FAS did NOT disclosed this unauthorized use (after
>Mr.
>> Lewallen refused to accept the situation and indicated he would not remove
>it)
>> then it would be interpreted as a 'go ahead' for piracy.
>>
>> I hope this helps.
>>
>> Nathan Cohen, Ph.D.
>> CTO
>> Fractal Antenna Systems, Inc.
>

73
Chip N1IR

217. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001003193733.14398.00000065@ng-cu1.aol.com>
Source record: 178550

>> > As of tomorrow, said descriptions are covered by patent.
>> >
>> > With best regards,
>> >
>> > Nathan Cohen, Ph.D.
>> >
>
>Not trying to practice law, but:
>
>That's a crock. Either a patent is issued or it isn't. The Patent
>Office will not tell you if or when your patent will issue, so "As of
>tomorrow....." has no meaning.

It has a pprofound meaning:it says on the next day there will be a patent
issued on said subject matter. Facts have, indeed, corroborated my statement.
Yours is not correct and indicates you do not understand how the issuance
process works.

He doesn't know that any more than any
>of the rest of us.
>
>

It would seem that I did, given the fact that my statement was accurate.

>>Just as a practical matter, if I request a reprint of the above
>> published article from the authors today, will they be in violation of
>> your patent if they send it to me?
>
>A patent allows you to keep others from making, using or selling your
>idea. Nothing more. Anyone can write about it, and obtaining a copy
>isn't unlawful. As a matter of fact, once the patent is issued, it is
>available from the Patent Office and other places as public knowledge.
>The purpose of a Patent is to increase the knowledge of a subject.

That's not why I have my patents:-)

>That's why you are reqired to disclose your best method of practicing it
>at the time of filling.
>
>See a Patent Attorney.
>
>Henry WA0GOZ
>

Agreed; see a patent attorney.

Here's a fun question to divert us to something more real: what is a 'ribbon copy' and does it have a ribbon?

73
Chip n1IR

218. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da7088.51906911@news.akorn.net>
Source record: 178551

On Tue, 03 Oct 2000 22:31:15 GMT, rwclark@seanet.com (Richard Clark)
wrote:
><snip>
>And yes, I have consulted a patent attorney, my partner. He smiles
>and informally extends his regrets to the aggrieved party. He is one
>sharp dude who averages 4 times the claims as the patent we are
>currently considering. He is the one with the master's touch. Claims
>are the asset - nothing else.
>
>73's
>Richard Clark, KB7QHC

Several others have e-mailed me suggesting exactly the same thing
Richard.

Seems like nearly everyone is in agreement.

73 Tom

219. http://clik.to/n0vfp

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "Mr. Davies" <n0SPAMvfp@BELL_SOUTH_RED_DWARF_.net>
Message-ID: <ztuC5.6240$Jf1.43336@news4.atl>
Source record: 178552
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

On my page, You will find:

Radio Shack webpages
MW DX page
Politics Pages
Message Board
Free for all Links pages
NEW! Radio of the month! This month it is the Pro-2006!

--
LLoyd Davies, N0VFP /4 NCI 2841
B.A.R.F. Chief of Communications
http://clik.to/n0vfp

220. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39DA7C1B.FD8@bellsouth.net>
Source record: 178553
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Well, Chas,

I can't agree with the mechanical troubles on Chevrolet, either. I went to Chevrolet for good after having several Fords that, not only gave me noise trouble (to the point that a radio was almost unusable), but left me stranded a number of times. I abandoned Ford for good in 1973 and never looked back. I've had 5 Chevrolets since that time (I used to trade just to keep up with the Joneses when I was younger)--two of which I own now. The '87 Celebrity station wagon I bought new in August '87. It now has 197,000 miles on it. It has never had the engine or transmission opened except for routine maintenance and they are both the originals. I replaced the OEM starter at 189,000, the OEM water pump shortly after. It has never quit except for a dead battery. Except for belts, brakes, several alternators over 13 years, I have replaced almost nothing. I did rebuild the front recently replacing the CV joints and the inner tie rods. It drives almost as new except for a couple squeaks in the rear I can't seem to locate. But I would drive it to the West Coast in a heartbeat. It doesn't tick, click or smoke.

The other Chevy is sort of a toy--a 1993 Lumina that I have put less than 30,000 miles on in the last 4 years. It is a Z34 that has proven to be reliable, mechanically sound, economical to drive, and just plain FUN. It is my Sunday go-to-meetin' car and it gets babied to death and both cars have always been garaged. The wagon is my "beater" that I drive every day, have my mobile ham rigs in, pull my lawn tractor with, haul lumber in, and even firewood! While Ford seems to be extremely popular, I can't agree that Chevrolets are prone to mechanical failure.

Since 1966, I have owned quite a few from a '61 to the '93 without having ANY recurring failures. The failures I had were with the Fords that had a habit of leaving me to walk back home. I learned to spell Ford backwards (D-river R-eturning On F-oot). LOL! I got extremely pissed at them after the fiasco with the '73 Mustang, and Ford's refusal to honor their tranny warranty. I cussed them out, stormed out the door, and traded down to a '69 Impala just to get rid of it! LOL! Funny, that 4 year old Chevy NEVER left me stranded NOR did it make ignition noise--and that was without doing anything to it.

It's what you get used to, I reckon!

Best 73

Jerry
K4KWH

Chas wrote:
>
> I think that you are right. I have had 3 Fords and they all had
> problems with noise. 92 Bronco with the 5.0 V8, 98 Exploder with the V6
> and now a 98 F150 with the V6. Put the fuel pump kit in the Bronco and
> that was a waste of time. The other 2 vehicles had ignition noise.
> Maybe I will learn one of these days. Go with a Ford and get the noise
> or go with a chevy and get mechanical problems(that should get a rise)
>
> Chuck
> KC0GUK
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

221. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DA8AE1.B50307BE@eznec.com>
Source record: 178554

Dick Carroll wrote:

> "Pure reactance" sounds as elusive as a "Conjugate match". Does that happen
> often?

Absolutely never.

This, however, doesn't diminish its utility as a modeling element or a tool to gain insight into how real things work. Real engineers use the concept of pure reactance daily in the development of real things that work.

Roy Lewallen, W7EL

222. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DA8CEF.49A0A639@eznec.com>
Source record: 178555

There are actually two independent claims in the patent, 1 and 13,
although they differ only very slightly from each other, and both deal
with a method of tuning.

Roy Lewallen, W7EL

Tom W8JI wrote:
>
> Hi Richard,
>
> I have excluded you from my filter, so this is the first F-word post I
> have seen in a week. I have a question.
>
> On Tue, 03 Oct 2000 19:41:23 GMT, rwclark@seanet.com (Richard Clark)
> wrote:
>
> >protected, or what the coverage was. You may see pictures of several
> >familiar fractal forms, but NONE of them has been patented by Fragile
> >Antennas in this last round - only a method to tune them. I will
> >stick with EZNEC to perform this loathsome chore. The publication was
> >a tremendously boring non-event.
>
> That was my conclusion also. The patent essentially said if you place
> one fractal thing in front of another and rotate it or alter the
> length of wires, it might be used to "tune" the system in a few
> non-amazing ways.
>
> I couldn't find any other claim.
>
> I suspect if someone wanted to tune an antenna that way, the whole
> patent could easily be tossed out. Mutual coupling effects are well
> known, and have been for years.
>
> IMO, it is another one of these nuisance patents designed to be a fake
> feather in the cap of the holder or a slight thorn in the side of
> someone who wants to use what is an obvious system of tuning.
>
> It was a method of tuning that was patented, nothing more. Unless I
> missed something in all the technobabble. Has anyone else found
> anything other than this one single claim?
>
> 73 Tom

223. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <39DA9470.733C3272@tir.com>
Source record: 178556

Dear Group: The latest Cohen patent is 6,127,977. The PTO's web
site has it posted. The last one is 6,104,349.
Regards, Mac

--
J. Mc Laughlin n8tt@tir.com Michigan ~

224. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "Robert L. Gill" <n5rg@itexas.net>
Message-ID: <8re23g0ao7@enews3.newsguy.com>
Source record: 178557

I guess I am lucky guys. I just installed my IC706 and HS1500 on my '98 Ford F250 Heavy Duty and I have no noise or at least very little noise.
After reading this thread I am truly thankful things came off as well as the did.
Maybe I can just recommend getting a 250 rather than a 150. HI
73 All
Robert L. (Bob) Gill, N5RG

Oh by the way the F250 has a 5.4 liter gas engine.
73

"W1RFI" <w1rfi@aol.com> wrote in message news:20001003044825.05565.00000086@ng-fm1.aol.com...
> >From: Chas chas0001@my-deja.com
>
> >Go with a Ford and get the noise
> >or go with a chevy and get mechanical problems(that should get a rise).
>
> At the moment, my '78 GMC pickup has neither -- only a few holes in the floor.
> Nothin' a few hours with a welder won't take care of, though. :-)
>
> 73,
> Ed Hare, W1RFI
>
>

225. Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: pvale <pvale@swbell.net>
Message-ID: <39DA94B7.3E418F52@swbell.net>
Source record: 178558

I bought a ICOM AH-4 to use with my IC706. I'm mounting this on my pickup and feeding a 8' CB whip on the back bumper. There is no place at the back of the truck to mount this tuner, so I'd like to mount it up under the cab and run coax back to the antenna feed point. Is this do-able, or does the feed point voltage at the output of the tuner get too high?

Thanks-In-Advance
Perry Vale N0MXJ

226. East Kentucky Fractail Virus

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39da98c8@news.planetc.com>
Source record: 178559

This message contains the dreaded East Kentucky Fractail Virus.

Because we ain't got a lot of programming skill here north of Harlan in the shadow of Pine Mountain, you must activate this virus your ownself.

Please go to the MS-DOS prompt, type format c:\ and hit return and answer "yes.".

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

227. Re: Car Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39DA9A29.25932D96@mindspring.com>
Source record: 178560
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf

I thought the glass mount antenna would extend above the top of the
vehicle. That would cut down on a lot of the RF inside the vehicle right?
I'm not installing any such antenna but I commonly run 15 to 20 Watts on 2
Meters. Mind you I am not cutting down the idea, just curious.

Jeffrey Herman wrote:

> <sideband@mindspring.com> wrote:
> >Doesn't this put a lot of rf in the car?
>
> A glass-mounted antenna a quarter-inch farther away doesn't? How
> much power were you intending to run? 73, Jeff KH6O
>
> >Jeffrey Herman wrote:
> >> Guys, a compromise between glass-mounted and exterior-mounted
> >> antennas is this: Take the end of your feedline and remove about
> >> 19 inches of the outer cover; at that point separate the inner
> >> conductor from the copper braid and run them opposite to each other
> >> and perpendicular to the feedline, taping them to your rear window:
> >>
> >> inner cond. copper braid
> >> -------------||--------------
> >> ||
> >> ||
> >> || coax feedline
> >> ||
> >> ||
> >>
> >> It's nothing but a 2m dipole made entirely from the last 19 inches
> >> of your feedline, taped to your car's back window. If the horizontal
> >> orientation bothers you, run the two legs at a 45 degree angle from
> >> the vertex (where the conductors separate) with that point taped to
> >> the base of the window:
> >> \ /
> >> \ /
> >> \ /
> >> \ /
> >> \/
> >> ||
> >> ||
> >> ||
> >>
> >> No muss, no fuss, no damage to the car, and much better results than
> >> the glass-mounted "dummy load."

> >>
> >> It makes a fine indoor antenna at home, too; mount it as a vertical
> >> dipole taped to a window.
> >>
> >> 73, Jeff KH6O
> >

228. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8re9kpmud1@iac5.navix.net>
Source record: 178561

Come on Cecil! There is no need to turn a debate into a sarcastic response.
You have been too used to responding to the baron of bent.

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D9E88B.EAC1D208@bigfoot.com...
> VE9SRB wrote:
> > If you check through my previous posts you will see that I indicate that
the
> > mechanism for re-reflection of the waves arriving back at the match
point is
> > simply the impedance seen at the match point by the reflected waves.
This
> > info was detailed in the previous posts.
>
> Too bad your explanation requires a religious-like faith in phantom
> waves, the existence of which you cannot prove. I've been thinking:
> Maybe your phantom waves with their phantom powers are responsible
> for spontaneous human combustion.
>
> On a related note: What happens to the EM energy when two coherent
> light waves are phased such that annihilation occurs? How is energy
> conserved? Where does the energy go and in what direction(s)?
> --
> http://www.mindspring.com/~w6rca

229. Re: East Kentucky Fractail Virus

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DAAD81.522BF7EC@eznec.com>
Source record: 178562

Gilbert Mouget wrote:
>
> Tue, 3 Oct 2000 22:37:49 -0400 dans l'article
> <39da98c8@news.planetc.com>
> l'honorable Joe Schlatter <joe@schlatter.org> escrivit :
>
> :Please go to the MS-DOS prompt, type format c:\ and hit return and answer
> :"yes.".
>
> How do you do that with Win ME ? There is no MS-DOS prompt.
>
> --
> Gilbert.

Search ME.

Roy Lewallen, W7EL

230. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DAACA7.4A87D989@bigfoot.com>
Source record: 178563

Dick Carroll wrote:
> Looks like you're trying to say that power moves even if it doesn't do any
> work. I thought The Dictionary ruled that out.

On the contrary, "power flow" is a concept accepted by the IEEE but
not by some on this newsgroup. I find it hard to visualize the power
in a pulse being anywhere except the pulse.
--
http://www.mindspring.com/~w6rca

231. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DAADCB.754BDBCB@bigfoot.com>
Source record: 178564

W4JLE wrote:
> Come on Cecil! There is no need to turn a debate into a sarcastic response.

Darn, I thought it was far enough out to be funny.
--
http://www.mindspring.com/~w6rca

232. Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <lhaltskdjv0596v3t3seo6his6mnecku11@4ax.com>
Source record: 178565

I have a question, bear with me. During the Desert Storm War, I 'heard' reports from the ''front'', and they would be by 'satellite phone', and there would be a '''delays in the transmit and receive messages '', maybe lasting a second or two, because the 'repeater' was in space. I am guessing those repeaters were located at about 22,000 miles out. ????. I don't really know what the distance was. Soooooo, with saying all this, my question IS if satellites were placed in space and were used as the cell phones are used today, how high up would they have to be???????????. Or another words how low could the ""repeaters"" be before they did not run in to the problem of ===delay===., and still stay in their orbit.??? (As I look over this question, I see I am not asking the question right, but I hope you ''see'' what I am trying to ask. :) C.
Lorentson 73

233. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DAB4AD.2444C417@bigfoot.com>
Source record: 178566

VE9SRB wrote:
> Really??? - 71 volts in a 300 ohm line is 16.8 watts of power, not 100
> watts of power. If your 100 watts of forward source power were correct, the
> 71 volts would have to be transformed into 173 v.

Look at a Smith Chart and observe what impedance that 71 volts is seeing. It is NOT 300 ohms. The reflections have changed the impedance from 300 ohms to 51.5 ohms.

> The impedance discontinuity at the junction is a function of the reflection
> coefficient at the junction. The reflection coefficient is +.707. The 71 v
> is transformed into 122 volts in the 300 ohm line - 50 watts of power.

V/I at the Z0-match is 51.5 ohms and varies from there around a 5.83:1 SWR circle on the Smith Chart.

> An impedance discontinuity always exists at the junction between the two
> transmission lines. The steady state match is a result of rearward voltage
> cancellation that only occurs because the impedance discontinuity always
> exists.

On that we agree. The impedance discontinuity is what makes the Z0-match possible.

> Really??? Like 71 v in a 300 ohm line is equal to 100 watts of power.

I never said that. The 71v doesn't see 300 ohms. The 71v sees 51.5 ohms. With an SWR of 5.83:1, 300 ohms is never seen because 300 ohms is the center of the SWR circle. (Total Voltage)/(Total Current) is NEVER 300 ohms. At the Z0-match, it is 51.5 ohms.
--
http://www.mindspring.com/~w6rca

234. Re: Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39DAA22C.81B@rpi.edu>
Source record: 178567

Larry Benko wrote:
>
> If you drive thru Conejos county Colorado which is south of
> Alamosa you will see several structures with stacked ~25 element
> horizontally polarized yagis of a size for the cell band. This
> area is very sparsely populated. I asked the proprietor of the
> ranch where we stayed and he said they were for phone service
> since USWest (now QWest) couldn't deliver standard phone service
> and the cell tower was >15 miles distant. I'm sure these antennas
> were legal. Just FYI. I don't know what gain you would get such
> an antenna but 18 to 20dBd would seem about right.
>
> 73,
> Larry, W0QE
>
> Crazy George wrote:
> >
> > You bet! Illegal, but works well.
> >
> > --
> > Crazy George
> > Brad <brad@escapees.com> wrote in message
> > news:mauhtssp68dakquv9fcg3cmg9gtjlc47qn@4ax.com...
> > > Has anyone tried a beam antenna for cell service? I was camping in a
> > > marginal area over the weekend, and was wondering if something like this
> > > would have help.
> > >
> > > Brad
> > >

There is another consideration as well: For digital cellular service,
there is a time-delay problem that shows up at around 15 miles from the
cell site. I believe that this is related to the frame rate of the data
packets. Using gain antennas to get greater range would lead to
problems. (Someone more familiar with the intricacies of this problem
may want to elaborate.)

Curt Breneman
RPI Chemistry
KC2EBP

235. Re: Dentron Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D9F6C1.39F78C65@oio.net>
Source record: 178569

Bill Ogden wrote:
>
> It seems there are more Dentron tuners put up for auction (on ebay) than
> equivalent sized MFJ tuners. Are the Dentrons generally considered inferior
> to MFJ? Any other thoughts as about their frequency on the auction site?
>
> Bill Ogden W2WO

Bill,
MFJ does make ~good~ tuners, but I think Dentron made
some of the ~best~. No matter who makes the tuner, always
use one that's rated much higher than what you think you
need (no such thing as 'over-kill' with tuners).
'Doc

236. FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Victor and Lisbeth Trucco <trucco@teleport.com>
Message-ID: <2HmC5.16253$XV.816954@nntp3.onemain.com>
Source record: 178570
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

Excellent condition with box and manual. $250 plus shipping Cont. U.S.

Thanks,

Victor KD6PTO
Portland, Oregon

237. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <uJmC5.16186$tl2.1145565@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178571

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D9E88B.EAC1D208@bigfoot.com...
>
> Too bad your explanation requires a religious-like faith in phantom
> waves, the existence of which you cannot prove. I've been thinking:
> Maybe your phantom waves with their phantom powers are responsible
> for spontaneous human combustion.
>
> http://www.mindspring.com/~w6rca

Why is your discussion turning into comments like this?

238. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D9F9DF.8662BB7D@mwci.net>
Source record: 178572

CAM wrote:

> On a related note: What happens to the EM energy when two coherent
> light waves are phased such that annihilation occurs? How is energy
> conserved? Where does the energy go and in what direction(s)?

Same question stated in a slightly different way:

Imagine a transmission line connected to a resistor at one end. At the other end two ac generators of equal volts but opposite phase. Zero power is delivered to the load and each generator delivers zero power.

In the case of light waves, since no power is delivered because of phase cancellation, no power is delivered by the light sources to a load, so no power is delivered by either light source.

A power source delivers power to a load only if the load is accepting power.

A lossless line (or empty space) does not actually "deliver" power unless there is something out there to accept it.

Some folks say that an antenna is "dissipating" the power that it radiates. I believe that the antenna "transfers" power from the transmission line to the 377 ohm transmission line of empty space. The antenna is exactly like a two-port network that may have some actual conventional resistance loss and a 50 ohm to 377 ohm transformer, but most of the RF is (hopefully) "transferred" to space. I prefer the classical idea that power "dissipation" means a conversion of one kind of energy to another kind of energy.

Antenna radio power is "dispersed" in *empty* space but it is still antenna radio power.

Bill W0IYH

239. WTB: two roller inductors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Bob <xyz_p15218>
Message-ID: <8rctqt$ros9@eccws12.dearborn.ford.com>
Source record: 178573
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Need two IDENTICAL roller inductors about 20 uH maximum. #14-16 or so wire size ok as they will probably be used at 100 Watt or less power level. They will be used in a balanced antenna tuner and must be the same.

REMOVE THE XYZ_ to reply
reply to XYZ_p15218@flash.net or XYZ_p15218@peoplepc.com
REMOVE THE XYZ_ to reply

TNX & 73
Bob
KB8TL

root@localhost
postmaster@localhost
admin@localhost
abuse@localhost

240. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D9FC1F.8E132782@hiwaay.net>
Source record: 178574

Walter-
I have been reading MANY of the posts from MANY different people, and it seems to me that several are posting arguments that are based merely on what they THINK you meant in your earlier publications. This has bothered me, but, as a non-expert, I shut up.

However, I think your post made some re-think their interpretation, which they thought was in keeping with yours. THey seem to be supportive, but are reviewing your position re the conjugate match in view of your recent post.

I Know of few that are not in your corner. I, personally, was taken aback when I tried to order your book, only to find it "withdrawn". THat was quite a while back. I saw the information about the new version on a post from Press (The Wireman), with glee, and told him to put my name at the upper part of his list for distribution.

I know that what you teach works. I am not too sure about the adherance to strick definitions being used in counter arguments. THere seems to be a BIG language problem. As a retired Rocket research and design Engineer, I know that if the steady state analysis doesnt balance, there is something wrong with the formulation. If the transient analysis arrives at the steady state, it may be right, but that is not a guarantee.

Keep in here with us, please.

Bill-W4BSG

Walter Maxwell wrote:
>
> Hello Group,
>
> I noticed that this thread shut down abruptly shortly after my single post.
> Was my attempt to be breezy and serious at the same time misread, and thus
> offending, causing you to leave the room? I know I've offended others at
> times, unintentially, by a poor choice of words, but never intentionally. If
> I offended, I apologize to all.
>
> I was simply trying to say that it that the main thrust of my Letter seemed
> to have been overlooked.
>
> Sincerely,
>
> Walt, W2DU

241. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D9FA38.F473CAB9@bigfoot.com>
Source record: 178575

VE9SRB wrote:
>
> "CAM" <cam2338@bigfoot.com> wrote in message
> > Too bad your explanation requires a religious-like faith in phantom
> > waves, the existence of which you cannot prove. I've been thinking:
> > Maybe your phantom waves with their phantom powers are responsible
> > for spontaneous human combustion.
>
> Why is your discussion turning into comments like this?

If your phantom waves with their phantom power really exist
(even though they cannot be proven to exist by any scientific
measurement) what's to keep them from being the cause of
spontaneous human combustion?

Hint for the humor impaired: the posting was less than serious
and was designed to elicit a chuckle.
--
http://www.mindspring.com/~w6rca

242. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rcuo5$3r9$1@iac5.navix.net>
Source record: 178576

I am somewhat curious as to how you can patent a fractal antenna,
particularly when you have stated here in the newsgroup and in your white
paper that Yagi's are fractals as well. In fact, have you not stated that
any random antenna is a fractal? How did you get around the "prior art"?

I
"Fractenna" <fractenna@aol.com> wrote in message
news:20001002140653.29166.00000379@ng-cg1.aol.com...
> >Microstrip fractal patch antenna for multi-band
> >communication
> >
> >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
> >
> >Defense Electronics Research Lab, Hyderabad, India
> >
> >Abstract
> >
> >A novel square microstrip fractal patch antenna in a
> >Sierpinski carpet is proposed for three-band operation.
> >Measured results indicate that the return loss is better
> >than 10 dB and that the gain is greater than 7 dB in
> >each band. This antenna is an attractive candidate for
> >wireless, satellite and mobile communication
> >applications. [Author abstract; 6 Refs; In English]
> >
> >Index Terms: Microstrip antennas; Fractals; Wireless
> >telecommunication systems; Satellite communication
> >systems; Mobile telecommunication systems; Microstrip
> >fractal patch antennas
> >
> >
> >Electronics Letters
> >Volume 36, Issue 14 2000
> >Pages 1179-1180
> >
> >--
> >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
> >via Mailgate.ORG Server - http://www.Mailgate.ORG
> >
>
> As of tomorrow, said descriptions are covered by patent.
>
> With best regards,
>

> Nathan Cohen, Ph.D.

243. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D9E146.414C@pacbell.net>
Source record: 178577

CAM wrote:
>
> VE9SRB wrote:
> > If you check through my previous posts you will see that I indicate that the
> > mechanism for re-reflection of the waves arriving back at the match point is
> > simply the impedance seen at the match point by the reflected waves. This
> > info was detailed in the previous posts.
>
> Too bad your explanation requires a religious-like faith in phantom
> waves, the existence of which you cannot prove. I've been thinking:
> Maybe your phantom waves with their phantom powers are responsible
> for spontaneous human combustion.

Charles Dickens, in the nineteenth century, linked it to an
overconsumption of booze. That can't possibly be true, otherwise
San Franciscans would be flaring up all over the place.

>
> On a related note: What happens to the EM energy when two coherent
> light waves are phased such that annihilation occurs? How is energy
> conserved? Where does the energy go and in what direction(s)?
> --
> http://www.mindspring.com/~w6rca

I was going to ask that question, but you beat me to it, Cecil. The
answer would go a long way toward providing a physical explanation
of how reflections do their job on a transmission line. It's
pretty easy to show, symbolically, that, in the steady state,
Steve's methods give correct results. Trying to understand the
details of a transient analysis, however, raises the kinds of
questions you just asked. I think we need the services of a
good physicist.

Tom Donaly KA6RUH

244. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D9E697.4C2C@pacbell.net>
Source record: 178578

CAM wrote:
>
> Jim Kelley wrote:
> >
> > CAM disputed the following concepts:
> > > Power does not move from the power generator through the distribution
> > > system to the load. Power cannot be measured entering and exiting a
> > > boundary drawn around a system. If work is not done then power doesn't
> > > exist. Remember those arguments?
> >
> > I remember them, and also find them defined and described in modern
> > physics texts.
>
> Unfortunately, there is a wide gap between pure physics and RF
> engineering. In RF engineering and power engineering the mere
> movement of electrical energy past a point is defined as power
> with no work required. And the Power Flow Vector is defined at
> a boundary.
> --
> http://www.mindspring.com/~w6rca

You have to learn to translate. When you read a physicist, like
Feynman, writing about the Poynting Theorem, you have to
substitute the word "power" whenever he writes "energy flux",
and, if you ever have the pleasure of talking to a physicist,
you have to say "energy flux" whenever you want to say "power".
This is reasonable, since physicists have defined power in
relation to work done on a physical object. If they started
talking about the rate of movement of energy into and out of a volume
as power, their students would start asking embarrassing questions.

Tom Donaly KA6RUH

245. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4796-39D9FCB5-45@storefull-115.iap.bryant.webtv.net>
Source record: 178579

Roy Lewallen wrote:
"It`s really not hard to do with feedback (an amplifier with a source impedance of zero, or a constant voltage source)."

Yes, but the constant voltage source can only maintain the output voltage constant down to some minimum load impedance. At lower load impedances, it loses control and the voltage droops due to the real internal components` impedance. At very low load impedance, the generator can`t keep the voltage up.

Negative impedance generators exist. One example is used as a telephone repeater. It cancels out some of the line loss. Negative impedance repeaters don`t produce a net gain. Negative impedance generators must be used with positive impedance loads with loss exceeding the negative impedance for stability.

Best regards, Richard Harrison, KB5WZI

246. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D9FD81.D44BCA82@bigfoot.com>
Source record: 178580

"William E. Sabin" wrote:
> Imagine a transmission line connected to a resistor at one end. At the other end
> two ac generators of equal volts but opposite phase. Zero power is delivered to
> the load and each generator delivers zero power.

That's because no energy is being moved. No movement of energy equals
no power. But a photon already possesses moving energy.

> In the case of light waves, since no power is delivered because of phase
> cancellation, no power is delivered by the light sources to a load, so no power is
> delivered by either light source.

This is different. Moving photons possess energy. During atomic annihilation
of two gamma ray photons, a positron and an electron are created indicating
that power is delivered to the load. What happens to a photon if its energy
cannot be delivered? Doesn't the photon have to go somewhere?

> A power source delivers power to a load only if the load is accepting power.

That's true, if a photon doesn't encounter a load it keeps on going. So
where do the photons go when a destructive interference pattern is
established? They seem to disappear. Where did they disappear to?
--
http://www.mindspring.com/~w6rca

247. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39DA082C.6C5D4665@3n.net>
Source record: 178581

Dick Carroll wrote:...
> .... Your Phd may impress you but if you're counting on it to impress
> the rest of the world ....

My Doctorate in Divinity is much more applicable to antenna design ...

... makes me better able to pray for devine guidance .... ;o)

Just "funnin" ya both

KA3DWW

248. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ASnC5.13765$s76.948788@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178582

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:39D9E146.414C@pacbell.net...
>
> I was going to ask that question, but you beat me to it, Cecil. The
> answer would go a long way toward providing a physical explanation
> of how reflections do their job on a transmission line. It's
> pretty easy to show, symbolically, that, in the steady state,
> Steve's methods give correct results. Trying to understand the
> details of a transient analysis, however, raises the kinds of
> questions you just asked. I think we need the services of a
> good physicist.
>
> Tom Donaly KA6RUH
>

Tom:

Think of it this way. The phenomenon of rearward wave cancellation in the transmission line (the impedance match) is similar to RF multipath in a real world propagation environment. In the real world environment, a transmitted signal will reflect off of the earth, trees, buildings, towers, etc, etc. At some locations, many of these multipath signals will arrive at or intersect at some point. Clearly, each signal will have different amplitude, phase delay, etc. Each will also have traveling power or energy associated with it. At the point where these signals meet, the net summation of all of these signals may result in a complete cancellation of all signals, hence the multipath fade (wave cancellation). At this multipath fade point, we would not be able to measure the energy contained in any one of the individual signal components but they exist individually, they simply cancel one another for a net zero power at that point. The law of conservation of energy is satisfied because the total power dissipation is equal to the total power delivered - zero. Each of the individual signals has power associated with it, yet we measure none at the multipath point. Does that mean that they don't exist individually or that they are phantom waves? Not at all.

In the transmission line, we have a similar situation except that we are also forcing the waves to travel in the same direction. In the transmission line, there is a transient process of wave reflection and re-reflection at any impedance junction. After a very very short period of time, the net result of this transient behavior is in fact the steady state condition. As stated, all we can measure is the total net sum of the individual transient wave components. That does not mean that they don't exist individually or that they are phantom waves.

The impedance match in the transmission line occurs when the net steady state sum of all these transient waves traveling in the rearward direction combine at a single point (the match point) to a total wave of zero voltage and zero current (multipath). Since we constrain these waves to be traveling in the same direction, the net rearward power flow at all points before of the match point is zero.

The other point to mention is that there are two sources of rearward wave travel at the match point. One occurs from the mismatch that the source wave sees arriving at the match point (rearward wave 1) and the other occurs from the reflected wave arriving at the match point (rearward wave 2). The level of rearward wave 2 is a function of the mismatch seen by the reflected wave when it arrives at the match point. Rearward wave 2 is comprised of numerous transient waves due the multiple wave reflections occurring between the match point and the load. In the steady state, rearward wave 2 is 180 degrees out of phase wrt rearward wave 1 and the net rearward wave is zero.

73
Steve

249. 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: "J.T. Johnston" <jt@central-web.com>
Message-ID: <stk35e6lahet6b@corp.supernews.com>
Source record: 178583

I have unsuccessfully tried to run 75M in my Jeep using a Hamstick mounted on the trailer hitch. After managing to get it close to resonance (ha, ha!) by trimming the whip, I put my trusty MFJ tuner in line and made it match the rig. The problem is that nobody can hear me outside of my local area. It is nearly impossible to check into our 75M traffic net in the evenings, unless I move the rig in the house and hook up to the G5RV.

My question is this: Has anyone had any luck with a similar setup? I assume my problem is that the rear of the Jeep is severely distorting my radiation pattern, but if I put the antenna on the roof of the Jeep (obviously the preferred location), the tip would be over 12' off the ground. Though it should stay out of power lines at that height, there are several trees in my neighborhood with which it would not get along.

One other thing, my Jeep also puts out a great deal of RFI on most every band. Most problematic is the fact that one of the frequencies that is strongest in the output frequency of our 2M repeater (147.16). The mobile rig is fine, but I have to turn the HT off when I have it in the Jeep, or the squelch will stay open all of the time.

I welcome any helpful advice.

TNX & 73,
J.T. Johnston, N4ZWV

250. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <5790-39DA0753-30@storefull-113.iap.bryant.webtv.net>
Source record: 178584

Steve wrote:
"A "total" re-reflection of this energy does not occur, ever."

It`s hard for me to follow the arguments because I forget which model is being argued. If we have a 50 ohm transmitter (a pox on 51.5 ohms!) connected to a 50 ohm load via 300 ohm twinlead, 1/2 wavelength long, neither the transmitter nor the load will "know" the twinlead is there, if we assume lossless transmission lines.

Your Bird wattmeter won`t measure any reflected power in or out of the 300 ohm twinlead. all the reflections are in the 300 ohm "tuned" line.

Moreover, it is crazy to talk about lossy lines and matching networks when your subject is maximum power transfer. Maximum power transfer is about source and load impedances, only. Any transmission line losses must be lumped with the source or load.

Best regards, Richsard Harrison, KB5WZI

251. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da0ce9.26399898@news.akorn.net>
Source record: 178585

On Tue, 03 Oct 2000 15:11:22 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>In the 300 ohm transmission line, a forward source power of 100 watts has a
>forward voltage of 173.2 volts. A re-reflected power of 100 watts would
>also have a forward voltage of 173.2 volts. If these voltages are in phase,
>the total forward voltage would be 346.4 volts and the total forward power
>would be 400 watts. These concepts are fundamental to basic circuit theory.
>Vtotal = V1 + V2. Power = |Vtotal|^2 / Z (Z being a pure resistance). If
>you double the voltage across any given resistance, the power delivered to
>that resistance will increase by a factor of 4. No magic, no perpetual
>motion machines.

Hi Steve,

I'm missing something here.

You are directly adding the voltages of the reflected signal to the
incident signal, and using that to derive power.

Will you please describe a practical circuit example of where that
would occur?

I'm having trouble getting past that statement.

73 Tom

252. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001003125821.12729.00000018@ng-ci1.aol.com>
Source record: 178586

Cecil--

I have a 100 watt transmitter with a 50 watt AM modulator installed in the PA's B+ line. Following your logic, shouldn't my wattmeter read 150 watts output at 100% modulation? Except it only reads 100. Yet, to replicate the same waveform and power meter reading using my AL-80, it's gotta deliver 400 watts! To me, this proves AM Radio must cause spontaneous human combustion. How else do you explain 100 w + 50 w = 400 w?

Rick K1BQT

253. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <1ioC5.16233$tl2.1151209@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178587

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:5790-39DA0753-30@storefull-113.iap.bryant.webtv.net...
>
> It`s hard for me to follow the arguments because I forget which model is
> being argued. If we have a 50 ohm transmitter (a pox on 51.5 ohms!)
> connected to a 50 ohm load via 300 ohm twinlead, 1/2 wavelength long,
> neither the transmitter nor the load will "know" the twinlead is there,
> if we assume lossless transmission lines.
>
> Your Bird wattmeter won`t measure any reflected power in or out of the
> 300 ohm twinlead. all the reflections are in the 300 ohm "tuned" line.
>
> <snip>
>
> Best regards, Richsard Harrison, KB5WZI
>

Hi Richard,

There is no argument from me as to the steady state conditions in the transmission line system. The issue is what really happens to the reflections when they arrive at the input to the 300 ohm line. Does a total re-reflection really occur? All of this is purely an academic exercise. For steady state design of matching networks, tuners, etc, none of this really matters. As Cecil said, the Smith Chart works great.

Steve

254. Re: Intellectual Property

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Todd <ktm@lanset.com>
Message-ID: <39da137f@sacnews.sac.bfp.net>
Source record: 178588

Does an antenna make any noise when it falls if no one is around?

"A ccrider3" <accrider3@aol.comnospam> wrote in message
news:20001002204903.18846.00000026@ng-fa1.aol.com...
> Is a fart the intellectual property of an asshole?

255. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <39DA1552.71FF@tc.umn.edu>
Source record: 178589

> > As of tomorrow, said descriptions are covered by patent.
> >
> > With best regards,
> >
> > Nathan Cohen, Ph.D.
> >

Not trying to practice law, but:

That's a crock. Either a patent is issued or it isn't. The Patent Office will not tell you if or when your patent will issue, so "As of tomorrow....." has no meaning. He doesn't know that any more than any of the rest of us.

>Just as a practical matter, if I request a reprint of the above
> published article from the authors today, will they be in violation of
> your patent if they send it to me?

A patent allows you to keep others from making, using or selling your idea. Nothing more. Anyone can write about it, and obtaining a copy isn't unlawful. As a matter of fact, once the patent is issued, it is available from the Patent Office and other places as public knowledge. The purpose of a Patent is to increase the knowledge of a subject. That's why you are reqired to disclose your best method of practicing it at the time of filling.

See a Patent Attorney.

Henry WA0GOZ

256. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DA1C2A.462FAA65@eznec.com>
Source record: 178590

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "It`s really not hard to do with feedback (an amplifier with a source
> impedance of zero, or a constant voltage source)."
>
> Yes, but the constant voltage source can only maintain the output
> voltage constant down to some minimum load impedance. At lower load
> impedances, it loses control and the voltage droops due to the real
> internal components` impedance. At very low load impedance, the
> generator can`t keep the voltage up.

That was what I was trying to say with the third sentence in my posting, which was:

"A real world zero ohm output impedance amplifier can still operate properly into a limited range of impedances, however."

> Negative impedance generators exist. One example is used as a telephone
> repeater. It cancels out some of the line loss. Negative impedance
> repeaters don`t produce a net gain. Negative impedance generators must
> be used with positive impedance loads with loss exceeding the negative
> impedance for stability.
>
> Best regards, Richard Harrison, KB5WZI

257. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DA1DD8.DD3A2046@eznec.com>
Source record: 178591

Dick Carroll wrote:
>
> Doesn't the fact that current is flowing past the measure point make it
> prima facie evidence that power is being consumed downstream? If not, no
> current would flow.
>
> 73, Dick

No. You also have to look at the voltage. If the voltage is in quadrature with (i.e. 90 degrees with respect to) the current, no power is flowing. This is the situation when the current is flowing through a pure reactance. The power being delivered is V * I * cos(theta) where theta is the phase angle between the voltage and current.

Roy Lewallen, W7EL

258. How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rd6jh$751$1@iac5.navix.net>
Source record: 178592

I am somewhat curious as to how you can patent a fractal antenna, particularly when you have stated here in the newsgroup and in your white paper that Yagi's are fractals as well. In fact, have you not stated that any random antenna is a fractal? How did you get around the "prior art"?

I
"Fractenna" <fractenna@aol.com> wrote in message
news:20001002140653.29166.00000379@ng-cg1.aol.com...
> >Microstrip fractal patch antenna for multi-band
> >communication
> >
> >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
> >
> >Defense Electronics Research Lab, Hyderabad, India
> >
> >Abstract
> >
> >A novel square microstrip fractal patch antenna in a
> >Sierpinski carpet is proposed for three-band operation.
> >Measured results indicate that the return loss is better
> >than 10 dB and that the gain is greater than 7 dB in
> >each band. This antenna is an attractive candidate for
> >wireless, satellite and mobile communication
> >applications. [Author abstract; 6 Refs; In English]
> >
> >Index Terms: Microstrip antennas; Fractals; Wireless
> >telecommunication systems; Satellite communication
> >systems; Mobile telecommunication systems; Microstrip
> >fractal patch antennas
> >
> >
> >Electronics Letters
> >Volume 36, Issue 14 2000
> >Pages 1179-1180
> >
> >--
> >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
> >via Mailgate.ORG Server - http://www.Mailgate.ORG
> >
>
> As of tomorrow, said descriptions are covered by patent.
>
> With best regards,
>

> Nathan Cohen, Ph.D.

259. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <E8pC5.16255$tl2.1154345@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178593

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39da0ce9.26399898@news.akorn.net...
> On Tue, 03 Oct 2000 15:11:22 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> >In the 300 ohm transmission line, a forward source power of 100 watts has
a
> >forward voltage of 173.2 volts. A re-reflected power of 100 watts would
> >also have a forward voltage of 173.2 volts. If these voltages are in
phase,
> >the total forward voltage would be 346.4 volts and the total forward
power
> >would be 400 watts. These concepts are fundamental to basic circuit
theory.
> >Vtotal = V1 + V2. Power = |Vtotal|^2 / Z (Z being a pure resistance).
If
> >you double the voltage across any given resistance, the power delivered
to
> >that resistance will increase by a factor of 4. No magic, no perpetual
> >motion machines.
>
> Hi Steve,
>
> I'm missing something here.
>
> You are directly adding the voltages of the reflected signal to the
> incident signal, and using that to derive power.
>
> Will you please describe a practical circuit example of where that
> would occur?
>
> I'm having trouble getting past that statement.
>
> 73 Tom

Hi Tom:

I'm not sure where the issue is above so if I don't answer your question directly, please let me know. I know you are on the ball technically so please don't take this as a lecture.

First, I used 100 watts in the discussion above because that was the net steady state forward power delivered to the match point in Cecil's example. Clearly, in Cecil's example, the steady state forward power in the 300 ohm line is not 400 watts, it is 200 watts. My discussion differs from Cecil's

in that I state that the forward source power in the 300 ohm line is 50 watts, not 100 watts and that the re-reflected power is 50 watts not 100 watts. 50 watts, added in phase with 50 watts is 200 watts. I assume this is where the problem is, ie. how does 50 watts + 50 watts equal 200 watts?

In the transmission line system, multiple forward traveling voltages (driving and re-reflected) simply add as series complex voltages. VFtotal = VF1 + VF2 where both are complex phasors that add as vectors in Cartesian coordinates. The same applies for rearward traveling voltages. The TOTAL voltage at any single point on the transmission line is equal to the total forward voltage + the total rearward voltage. The power contained in any one forward voltage wave is equal to |VF|^2 / ZO (ZO is resistive). The power contained in the total forward wave is equal to |VFtotal|^2 / ZO. When the voltages are in-phase, the total voltage will double (VF1 = VF2) and the total power will go up by a factor of 4.

From a practical circuit standpoint, connect a transmitter to a matched load through some length of cable. Set the forward power in the transmission line to 100 watts. If there are truly no reflections on the transmission line the rearward traveling power will be zero and the total voltage at any point on the line will be the forward traveling voltage. This is also true at the matched load. Measure the voltage across the matched load. Now increase the total forward power to 400 watts. Measure the voltage across the matched load again. I'm assuming the phase properties of the transmitter are linear with power. The voltage magnitude should double. I'm not sure as to the accuracy of the wattmeter re: the voltmeter.

Another way to think of this is connecting batteries in series across a resistor. Connect a 12 volt battery across 12 ohm resistor, the power dissipation is 12 watts. Now connect two batteries in series, should the power dissipation be 24 watts? No, it is 48 watts.

73
Steve

260. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8rd5qi$2pf2$1@heap.juniper.net>
Source record: 178594

Henry Knoll <knoll003@tc.umn.edu> wrote:
>> > As of tomorrow, said descriptions are covered by patent.
>> >
>> > With best regards,
>> >
>> > Nathan Cohen, Ph.D.
>> >
>
>Not trying to practice law, but:
>
>That's a crock. Either a patent is issued or it isn't. The Patent
>Office will not tell you if or when your patent will issue, so "As of
>tomorrow....." has no meaning. He doesn't know that any more than any
>of the rest of us.

That isn't quite true. The patent office publishes data about new
patents on Tuesdays. Patent number 6,127,977 showed up today.

Dennis Ferguson

261. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DA227E.57EC@wt.net>
Source record: 178595

W4JLE wrote:
>
> I am somewhat curious as to how you can patent a fractal antenna,
> particularly when you have stated here in the newsgroup and in your white
> paper that Yagi's are fractals as well. In fact, have you not stated that
> any random antenna is a fractal? How did you get around the "prior art"?

Hummmm, to me, any antenna that is self similar, such as a dipole,
bowtie, yagi, log periodic, etc, ALL are a form of a fractal. IE: All
have a mirror image from one side to the other. We have been stealing
fractal designs for years. And I for one am not going to stop. MK
--
http://web.wt.net/~nm5k

262. Tubes for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <39DA235F.21D1E498@swbell.net>
Source record: 178596

Tube List
2 @ 6JH5 3 @ 6JB5 1 @ 6JM5 1 @ 6KN5
1 @ 6JE6 1 @ 15MF8 3 @ 6LR8 1 @ 6EN4
1 @ 6KD6 1 @ 20LF6 1 @ 6BK4 1 @ 36KD6
2 @ 31LQ6 1 @ 6KM6 2 @ 17KV6A 1 @ 38HK7
1 @ 38HE7 1 @ 22KV6A 1 @ 22LX6 1 @ 22JR6

1 @ 36MC6 1 @ 13J10 1 @ 10JT8 1 @ 9AH9
2 @ 6T10 2 @ 6J10 1 @ 6KY8A 2 @ 6FM7
1 @ 6EM7 1 @ 6DN3 2 @ 6CG3 1 @ 6U10
1 @ 3AW2A 1 @ 6AY3B 1 @ 3AT2B 1 @ 6GF7
1 @ 3DB3 4 @ 1G3GT 4 @ 6GU7 2 @ 6HA5

2 @ 6HB7 1 @ 6KA8 4 @ 6FQ7 1 @ 6DT6A
1 @ 6LN8 1 @ 6FQ7 1 @ 6GN8 5 @ 6CG8A
1 @ 6CS6 1 @ 6DT8A 3 @ 6DT6A 1 @ 6DX8
1 @ 6EJ7 5 @ 6BZ6 4 @ 2AV2 1 @ 6BL8
1 @ 4JC6A 3 @ 5GH8A 1 @ 5GX7 1 @ 7KY6

1 @ 17CT3 1 @ 6KM8A 1 @ 12AT7 1 @ 6KT8
4 @ 6KE8 1 @ 12BY7 1 @ 12A7

Most of the above are Zenith brand tubes and most of the ones below are
Westinghouse brand tubes.

2 @ 6GM5 2 @ 6GC5 1 @ 6EZ5 5 @ 6K6GT
5 @ 6JZ6 2 @ 6JF6 2 @ 6GT5 3 @ 6K11
5 @ 6JM6 1 @ 6EU7 1 @ 6HF6 2 @ 6HB5
1 @ 6JB6 1 @ 6JB6A 2 @ 6GE5 8 @ 6JZ5
1 @ 6KT5 1 @ 6F5 21 @ 6ES5 4 @ 6EW7

7 @ 6FV6 8 @ 6FD7 8 @ 6EV5 4 @ 6FH5
14 @ 6ES8 36 @ 6FS5 15 @ 6GW8 10 @ 6EU8
18 @ 6JC8 8 @ 6J5 4 @ 6EW7 4 @ 6FY5
5 @ 6J6A 5 @ 6GY8 2 @ 6KT6

The above listed tubes are for sale all together or seperate BUYER
PAYS SHIPPING!!!.....please contact:

Gene P. Anderson...Owner
Bowen TV and Appliance
Beaumont, Texas
(409) 832 1632
(409) 838 6120 .... Fax
e mail: ApRepCtr@aol.com
redbone1@swbell.net
bowentv@netzero.net

263. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DA244A.1DD8@wt.net>
Source record: 178597

Dick Carroll wrote:
>
> What a real nutball troll. Now he claims that a computer analysis of his
> "invention" is copyright infringment. HE is a fringe lunatic troll troublemaker.
>
> If you plan to lock horns with W7EL you'd better get your nose out of this NG and
> into the books. Your Phd may impress you but if you're counting on it to impress
> the rest of hte world you'd best reconsider a little further. Many of us remember
> that about the time you went through school lots of Phd's were handed out like
> admission tickets, to anyone who paid the fees and showed up often enough in
> attendance to parts of the program.The more you toss it in people's face the more
> suspect it becomes.

Hummmm, I keep getting these e-mails: No joke.....

Subject:
UNIVERSITY DIPLOMAS FOR YOU, LIKE TODAY! 11785
Date:
Mon, 25 Sep 2000 19:22:29 -0700
From:
rdnpj@mail.md
To:
<79@aichi.com>

UNIVERSITY DIPLOMAS

Obtain a prosperous future, money earning power,
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Call 24 hours a day, 7 days a week, including
Sundays and holidays.

To be removed from future mailings email eva454@ghanamail.com with remove as the subject.

I wonder....If I spring for one of these degrees, will I be special too? Will I be the antenna boy of burdine street? Will women flock to me like flies on doo-doo? Dunno, but maybe it's worth a phone call. I notice the phone number is a local Houston call...At least the cash will stay in town....I think I'm gonna apply for an advanced degree in mental toss flycation. MK

--
http://web.wt.net/~nm5k

264. Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <39DA23D1.30FF65B7@tri.net>
Source record: 178598

40 years ago I worked for a guy that serviced oil field 2 way equipment. Scattered on hills around the countryside were yagis on sticks of oilfield pipe stuck in the ground. Most of the gear was "Hi Band", 170 MHz?. Most of the offices were in Great Bend or Russell. Just about anyone could drive up, hook the hunk of coax to the back of their GE or Motorola tube type boxes and get a quick connect to their office.

Also, when the various groups would have a field meeting, we would drive over. They all left the keys in their vehicles. We would check one transmitter freq with the Lampkin (sp) freq meter and then key it as we adjusted the other receivers AFC to that rig. Everyone in the center of Kansas was at least on one freq!

As always in the oilfield: Do something (even) if you do it wrong.

N0UU

265. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DA252D.EFC5B59A@west.raytheon.com>
Source record: 178599

Rick Littlefield wrote:
>
> Cecil--
>
> I have a 100 watt transmitter with a 50 watt AM modulator installed in the PA's
> B+ line. Following your logic, shouldn't my wattmeter read 150 watts output at
> 100% modulation?

> Except it only reads 100.

Are you sure?

An AM transmitter with a carrier output of 100 watts will reach a peak
instantaneous output power of 400 watts during modulation peaks.
Assuming the modulation is a single tone, the average output power (at
100% modulation depth) will be 150 watts, 100 watts in the carrier and
25 each in the upper and lower sideband.

>Yet, to replicate the same
> waveform and power meter reading using my AL-80, it's gotta deliver 400 watts!

Right, 400 watts PEP and 150 watts average.

bart
wb6hqk

266. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA24A9.53C0AFED@uci.edu>
Source record: 178600

CAM wrote:
> Unfortunately, there is a wide gap between pure physics and RF
> engineering.

I'd call it more of a slight incongruity than a wide gap. I don't think we really want to consider engineering to be at odds with physics. ;-)

> In RF engineering and power engineering the mere
> movement of electrical energy past a point is defined as power
> with no work required.

The need was for some electrical engineers to be able to understand how "power" could be generated at one end of a transmission line, converted and utilized at the other end of the transmission line without "moving" between points. It's actually quite easy to understand when viewed from the standpoint of energy.

> And the Power Flow Vector is defined at
> a boundary.

Yes. However the types of boundaries to which this may be applied are also well defined, although in some cases, not well understood. The boundary at which the flow vector is defined is assumed to be one at which energy is transformed. Since energy is almost invariably conveyed for the purpose of converting it to another form, this is a fair assumption.

Since the numbers work out, it makes little difference whether we call it a flow of power, or whether we call it a flow of energy. It is simply a matter of convenience, depending on the application, whether we must think of power strictly in terms of the rate of doing work or not. It seems for most thermo and mechanics problems it is more useful to view power as a rate of doing work. For electrical problems it is more convenient to consider power to be the rate of flow of energy with the assumption that something in the closed circuit eventually transfers that energy to another form.

The only point I wanted to dispute here Cecil was that you implied that Gary was incorrect in his comments regarding these definitions. That is not a fair or accurate characterization.

73, Jim AC6XG

267. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA26D9.67876F2B@bigfoot.com>
Source record: 178601

VE9SRB wrote:
> We disagree as to how the steady state conditions are reached.

No we don't, Steve. We agree on the transient conditions. What we disagree on is the nature of the steady-state condition. You believe in phantom voltages, phantom currents, and phantom powers. I say if they are undetectable, they don't exist. You are appealing to Faith-in-the-Unmeasurable to try to prove your point. I put my faith in the measuring equipment. IMO, the only place your phantom signals exist is in your mind. You are essentially trying to keep two glasses of water separate while mixing them together. You simply cannot have it both ways. They cannot be both mixed and unmixed at the same time.

> In the 300 ohm transmission line, a forward source power of 100 watts has a
> forward voltage of 173.2 volts. A re-reflected power of 100 watts would
> also have a forward voltage of 173.2 volts. If these voltages are in phase,
> the total forward voltage would be 346.4 volts and the total forward power
> would be 400 watts. These concepts are fundamental to basic circuit
> theory.

Given A + B = C, you are saying that B + C = D, and that is true but completely irrelevant to reality. Adding a cause to an effect is just ridiculous.

> Cecil, you're misquoting me again. I never said hook up two IC-706's and
> you would get 400 watts.

I'm pulling your leg, Steve, but you did say that you could get 400w out of two 100w waves.

> The *net* steady state power delivered to the match point is 100 watts.
> There is a big difference between the *net* steady state power delivered to
> the match point and the *forward* source power delivered to the match point.

If there are no reflections, net and forward are equal.

> There is no doubly-phantom power in my description.

Of course there is, Steve. When coherent V1+V2=0 and I1+I2=0, power equals zero. You are saying power equals V1*I1 + V2*I2 and that's two terms of phantom power. (I left out phase to simplify.)

> The physical impedances at the junction never changes.

The physical impedance of a stub never changes either but that doesn't prohibit us from making extensive use of its virtual impedance. You simply cannot have it both ways, Steve. If what you say is true, stubs wouldn't work but we know they do. If stubs can have a virtual impedance,

then so can a Z0-match, which is just a stub with a load instead of a short or open. A 1/4WL shorted stub presents Z0 initially during transient buildup to steady state. After the stub reflections achieve steady-state, it presents a virtual open circuit. That is no different in concept to the operation of a Z0-match.

> Your statement above is incorrect because it would require that a total
> re-reflection of the reflected power occur at the impedance junction.

Power is a *scalar* associated with coherent in-phase voltages and currents. All that is required is an interference pattern which, like light waves, causes one region to be "darker" and another region to be "lighter". When two coherent voltages and/or currents interfere with each other, the two associated powers don't interfere because there is only ever one total power.

> As for the virtual short circuit, let's review this concept and look at
> another example.

I am not supporting a virtual short circuit and have not used the concept in these postings. I am supporting an interference pattern between two sets of coherent reflected waves that builds up to steady state conditions that can be measured and verified.

The interference patterns resulting from complimentary sets of coherent waves certainly remind me of interference of light waves. It simply becomes darker in one place while becoming lighter in another place.
--
http://www.mindspring.com/~w6rca

268. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001003144753.18167.00000037@ng-fl1.aol.com>
Source record: 178602

Hi Bart--

I know--just pulling Cecil's leg about getting 400 watts from 100!

73 Rick K1BQT

269. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8rdbbc$92d$1@nnrp1.deja.com>
Source record: 178603

"Gee willikers Mr. Diploma Man, can I be a Ph. D., too?" "Why sure
Nathan, no problem. I am sure your life experiences justify it."

In article <39DA244A.1DD8@wt.net>,
nm5k@wt.net wrote:
> Hummmm, I keep getting these e-mails: No joke.....
>
> Subject:
> UNIVERSITY DIPLOMAS FOR YOU, LIKE TODAY! 11785
> Date:
> Mon, 25 Sep 2000 19:22:29 -0700
> From:
> rdnpj@mail.md
> To:
> <79@aichi.com>
>
> UNIVERSITY DIPLOMAS
>
> Obtain a prosperous future, money earning power,
> and the admiration of all.
>
> Diplomas from prestigious non-accredited
> universities based on your present knowledge
> and life experience.
>
> No required tests, classes, books, or interviews.
>
> Bachelors, masters, MBA, and doctorate (PhD)
> diplomas available in the field of your choice.
>
> No one is turned down.
>
> Confidentiality assured.
>
> CALL NOW to receive your diploma
> within days!!!
>
> 1-713-866-6227
> Call 24 hours a day, 7 days a week, including
> Sundays and holidays.
>
> To be removed from future mailings email eva454@ghanamail.com with
> remove as the subject.
>

> I wonder....If I spring for one of these degrees, will I be special
too?
> Will I be the antenna boy of burdine street? Will women flock to me
like
> flies on doo-doo? Dunno, but maybe it's worth a phone call. I notice
the
> phone number is a local Houston call...At least the cash will stay in
> town....I think I'm gonna apply for an advanced degree in mental toss
> flycation. MK
>
> --
> http://web.wt.net/~nm5k
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

270. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA29F9.C865A324@bigfoot.com>
Source record: 178604

"J.T. Johnston" wrote:
> My question is this: Has anyone had any luck with a similar setup?

Luck has nothing to do with it. Your 75m hamstick is about 0.3%
efficient - radiating about 1/3 watt for every 100 watts put
into it.

> I
> assume my problem is that the rear of the Jeep is severely distorting my
> radiation pattern, ...

Not distorting - attenuating. Forget the hamstick for 75m operation.
You need a bugcatcher or screwdriver, preferably with a top hat.

Hamsticks work reasonably well on 14MHz and higher but they are absolute
dogs on 75m.
--
http://www.mindspring.com/~w6rca

271. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA2C1C.D86B49BC@uci.edu>
Source record: 178605

CAM wrote:
> On a related note: What happens to the EM energy when two coherent
> light waves are phased such that annihilation occurs? How is energy
> conserved? Where does the energy go and in what direction(s)?

Light does not annihilate. Matter and anti-matter annihilate. In a scenario where two coherent beams of parallel light cross paths at a point at which they are out of phase, the area of intersection would appear not to be illuminated. The light beams would each then continue to propagate unperterbed on their respective trajectories. But I expect you knew all that. ;-)

73, Jim AC6XG

272. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DA2E11.3C79@wt.net>
Source record: 178606

J.T. Johnston wrote:
>
> I have unsuccessfully tried to run 75M in my Jeep using a Hamstick mounted
> on the trailer hitch.

Thats the main problem. And also the likely high degree of loss in the
average hamstick for 75m.

>
> My question is this: Has anyone had any luck with a similar setup? I
> assume my problem is that the rear of the Jeep is severely distorting my
> radiation pattern, but if I put the antenna on the roof of the Jeep
> (obviously the preferred location), the tip would be over 12' off the
> ground. Though it should stay out of power lines at that height, there are
> several trees in my neighborhood with which it would not get along.

#1. A bumper mount is about the worst place to mount the antenna. You
have quite a bit of coupling to the body of the jeep most likely, which
will kill the antenna dead, and also the highest amount of earth loss.
If you use a bumper mount you want the coil as high as possible.
"actually a good idea anywhere for 80m". How tall is the antenna in
itself including the stinger? What I would do in that case is completely
butcher the hamstick and add a much wider loading coil, but you may not
want to do that. You might consider using a 40m stick and add a longer
whip to it to resonate. I've never tried this for 40 to 80 to see the
length of stinger needed, but in the case of the 20 to 40 stick I use, I
need 3 ft to tune a 20 stick to 40. I would use the longest stinger you
can get away with, and if the antenna comes up high in freq still, add a
few turns to the stick in a place where you can easily splice into the
wires, but as high on the stick as possible. Or better yet, do it as I
do, and make a big loading coil to tune the stick and do away with all
the narrow tight windings. In effect a plastic bugcatcher. The 40 to 80
ant will be much more efficient on 80 than the 80 stick will be on 80.
The big coil version will in effect equal the bugcatcher with the same
size coil. And using the longest whip you can will let you hit tress
with no problem as long as your mount is strong. The whip will just slap
off of them, and the stick flexes also. Really flexible. 12 ft off the
ground is legal here in TX. We can go to 13.6 ft I think.
>
> One other thing, my Jeep also puts out a great deal of RFI on most every
> band. Most problematic is the fact that one of the frequencies that is
> strongest in the output frequency of our 2M repeater (147.16). The mobile
> rig is fine, but I have to turn the HT off when I have it in the Jeep, or
> the squelch will stay open all of the time.

Is this transmit or receive? Sounds like you need better grounding in the jeep. Ground all metal together with strap. Sounds like the ground conection to the bumper mount is bad. MK

--
http://web.wt.net/~nm5k

273. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA2BF2.52B65557@bigfoot.com>
Source record: 178607

Jim Kelley wrote:
> The
> boundary at which the flow vector is defined is assumed to be one at
> which energy is transformed.

I don't think that's true, Jim. From the IEEE dictionary, "The integral
of the (instantaneous Poynting vector) over a surface is the instantaneous
electromagnetic power flow through the surface." Sounds like one could
define the surface in free space if one so desired.
--
http://www.mindspring.com/~w6rca

274. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA2C35.C8B245F6@bigfoot.com>
Source record: 178608

Jim Kelley wrote:
> The only point I wanted to dispute here Cecil was that you implied that
> Gary was incorrect in his comments regarding these definitions. That is
> not a fair or accurate characterization.

He first called me "childish". Do you think that is a fair or accurate
characterization? On second thought, never mind. :-)
--
http://www.mindspring.com/~w6rca

275. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA2CF4.D5C3BFB2@bigfoot.com>
Source record: 178609

VE9SRB wrote:
> Does a total re-reflection really occur?

Does a destructive interference pattern occur in one direction along with
a constructive interference pattern in the other direction?
--
http://www.mindspring.com/~w6rca

276. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA2F13.8AE9294B@bigfoot.com>
Source record: 178610

Tom W8JI wrote:
> You are directly adding the voltages of the reflected signal to the
> incident signal, and using that to derive power.

Like I said, he's taking the equation, A + B = C, and saying that
B + C = D which is correct but absolutely irrelevant.
--
http://www.mindspring.com/~w6rca

277. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA3070.91C76F81@uci.edu>
Source record: 178611

CAM wrote:
> During atomic annihilation
> of two gamma ray photons, a positron and an electron are created indicating
> that power is delivered to the load.

Slight correction. In matter/antimatter annihilation, an electron and a positron are converted to two 511 KeV (rest mass of the electron) gamma rays with equal but opposite momentum. Photons don't annihilate.

73, Jim AC6XG

278. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DA3175.3D31534@uci.edu>
Source record: 178612

CAM wrote:

> Jim Kelley wrote:
> > The
> > boundary at which the flow vector is defined is assumed to be one at
> > which energy is transformed.

> I don't think that's true, Jim. From the IEEE dictionary, "The integral
> of the (instantaneous Poynting vector) over a surface is the instantaneous
> electromagnetic power flow through the surface." Sounds like one could
> define the surface in free space if one so desired.

It's the only difference in our two respective points of view, Cecil.
If it were not for that discrepancy, engineering and physics would be
entirely in agreement. Why do you think physics and engineering should
disagree? One of them would have to be wrong.

73, Jim AC6XG

279. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da2a06.33854461@news.akorn.net>
Source record: 178613

On Tue, 03 Oct 2000 18:00:04 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>First, I used 100 watts in the discussion above because that was the net
>steady state forward power delivered to the match point in Cecil's example.
>Clearly, in Cecil's example, the steady state forward power in the 300 ohm
>line is not 400 watts, it is 200 watts.

Nothing is clear yet to me.

>My discussion differs from Cecil's
>in that I state that the forward source power in the 300 ohm line is 50
>watts, not 100 watts and that the re-reflected power is 50 watts not 100
>watts. 50 watts, added in phase with 50 watts is 200 watts. I assume this
>is where the problem is, ie. how does 50 watts + 50 watts equal 200 watts?

You state that, but the reason isn't clear to me yet why you say that.

>In the transmission line system, multiple forward traveling voltages
>(driving and re-reflected) simply add as series complex voltages. VFtotal =
>VF1 + VF2 where both are complex phasors that add as vectors in Cartesian
>coordinates. The same applies for rearward traveling voltages. The TOTAL
>voltage at any single point on the transmission line is equal to the total
>forward voltage + the total rearward voltage. The power contained in any
>one forward voltage wave is equal to |VF|^2 / ZO (ZO is resistive). The
>power contained in the total forward wave is equal to |VFtotal|^2 / ZO.
>When the voltages are in-phase, the total voltage will double (VF1 = VF2)
>and the total power will go up by a factor of 4.

I understand the VAR power can be any value, but I haven't noticed use
of the term VAR power. What type of power are you talking about, and
how would I measure it?

>From a practical circuit standpoint, connect a transmitter to a matched load
>through some length of cable.

OK, I have a 1/4 wl of lossless 100 ohm transmission line connected to
a 100 ohm load.

>Set the forward power in the transmission
>line to 100 watts. If there are truly no reflections on the transmission
>line the rearward traveling power will be zero and the total voltage at any
>point on the line will be the forward traveling voltage. This is also true
>at the matched load. Measure the voltage across the matched load. Now
>increase the total forward power to 400 watts. Measure the voltage across
>the matched load again. I'm assuming the phase properties of the
>transmitter are linear with power. The voltage magnitude should double.

>I'm not sure as to the accuracy of the wattmeter re: the voltmeter.

I don't have a problem with the voltage doubling when the generator power is increased to 400 watts and the impedances haven't changed.

What I need to know is how I can convert 100 watts of source power into 400 watts of actual power using a phase-coherent source. (That will keep two non-coherent generators of 100 watts effective power from being combined to produce a power level that varies from zero to 400 watts PEP out of the discussion.)

>Another way to think of this is connecting batteries in series across a
>resistor. Connect a 12 volt battery across 12 ohm resistor, the power
>dissipation is 12 watts. Now connect two batteries in series, should the
>power dissipation be 24 watts? No, it is 48 watts.

Only when the currents also double, and now the power from each battery is 200 watts. You have changed the source power.

You claimed, if I'm not mistaken, a single 100 watt transmitter could produce 400 watts of power at multiple points in the system...none of which were described to be VAR power measurements.

Let me ask my original question again:

Can you give me an example of how, by changing only the line match, I can cause the voltages to double and current to double at any single point in the line while they remain in-phase (so power is multiplied by four) WITHOUT doubling the power of the generator?

I want to build a system to prove you are correct. Can you help me build one?

73 Tom

280. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39DA33E2.2A8FE5F1@bellatlantic.net>
Source record: 178614

Walt,

Your credibility is too well established to be tattered.
FAR too well. To say nothing of your immense contributions
to amateur radio.

Walter Maxwell wrote:

> I appreciate the confidence some of you have shown in my credibility, which
> has been tattered during this thread. Thanks also to all for your
> participation in this thread, it's a real learning experience.
>
> Walt Maxwell, W2DU

281. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA3153.35B07703@bigfoot.com>
Source record: 178615

Jim Kelley wrote:
> Why do you think physics and engineering should
> disagree? One of them would have to be wrong.

Not necessarily, both could be wrong. :-)
--
http://www.mindspring.com/~w6rca

282. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39da3344.36220956@news.akorn.net>
Source record: 178616

On Tue, 03 Oct 2000 14:10:11 -0500, CAM <cam2338@bigfoot.com> wrote:

>Tom W8JI wrote:
>> You are directly adding the voltages of the reflected signal to the
>> incident signal, and using that to derive power.
>
>Like I said, he's taking the equation, A + B = C, and saying that
>B + C = D which is correct but absolutely irrelevant.
>--
>http://www.mindspring.com/~w6rca

I haven't reached any conclusion yet. I'm pretty slow (and I don't
have a spellchecker).

All I want to do is understand what Steve is saying, and he is the
only one who can tell me what he means.

73 Tom

283. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA3339.8CB332FE@bigfoot.com>
Source record: 178617

Jim Kelley wrote:
>
> CAM wrote:
> > During atomic annihilation
> > of two gamma ray photons, a positron and an electron are created indicating
> > that power is delivered to the load.
>
> Slight correction. In matter/antimatter annihilation, an electron and a
> positron are converted to two 511 KeV (rest mass of the electron) gamma
> rays with equal but opposite momentum. Photons don't annihilate.

You're right but I have an excuse. From my physic's book:

"This equivalent, for the electron, is directly observed in connection
with annihilation and creation of electrons and positrons ..."

A non-careful reader might mistakenly infer that electrons
and positrons are the result of annihilation.
--
http://www.mindspring.com/~w6rca

284. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DA33B1.1392690B@bigfoot.com>
Source record: 178618

Jim Kelley wrote:
> Light does not annihilate. Matter and anti-matter annihilate. In a
> scenario where two coherent beams of parallel light cross paths at a
> point at which they are out of phase, the area of intersection would
> appear not to be illuminated. The light beams would each then continue
> to propagate unperterbed on their respective trajectories. But I expect
> you knew all that. ;-)

Would you believe my physics book had a dangling participle?
--
http://www.mindspring.com/~w6rca

285. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <WxeC5.3834$mC.237736@monger.newsread.com>
Source record: 178653

Hello Group,

I noticed that this thread shut down abruptly shortly after my single post. Was my attempt to be breezy and serious at the same time misread, and thus offending, causing you to leave the room? I know I've offended others at times, unintentially, by a poor choice of words, but never intentionally. If I offended, I apologize to all.

I was simply trying to say that it that the main thrust of my Letter seemed to have been overlooked.

Sincerely,

Walt, W2DU

286. Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: littlejohn <littlejohn@planet-interkom.de>
Message-ID: <8rc6gn$1jej$1@news.okay.net>
Source record: 178654

Due to restrictions I am planning to install a multiband HF vertical groundplane (3,5 - 28 MHz). I don't expect any problems on the higher bands, but I do need some tips concerning a grounding system for 80 Meters.. I realize a vertical is not the ideal solution, but if you want to get on the air, you'll try anything !!!

Thanks in advance,

de DL1HWX -- John

287. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001003044825.05565.00000086@ng-fm1.aol.com>
Source record: 178655

>From: Chas chas0001@my-deja.com

>Go with a Ford and get the noise
>or go with a chevy and get mechanical problems(that should get a rise).

At the moment, my '78 GMC pickup has neither -- only a few holes in the floor.
Nothin' a few hours with a welder won't take care of, though. :-)

73,
Ed Hare, W1RFI

288. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001003080457.03668.00000001@ng-cd1.aol.com>
Source record: 178656

>From: "Walter Maxwell" w2du@journey.com

>I noticed that this thread shut down abruptly shortly after my single post.
>Was my attempt to be breezy and serious at the same time misread, and thus
>offending, causing you to leave the room?

Walt, I cannot imagine anyone taking offense at what you said. I think the people may have felt that you were certainly an authority on the topic and, rather than risk being caught saying something wrong, they decided to let you speak. :-) Besides, the thread had run on for quite a while; it was probably about due to close. :-)

73,
Ed Hare, W1RFI

289. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001003081909.14343.00000002@ng-cu1.aol.com>
Source record: 178657

```
>
>In article <20001002140653.29166.00000379@ng-cg1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> >Microstrip fractal patch antenna for multi-band
>> >communication
>> >
>> >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
>> >
>> >Defense Electronics Research Lab, Hyderabad, India
>> >
>> >Abstract
>> >
>> >A novel square microstrip fractal patch antenna in a
>> >Sierpinski carpet is proposed for three-band operation.
>> >Measured results indicate that the return loss is better
>> >than 10 dB and that the gain is greater than 7 dB in
>> >each band. This antenna is an attractive candidate for
>> >wireless, satellite and mobile communication
>> >applications. [Author abstract; 6 Refs; In English]
>> >
>> >Index Terms: Microstrip antennas; Fractals; Wireless
>> >telecommunication systems; Satellite communication
>> >systems; Mobile telecommunication systems; Microstrip
>> >fractal patch antennas
>> >
>> >
>> >Electronics Letters
>> >Volume 36, Issue 14 2000
>> >Pages 1179-1180
>> >
>> >--
>> >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
>> >via Mailgate.ORG Server - http://www.Mailgate.ORG
>> >
>>
>> As of tomorrow, said descriptions are covered by patent.
>>
>> With best regards,
>>
>> Nathan Cohen, Ph.D.
>>
>
> Just as a practical matter, if I request a reprint of the above
>published article from the authors today, will they be in violation of
```

>your patent if they send it to me?
>
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>

Ask a patent attorney.

With Best regards,

NC

290. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <GckC5.4006$0n.335600@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178658

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:39D8EE60.5FBC@pacbell.net...
>
> That's a pretty good trick, however, neither you nor Cecil have
> given a satisfactory mechanism for explaining 1. How power that
> was formerly reflected back toward the generator is redirected
> toward the load
>
> Tom Donaly KA6RUH
>

Tom:

If you check through my previous posts you will see that I indicate that the mechanism for re-reflection of the waves arriving back at the match point is simply the impedance seen at the match point by the reflected waves. This info was detailed in the previous posts.

Steve

291. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <wfkC5.4012$0n.336352@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178659

"Walter Maxwell" <w2du@journey.com> wrote in message
news:WxeC5.3834$mC.237736@monger.newsread.com...
> Hello Group,
>
> I noticed that this thread shut down abruptly shortly after my single
post.
> Was my attempt to be breezy and serious at the same time misread, and thus
> offending, causing you to leave the room? I know I've offended others at
> times, unintentially, by a poor choice of words, but never intentionally.
If
> I offended, I apologize to all.
>
> I was simply trying to say that it that the main thrust of my Letter
seemed
> to have been overlooked.
>
> Sincerely,
>
> Walt, W2DU
>

Walt:

Nothing you said was offensive in any way. No apology needed to anyone on
this NG. Besides, you should see what else goes on here.

Would enjoy a continued discussion.

Steve

Steve

292. Re: Dentron Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: David Edwards <ham@cybercomm.net>
Message-ID: <8rck3dgir1@ostrich.cybercomm.net>
Source record: 178660

They are much older. There is nothing inferior to MFJ.
....Dave
"Bill Ogden" <wogden@attglobal.net> wrote in message
news:39d93298_1@news1.prserv.net...
> It seems there are more Dentron tuners put up for auction (on ebay) than
> equivalent sized MFJ tuners. Are the Dentrons generally considered
inferior
> to MFJ? Any other thoughts as about their frequency on the auction site?
>
> Bill Ogden W2WO
>
>

293. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rcndi$754$0@208.207.71.171>
Source record: 178661

CAM wrote:

> Jim Kelley wrote:
> >
> > CAM disputed the following concepts:
> > > Power does not move from the power generator through the distribution
> > > system to the load. Power cannot be measured entering and exiting a
> > > boundary drawn around a system. If work is not done then power doesn't
> > > exist. Remember those arguments?
> >
> > I remember them, and also find them defined and described in modern
> > physics texts.
>
> Unfortunately, there is a wide gap between pure physics and RF
> engineering. In RF engineering and power engineering the mere
> movement of electrical energy past a point is defined as power
> with no work required.

Doesn't the fact that current is flowing past the measure point make it prima facie evidence that power is being consumed downstream? If not, no current would flow.

73, Dick

294. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rcob1$754$1@208.207.71.171>
Source record: 178662

Wayne Jones wrote:

> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
> be against my house and the other will be close to and guyed from the corner
> of my back fence.
> I am planning on using 3 10foot sections of electrical conduit, each section
> smaller than the next so the sections will telescope and can be clamped with
> about a foot of overlap.

You might want to look into chain link fence top rail tubing. It's about 1.75 inches diameter, comes in 20 foot lengths, swages together on the ends and seems considerably tougher than EMT. It's also cheap. You could get 5 pieces, cut one and have two 30 ft masts.
I've used it a few times for short masts with good results. I believe that Tom W8JI had plans a year or so ago to to use it for some guyed vertical antenna phased elements. Haven't heard how that project turned out.

73, Dick W0EX

295. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D9E3BD.F5331F39@bigfoot.com>
Source record: 178663

Dick Carroll wrote:
> Doesn't the fact that current is flowing past the measure point make it
> prima facie evidence that power is being consumed downstream? If not, no
> current would flow.

Too bad "consume" is not in the IEEE dictionary. To me, the word
"consume" would conote being "used up" so a lossless antenna radiating
in free space would not "consume" any power. What definition of "consume"
did you have in mind?
--
http://www.mindspring.com/~w6rca

296. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D9E88B.EAC1D208@bigfoot.com>
Source record: 178664

VE9SRB wrote:
> If you check through my previous posts you will see that I indicate that the
> mechanism for re-reflection of the waves arriving back at the match point is
> simply the impedance seen at the match point by the reflected waves. This
> info was detailed in the previous posts.

Too bad your explanation requires a religious-like faith in phantom
waves, the existence of which you cannot prove. I've been thinking:
Maybe your phantom waves with their phantom powers are responsible
for spontaneous human combustion.

On a related note: What happens to the EM energy when two coherent
light waves are phased such that annihilation occurs? How is energy
conserved? Where does the energy go and in what direction(s)?
--
http://www.mindspring.com/~w6rca

297. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <39D9EB39.643B2B98@NO.excite.SPAM.com>
Source record: 178665

Check onto the vertical dipole type antennas like MFJ sells that don't require a ground plane. If you do go with this type such as an 18AVT/WB or a modern equivlent, it will work with a little a 1 ground wire which will work like a counter poise versus a ground image. You will have a lobe in the direction it goes in, but it will work, but don't expect to be a top contender in a contest. Try to make it a straight a possible, "folding" at the far end as little as posible. Also consider a "ground ring" verses a ground rod. This sould give you a better ground connection. These are availble through commerical electrical suppliers and the 2 sizes i know of are 6' and 8' in diameter.

littlejohn wrote:

> Due to restrictions I am planning to install a multiband HF vertical
> groundplane (3,5 - 28 MHz). I don't expect any problems on the higher
> bands, but I do need some tips concerning a grounding system for 80 Meters..
> I realize a vertical is not the ideal solution, but if you want to get on
> the air, you'll try anything !!!
>
> Thanks in advance,
>
> de DL1HWX -- John

298. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rcrjn$754$2@208.207.71.171>
Source record: 178666

What a real nutball troll. Now he claims that a computer analysis of his "invention" is copyright infringment. HE is a fringe lunatic troll troublemaker.

If you plan to lock horns with W7EL you'd better get your nose out of this NG and into the books. Your Phd may impress you but if you're counting on it to impress the rest of hte world you'd best reconsider a little further. Many of us remember that about the time you went through school lots of Phd's were handed out like admission tickets, to anyone who paid the fees and showed up often enough in attendance to parts of the program.The more you toss it in people's face the more suspect it becomes.

Fractenna wrote:

> >
> >
> >Fractenna,
> > Why don't you take your silliness somewhere else for a while?
> >All of this crap is really getting old. If your going to sue him,
> >them sue him. I certainly don't need to hear about it, and I really
> >doubt if anyone else wants to either.
> > Pesonally, I don't see how you can stand to look at yourself
> >in a mirror...
> > 'Doc
> >
> >
>
> Excuse me;
>
> First, I have no reason personally to even think of Roy Lewallen or his
> company. So what you state is not only not possible, but not relevant.
>
> Second, this public notice was posted--appropriately--on the same public NG as
> Roy Lewallen's public announcement about his (unauthorized) publication and
> distribution of the MI2 file.
>
> Fractal Antenna Systems, Inc., which is the copyright holder, see no reason at
> present to pursue a lawsuit. That will change depending on what actions are
> taken before December 15, 2000 by Mr. Lewallen.
>
> But, so you know, Mr. Lewallen has privately corresponded in words that
> indicate that ANY public disclosure of Mr. Lewallan's unuathorized publication
> and distribution will be interpreted as a basis for actions against Fractal
> Antenna Systems, Inc.
>
> Copyright holders commonly, indeed must, inform the public when unuathorized

> use of copyright material is occurring in a very public and accessible medium
> such as the internet. If FAS did NOT disclosed this unauthorized use (after Mr.
> Lewallen refused to accept the situation and indicated he would not remove it)
> then it would be interpreted as a 'go ahead' for piracy.
>
> I hope this helps.
>
> Nathan Cohen, Ph.D.
> CTO
> Fractal Antenna Systems, Inc.

299. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D9F616.E6625868@oio.net>
Source record: 178667

littlejohn wrote:
>
> Due to restrictions I am planning to install a multiband HF vertical
> groundplane (3,5 - 28 MHz). I don't expect any problems on the higher
> bands, but I do need some tips concerning a grounding system for 80 Meters..
> I realize a vertical is not the ideal solution, but if you want to get on
> the air, you'll try anything !!!
>
> Thanks in advance,
>
> de DL1HWX -- John

John,
Any antenna works better with a good ground system. Start
putting in your ground system before erecting the vertical.
'Doc

300. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <uGmC5.16185$tl2.1145892@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178668

This is a bit long.

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D96D05.80175161@bigfoot.com...
>
> I thought you said steady-state wasn't the truth. How can you reject
> steady-state and like the Smith Chart?

Cecil, you know I *never* said the steady state wasn't the truth. We
disagree as to how the steady state conditions are reached. Please do not
start to misquote me or incorrectly state my technical position.

>
> Well then, that's obviously not what you had in mind when you said
> 100w + 100w = 400w. Please tell me how to hook up two IC-706s to
> get that 400w you promised.
>

Cecil, you're misquoting me again. I never said hook up two IC-706's and
you would get 400 watts.

In the 300 ohm transmission line, a forward source power of 100 watts has a
forward voltage of 173.2 volts. A re-reflected power of 100 watts would
also have a forward voltage of 173.2 volts. If these voltages are in phase,
the total forward voltage would be 346.4 volts and the total forward power
would be 400 watts. These concepts are fundamental to basic circuit theory.
Vtotal = V1 + V2. Power = |Vtotal|^2 / Z (Z being a pure resistance). If
you double the voltage across any given resistance, the power delivered to
that resistance will increase by a factor of 4. No magic, no perpetual
motion machines.

The *net* steady state power delivered to the match point is 100 watts.
There is a big difference between the *net* steady state power delivered to
the match point and the *forward* source power delivered to the match point.

In the example you presented, I specifically said that the *forward* source
power in the 300 ohm line was 50 watts (122.47 volts) and the re-reflected
power at the match point was 50 watts (122.47 volts). These two forward
voltages add to a total forward voltage of 244.94 volts for a total forward
power of 200 watts, the correct steady state solution, consistent with basic
circuit theory and basic transmission line theory.

>
> It can detect reflected power, Steve, and there ain't none on the coax.
> Power cannot exist when voltage and current are zero. You are asking us
> to reject something dubbed a "virtual short" in favor of something that
> can be described as phantom voltages, phantom currents, and doubly-phantom

> powers. Given the "virtual short" concept could be improved but I don't
> think doubly-phantom power is the way to do it.
>

All I said was that two rearward traveling waves cancel one another to a net rearward traveling wave of 0 volts and 0 current. In this case, there is no *net* rearward power flow. The SWR meter reads *net* power flow. There are no inconsistencies in my statements. There is no doubly-phantom power in my description.

>
> Seems to me the following is all we need to say: The reflections that
> exist on the coax during the transient buildup to steady-state, are
> eventually completely canceled by a complimentary set of reflections
> from the load.
>

This is somewhat correct.

>Since the steady-state result is no reflected energy on
> the coax, all energy incident upon the Z0-match is forced toward the
> load since there is no other place for it to go and it cannot stand still.

There is rearward energy incident at the ZO match. Actually at the junction between the 51.5 ohm and 300 ohm lines. The ZO match is a steady condition resulting from rearward wave cancellation. The physical impedances at the junction never changes. When the rearward energy arrives at the impedance junction, there is a partial re-reflection of power in the 300 ohm line (50 watts in the example) and a partial transmission of power into the 51.5 ohm line (50 watts in the example). The 50 watts of re-reflected power combines with the forward driving power (50 watts) resulting in a total forward power of 200 watts. The 50 watts of power delivered into the 51.5 ohm line is 180 degrees out of phase with the 50 watts reflected at the junction such that the two combine to a net rearward power of 0 watts (wave cancellation) and the steady state match.

Your statement above is incorrect because it would require that a total re-reflection of the reflected power occur at the impedance junction. It does not. It is also incorrect because it would require 100 watts of forward power plus 100 watts of re-reflected forward power to equal 200 watts of forward power. Power "addition" in this manner is inconsistent with basic circuit theory.

As for the virtual short circuit, let's review this concept and look at another example. When a steady state impedance match exists at the junction between the 51.5 ohm and the 300 ohm line, a virtual short circuit is said to be created, which effectively causes a *total* re-reflection of all reflected power in the 300 ohm transmission line. This re-reflected power (100 watts) then adds in-phase with the forward source power delivered to the match point (100 watts) and the two in-phase powers add to a total forward power of 200 watts. (I do not believe any of this to be correct)

Now its my turn to define an example. Let's look at the case where a steady state impedance match does not exist at the impedance junction between the 51.5 ohm line and the 300 ohm line. Specifically, let's look at the relationship between all steady state forward and rearward powers at the impedance junction between the 51.5 ohm and the 300 ohm line.

Let's set the load impedance to 51.5 + j51.5 ohms. In this case, the *steady state* conditions are as follows:

The steady state input impedance at the junction is 51.5 +j51.5 ohms. An impedance mismatch exists at the junction with an SWR of 2.62:1

The steady state forward power in the 51.5 ohm line is 100 watts. The reflected power in the 51.5 ohm line is 20 watts. The *net* steady state power delivered to the 300 ohm line is 80 watts.

The steady state forward power in the 300 ohm line is 163.37 watts. The reflected power in the 300 ohm line is 83.37 watts. The steady state power delivered to the 300 ohm line and the load is 80 watts.

Now, what do we learn by looking at *only* the steady state power levels? We know that the source delivers a net steady state power to the 300 ohm line of 80 watts. We know that the forward power in the 300 ohm line is 163.37 watts and the reflected power is 83.37 watts. What conclusions could I reach with *only* these measurements? I could conclude that a virtual short circuit still exists. I could conclude that the 83.37 watts of reflected power is totally re-reflected at the junction and "adds" to the delivered source power of 80 watts such that the total forward power in the 300 ohm line is 163.37 watts. But an impedance match does not exist at the junction and the re-reflected power is not in-phase with the forward source power. Do you see that the steady state power levels do not provide sufficient information to reach any conclusion without further analysis?

The truth is, that in *any* transmission line system matched or mismatched, the net steady state power delivered to the system is equal to the forward power in the system minus the reflected power in the system. However, it is incorrect to reach the conclusion that a total power re-reflection occurs. Without further analysis, the steady state power levels do not provide enough information to describe the wave reflection process occurring at the junction.

Now, let's look at this example from my perspective.

The forward voltage of 71.76 volts (100 watts) arrives at the impedance junction between the 51.5 ohm line and the 300 ohm line sees a reflection coefficient of +0.707. There is a reflected voltage equal to +50.73 volts developed in the 51.5 ohm line. This is equivalent to 50 watts of reflected power in the 51.5 ohm line (remember this for later). The total voltage developed at the impedance junction is equal to 122.49 volts. This is the forward source voltage delivered into the 300 ohm line. The forward source power delivered into the 300 ohm line is equal to 50 watts.

Now, let's jump to the steady state. The steady state rearward reflected voltage in the 300 ohm line is equal to -124.16 + j97.96 volts (|V| = 158.15

volts, Phase = 141.73 deg). This equals a reflected power of 83.37 watts in the 300 ohm line. According to basic transmission line theory, the level of voltage re-reflection at any impedance junction is found through the reflection coefficient. In this case, the reflection coefficient is equal to -0.707. Therefore, the re-reflected voltage at the impedance junction is equal to 87.78 - j69.26 volts (|V| = 111.81 volts, Phase = -38.27 deg). This equates to a re-reflected power of 41.67 watts in the 300 ohm line.

Now, the *total* steady state forward voltage in the 300 ohm line is equal to the source forward voltage plus the re-reflected voltage. The total forward voltage is equal to 122.49 volts + (87.78 - j69.26 volts) = 210.27 - j69.26 volts (|V| = 211.39 volts, Phase = -18.23 deg). This total forward voltage translates into a total forward power of 163.37 watts in the 300 ohm line. Correct steady state solution.

Now what else happens at the impedance junction? The reflected wave arriving at the impedance junction causes some level of voltage (power) to be transmitted back into the 51.5 ohm line. The total voltage transmitted back into the 51.5 ohm is equal to the sum of the reflected and re-reflected voltages. The total voltage transmitted back into the 51.5 ohm line is equal to -36.38 +j28.71 volts (41.7 watts). This rearward voltage adds to the reflected voltages created by the source voltage (+50.73 volts). Therefore, the total rearward voltage in the 51.5 ohm transmission line is equal to 14.35 + j28.71 volts (|V| = 32.09 volts, Phase = 63.43 deg). This equates to a total steady state rearward power of 20 watts in the 51.5 ohm line. Correct steady state solution.

Let's look at this example using the formula presented previously for power addition in a transmission line:

Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) cos(theta), where theta is the phase angle difference between the voltages V1 and V2.

The source power delivered to the 300 ohm line is 50 watts. The re-reflected power in the 300 ohm line is 41.67 watts. The phase angle difference between V1 and V2 is -38.274 deg.

Ptotal forward in 300 ohm line = 50.02 + 41.669 + 2 (7.0725) (6.4551) (0.7851) = 163.37 watts

The reflected power in the 51.5 ohm line due to the 100 watts of source power is 50 watts. The rearward power in the 51.5 line due to the reflected power of 83.37 watts arriving at the junction is 41.7 watts. The phase angle difference between the two is 141.73 degrees.

Ptotal rearward in 51.5 ohm line = 49.98 + 41.702 + 2 (7.0697) (6.4577) (-0.7851) = 20 watts

Clearly, this analysis is more complex and detailed than looking at the steady state power levels and concluding that a virtual short circuit exists or doesn't exist. However, this analysis is necessary in order to describe the correct behavior of wave transmission, reflection and re-reflection in a transmission line system. A total re-reflection of power is simply not

occurring at the impedance junction, matched or mismatched.

Cecil: At this point, I will concede that last word to you. It's been fun but I know that we will always continue to disagree so it makes no sense to continue to state the same opinions over and over.

73,
Steve VE9SRB

301. Re: Interesting antenna site :>)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:16:12 UTC
From: william ewald <wgewald@att.net>
Message-ID: <o89its0cr4n82ak70osm79ci69u693go5c@4ax.com>
Source record: 178635

On Mon, 2 Oct 2000 19:31:20 -0400, "Chuck O'Neal"
<coneal@ultranet.com> wrote:

>Makes as much sense as the fractena site!
>
>http://www.pyradyne.com/
>
>At the top click on "Mega Orb and Irradiation" for
>their fractal design!!!
>
>enjoy....
>73,
>Chuck...K1KW

" On the receiving end, the chakras or nerves of the parasympathetic nervous network respond by stimulating or blocking hormone uptake to the brain - the brain's response at the sympathetic junction of the sensory neurons. Here through enzyme action, a release on the transmitter sites takes place at the neurons. The transmitters are either excitatory or inhibitory, depending on the type of transmission release. Such synapses have been distinguished morphologically in the electron microscope; excitatory synapses tend to have round vesicles and inhibitory synapses tend to have flattened vesicles. Thus you can easily see how Shape Energy in biochemical transmission and reception is extremely critical and effective. "

Makes perfect sense to me, as the nerve network is a fractal system...

302. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:23:00 UTC
From: klocko@toad.net
Message-ID: <8rb8sv$ju2$1@nnrp1.deja.com>
Source record: 178637

In article <8r81vk$m1c$0@208.207.71.162>,
Dick Carroll <dixie@townsqr.com> wrote:
> Bill, Walt Maxwell needs no justification from me. His lifetime of
work,
> including "Reflectiosn", stands on its own. What I've given here is an
> analysis of the complaint against his book, distilled from much
reading here
> and elsewhere. Finally, a couple days ago, it came out that the
Conjugate
> Match theorm was useless outside theory, except for the little snippet
that
> "Close" might be useful in describing matching. Problem was, Walt
didn't
> mention that. Perhape he was distilling out everything uneeded to keep
it
> basic for hams. I believe that was the case. If your mileage varies,
well, I
> think I predicted it might.
>
Hi Dick,
I didn't want it to sound like you were the one proposing to dumb-down ham pubs. BTW, I think Reflections is a wonderful piece of work, useful to both engineers and amateurs.

> As I mentioned in my earier post regarding the tuning of PI
networks,
> inaccuracies are ubiquitous in ham radio, indeed in life itself.
Fortunatley
> for most of us non-engineeers, close is almost always good enough.
I'd
> imagine that in retrospect, Walt regrets ever borrowing the Conjugate
Match
> theorm from the rest of you engineers for metaphorical use here, and
> especially so without so labelling it, as I mentioned.

Sure, inaccuracies exist, and engineering methods usually have one or more approximations. I just think that an author should strive to be as technically accurate as possible. And like you say, if a presentation is inaccurate or approximate, it should be clearly labeled that way.

> If you think his doing so "dumbed down" ham radio you evidently
never
> suffered much exposure to all the misinformation within the hobby that
went
> before "Reflections", and is still way too predominant.

No, I just would not want to see dumbing down become a policy of an author. I would rather see Walt be accurate yet informative. Tough job, no doubt.

> Mistakes are not unknown in engineering. I recall a new transmitter that
> fried a bank of receivers immediately when it first transmitted because it
> had in its design a tiny antenna change relay for the receiver bank that
> switched them on and off the transmit antenna line. The darn thing looked
> like it was designed for a 5 watt CB set, yet it had to isolate 3 KW of rf
> from the receivers on transmit mode, and it was way too tiny to do the job.

Ouch!

> Bill, again, I know that engineers and scientists are, by nature and
> training, perfectionists, at least to a high degree, and your attitude here
> seems to demonstrate that. I certainly have no argument with you on your own
> level, but on my own it's a different matter. The difference is that Walt
> did it while everyone else is mostly just talking about it.
> And criticising the few possible areas in his work where criticism is
> possible.

By criticizing, I'm not saying Reflections is worthless. There's a wealth of info in there. But sometimes by criticizing, things get improved. That's good for everybody.

> Did Walt make a mistake in using the Conjugate Match theorm as he did? Not
> from my point of view, now that I know that it's a theoretical concept only,
> evidently used mostly as a proof of systems. I confess I was wondering
> what the flap was all about when the criticism first surfaced, but decided
> to stay with it until the entire story came clear. I'm glad I did.

Well, certainly those details could be added to the book. The amateur could skip over them, but the engineer might find them very valuable.
73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

303. Re: Interesting antenna site :>)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:27:00 UTC
From: Richard Miller <k1rdm@mediaone.net>
Message-ID: <oJ9C5.32067$pu4.3420054@typhoon.ne.mediaone.net>
Source record: 178636

Careful, that may be copyrighted material!

Rick
K1RDM

"william ewald" <wgewald@att.net> wrote in message
news:o89its0cr4n82ak70osm79ci69u693go5c@4ax.com...
> On Mon, 2 Oct 2000 19:31:20 -0400, "Chuck O'Neal"
> <coneal@ultranet.com> wrote:
>
> >Makes as much sense as the fractena site!
> >
> >http://www.pyradyne.com/
> >
> >At the top click on "Mega Orb and Irradiation" for
> >their fractal design!!!
> >
> >enjoy....
> >73,
> >Chuck...K1KW
>
> " On the receiving end, the chakras or nerves of the parasympathetic
> nervous network respond by stimulating or blocking hormone uptake to
> the brain - the brain's response at the sympathetic junction of the
> sensory neurons. Here through enzyme action, a release on the
> transmitter sites takes place at the neurons. The transmitters are
> either excitatory or inhibitory, depending on the type of transmission
> release. Such synapses have been distinguished morphologically in the
> electron microscope; excitatory synapses tend to have round vesicles
> and inhibitory synapses tend to have flattened vesicles. Thus you can
> easily see how Shape Energy in biochemical transmission and reception
> is extremely critical and effective. "
>
> Makes perfect sense to me, as the nerve network is a fractal system...

304. FS: Millen GDO plus Bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:43:51 UTC
From: k9sqg@aol.com
Message-ID: <20001002204351.13030.00000019@ng-fg1.aol.com>
Source record: 178638

Have a 90651 grid dip meter, beautiful condition, all seven coils, plastic carrying case, and copy of instruction manual. Also have 90672 antenna bridge, beautiful condition, all three pickup coils, and copy of instruction manual. Sold as a pair for $150 shipped UPS, continental US only. Several circumstances suggest that I reduce items from the ham shack. Thanks for reading the post.

73s,

Evan

305. Intellectual Property

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 00:49:03 UTC
From: accrider3@aol.comnospam
Message-ID: <20001002204903.18846.00000026@ng-fa1.aol.com>
Source record: 178639

Is a fart the intellectual property of an asshole?

306. Re: Intellectual Property

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 01:28:39 UTC
From: k1bqt@aol.com
Message-ID: <20001002212839.27582.00000033@ng-fc1.aol.com>
Source record: 178640

>Is a fart the intellectual property of an asshole?<

Only if it's recent, properly registered, and reproduced in its totality.
Otherwise, it's called a "fair use" tinctiture of fart--the waft of which all
of us are allowed to savor without encumbrance.

Rick K1BQT

307. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 02:18:35 UTC
From: klocko@toad.net
Message-ID: <8rbfln$p7a$1@nnrp1.deja.com>
Source record: 178642

In article <39D86C8A.F43627B1@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> klocko@toad.net wrote:
> > Why is there a big difference between fields canceling and currents
> > canceling?
>
> Because currents *cause* fields. If there is zero current, the fields
> do not continue to exist. IMO, all these phantom currents and phantom
> fields border on a religion that takes us away from reality.

In that case, you might want to contact the editors of the Antenna Book
so they can change the first page of Chapter 24 ASAP.

> Can you explain exactly why
> "phantom reflections" is a superior concept to a "virtual short"?

Because it's based on *standard* transmission line theory.

Well, Cecil, thanks for giving me the opportunity to jump on my soapbox
and add my two cents worth. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

308. Re: Interesting antenna site :>)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 02:18:58 UTC
From: redberd95@aol.comnospam
Message-ID: <20001002221858.25806.00000044@ng-fu1.aol.com>
Source record: 178641

Finally, a site that is WORSE and full of make believe science.

Randy KA4NMA

309. Re: San Jose towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 02:44:26 UTC
From: sam@severs.com
Message-ID: <sam-0210001954100001@c307794-c.frmt1.sfba.home.com>
Source record: 178643

Scott,

I used to live in San Jose and had a 40" tower. A ham friend of mine in San Jose just completed a tower by permit in South San Jose and he indicated a 65 foot limit. You should go and check with your building inspectors / planning department...

By the way, we work for the same company...and we both work in San Jose...feel free to email me or call me if you have questions about obtaining permits...I've done it 3-4 times and it's not that much of a problem.

Sam Severs / WS6S

"We've all heard that a million monkeys banging on a million typewriters will eventually produce the entire works of Shakespeare. Now, thanks to the Internet, we know this is not true."
- Professor Robert Silensky, California University

In article <39D8DEF2.E0D2DD9@cisco.com>, Scott Moore <samiam@cisco.com> wrote:

> Sorry if this is the wrong place to post this but:
>
> Does anyone know the city policy on towers for San Jose, California ?
> I suspect it is not good, since I can't see any towers from my roof, but
> would like to know.
>
> --
> Scott A. Moore is samiam@cisco.com
>
> I like long walks, especially when they are taken by people
> who annoy me.
> - Fred Allen

310. Network seriously degraded tonight.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 03:10:42 UTC
From: jbarrett@remove.stny.rr.com
Message-ID: <S6cC5.5806$355.1346442@typhoon.nyroc.rr.com>
Source record: 178644

No question that something is very much amiss with Roadrunner this evening. It's taking an average of 90 seconds to download a single email message. Ditto for newsgroup messages and web pages. I've been contacted by users at two commercial RR insstallations which I administer, reporting the same problems.

I can't get through on either the local or 1-800 RR numbers - so I hope that somebody in tech support is reading this.

I smell another system-wide crash coming on... wonder if this message will even "take" on the news server?

Jim Barrett

311. Re: 10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 03:29:50 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D9449F.8E4A5E12@dvol.com>
Source record: 178645

Joe Schlatter wrote:

> To whomever wrote: "10M FRACTAL QUAD YAGI: JA with 1/2 WATT(!)":
>
> BFD.
>
> I have worked JA from East Tennessee on 1/2 watt and less using 2N2222 xtal
> oscillator xmtr to trap dipole, 15 feet off the ground, running parallel to
> a house with aluminum siding.

>
Of course, SOP.
>--

>
> Regards,
> Joe Schlatter
> joeNOSPAM@schlatter.org
> http://www.schlatter.org/
> http://www.miafacts.org/
> Amateur Radio Extra Class call sign W4HH

312. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 04:02:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rblo5$ab4$0@208.206.142.111>
Source record: 178646

Donaly wrote:

> Jim Kelley wrote:
> >
> > CAM disputed the following concepts:
> > > Power does not move from the power generator through the distribution
> > > system to the load. Power cannot be measured entering and exiting a
> > > boundary drawn around a system. If work is not done then power doesn't
> > > exist. Remember those arguments?
> >
> > I remember them, and also find them defined and described in modern
> > physics texts.
> > 73, Jim AC6XG
>
> Uh, oh. Another old argument that failed to die. Can't anyone
> start any new arguments?

Tom, looks like all the good arguments are already used up. Nothing left but to recycle them. Or duel with Fracturedtenna. Bleeeehhhhhh!

73, Dick

313. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 04:52:58 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39d966ed@news.planetc.com>
Source record: 178648

Indian antenna research???

Are you saying that Geronimo owned a rubber duck?
--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

314. Re: Korean antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 04:53:50 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39d96722@news.planetc.com>
Source record: 178649

Korean antenna research?

Sounds very much akin to the national dish of Korea: BULL-go-gi.

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

315. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 05:22:13 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D96D05.80175161@bigfoot.com>
Source record: 178651

VE9SRB wrote:
> The Smith Chart works great, it is pure genius. It is a graphical tool used
> to perform *steady state* design with *steady state* impedances.

I thought you said steady-state wasn't the truth. How can you reject
steady-state and like the Smith Chart?

> In this case Cecil, you would be driving the 50 ohm load with two equal
> voltages in parallel.

Well then, that's obviously not what you had in mind when you said
100w + 100w = 400w. Please tell me how to hook up two IC-706s to
get that 400w you promised.

> I was unaware that the SWR meter could independently detect two steady state
> powers traveling in the same direction simultaneously and then present a
> relative measure of both via the meter reading.

It can detect reflected power, Steve, and there ain't none on the coax.
Power cannot exist when voltage and current are zero. You are asking us
to reject something dubbed a "virtual short" in favor of something that
can be described as phantom voltages, phantom currents, and doubly-phantom
powers. Given the "virtual short" concept could be improved but I don't
think doubly-phantom power is the way to do it.

Seems to me the following is all we need to say: The reflections that
exist on the coax during the transient buildup to steady-state, are
eventually completely canceled by a complimentary set of reflections
from the load. Since the steady-state result is no reflected energy on
the coax, all energy incident upon the Z0-match is forced toward the
load since there is no other place for it to go and it cannot stand still.
(I have non-glare lenses in my glasses that act the same way.)
--
http://www.mindspring.com/~w6rca

316. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 05:29:26 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D96EB6.79C7FE@bigfoot.com>
Source record: 178652

klocko@toad.net wrote:
> In that case, you might want to contact the editors of the Antenna Book
> so they can change the first page of Chapter 24 ASAP.

Nowhere in my Antenna Book does it say zero current can cause fields
that cancel. Try running those differential currents through the same
single wire and see what happens.

> Because it's based on *standard* transmission line theory.

Please give a reference that says that zero current and zero voltage
can generate phantom power and phantom fields.
--
http://www.mindspring.com/~w6rca

317. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 05:31:27 UTC
From: Edward Dowdy <elIhatespamdowdy@home.com>
Message-ID: <PaeC5.98434$Qx4.3137769@news1.rdc1.il.home.com>
Source record: 178650
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

By the time I sell it. Resale value won't be a problem. I didn't buy it to
sell it.

--
Please reply to eldowdy@home.com. Spam is a pain!

"Dan" <dano@truvalue.com> wrote in message
news:8rb6pq$nn6$1@news.xmission.com...
> "Edward Dowdy" <elIhatespamdowdy@home.com> wrote in message
> news:WP8C5.97186$Qx4.3096410@news1.rdc1.il.home.com...
> > Go with a Dodge and have neither! :)
> >
> >
>
> Yeah, and hope you don't have to sell it. Resale values are terrible...
>
>

318. Re: Big antenna/stations vs better operators - was Re: 10M CONTEST

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 07:36:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8rbnmt$t9p$1@nntp9.atl.mindspring.net>
Source record: 178647

Cecil:

Don't you see... some folks desparately have to be better than someone, something, anything!

Or...

Peter K1PO

"CAM" <cam2338@bigfoot.com> wrote in message news:39CBD353.A088744F@bigfoot.com...
> Fractenna wrote:
> > I have a REAL EDGE as an operator. I have no doubt that I can beat him hands
> > down.
>
> Why does it matter who is the best operator?
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

319. Polish antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 11:47:08 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39d9c7f6@news.planetc.com>
Source record: 178568

[No readable article body recovered]

320. High Above Cayuga's Waters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-03 15:49:22 UTC
From: wgewald@att.net
Message-ID: <20001003154859.KQRJ22244.mtiwmhc25.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178469

http://www.asandler.com/jokes/computer/nerdtest.shtml

--
Posted from mtiwmhc25.worldnet.att.net [204.127.131.50]
via Mailgate.ORG Server - http://www.Mailgate.ORG

321. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DBBA15.E6F80729@bigfoot.com>
Source record: 178369

W4JLE wrote:
> I think that your finger slipped on the keyboard. Did you not mean 186,000?

Maybe his number is based on Texas minutes as opposed to New York minutes.
--
http://www.mindspring.com/~w6rca

322. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DBBC40.B2262225@uci.edu>
Source record: 178370

"William E. Sabin" wrote:
>
> Roy Lewallen wrote:
>
> > I sometimes see "RMS power" used with respect to audio amplifiers. As
> > far as I can tell, this is due to ignorance, or perhaps it has some
> > marketing advantage. But I know of no real use for this value in
> > everyday electrical or electronic calculations.
>
> I found out the answer to this usage of RMS power. The audio folks have
> co-opted the RMS idea to mean the following: If the signal is a single sine
> wave, then RMS power is understood to mean the average power output due to
> that sine wave. It is deceptive to the following extent: An amplifier with a
> certain "RMS power rating" may go completely flat on peaks that are only a
> little greater than the RMS rating. Anyway, the use of the term is
> pervasive.

The way we used to determine RMS power of an audio amplifier was to measure the peak sinewave output voltage into the rated load just before the onset of clipping, multiply the peak voltage by .707, square that, and then divide by the load impedence. By citing the RMS value, one would be able to differentiate from those who may have been using peak power values in order to make their power figure higher for the sales literature.

The idea of trying to adopt a standard way of determining power output was to avoid pitfalls similar to those currently enjoyed in the antenna market, e.g. 12 dB gain, 3 element Yagis.

73, Jim AC6XG

323. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e5bc6c.437336927@news.seanet.com>
Source record: 178371

On Wed, 04 Oct 2000 17:48:01 -0500, CAM <cam2338@bigfoot.com> wrote:

> I doubt that anyone knows
>exactly what happens inside a generator that has reflected energy
>flowing backwards through the tank circuit to/through the source.
>--
>http://www.mindspring.com/~w6rca

Cecil,

You have lived a charmed life!

Unless, of course, this has all become a philosophical question on the
meaning of "knows." ...or "exactly."

73's
Richard Clark, KB7QHC

p.s.
Does the IEEE dictionary have an entry for "knows?" Seeing that tome
has a use, but gives no understanding of the word heat, it is a
philosophical reference isn't it? Or is it metaphysics?
rwc

324. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3420-39DBBA42-92@storefull-112.iap.bryant.webtv.net>
Source record: 178372

Rick, K1BQT wrote:
"Shouldn`t this be a cut-and-dried issue after 75 years?"

Yes, and it is. The FCC specifies a measured common point impedance, and the reading of an r-f ammeter at this point, as how the power output of the a-m broadcast station shall be determined. The rules and test questions specify that a current increase in the r-f common point reading of 22.5% indicates 100% modulation.

A separate modulation monitor is required to improve monitoring. There is a carrier level set meter which calibrates the monitor and also indicates non-linear modulation as the carrier level set meter will dodge on non-linear peaks. The range of the percent modulation meter starts at zero and thus gives a much better indication of modulation than a current meter which only increases by 22.5%. The meter action is much faster than that of a thermal r-f ammeter.
Also, the modulation monitor is usually equipped with an alarm for peaks exceeding 100%. Usually this is a flashing lamp and sometimes this is augmented with an audible alarm. What`s more, the modulation monitor doesnt have to even be located on the station site. It can be almost anywhere the station can be received well.

Best regards, Richard Harrison, KB5WZI

325. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Dan <dano@truvalue.com>
Message-ID: <8rgh9u$9j1$1@news.xmission.com>
Source record: 178373
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Chas" <chas0001@my-deja.com> wrote in message
news:8rgd79qnt1@nnrp1.deja.com...
>
> > Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
> > Turns my head every time.
>
>
> The wife wants one of those now too. I wonder if that thing sends out
> the garbage like the Fords.

You never know, but 26 different ways to arrange the rear seat has got to
count for something! =)

Dan

326. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <25813-39DBDFE6-34@storefull-116.iap.bryant.webtv.net>
Source record: 178374

Richard Clark, KB7QHC wrote:
"I`ve seen a number of these instruments cross my bench for
calibration."

Yes, I`ve worked with models from several manufacturers too. Some if not all allow you to select positive or negative modulation peak monitoring. As pricey as these instruments tend to be, they should monitor both peaks simultaneously and allow you to alarm either or both peaks for near 100% or more modulation.
But all I`ve seen were positive or negative peak detector, you choose which and what level to alarm.

Best regards, Richard Harrison, KB5WZI

327. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Ted W2ICV <tbruce2@bellsouth.net>
Message-ID: <srpntsg7elp4lk6s9vggt48s1qjh5ibmi9@4ax.com>
Source record: 178375

Reg,

Shotgun weddings??? I lived in England for a bit, but I never knew
that there was an "Ozarkshire"!

Cheers!

On Sun, 1 Oct 2000 23:06:19 +0100, Ian Jackson
<ianjackson@g3ohx.demon.co.uk> wrote:

>In article <8r6oe8bmf1@uranium.btinternet.com>, Reg Edwards
><g4fgq.regp@btinternet.com> writes
>>"Yep" and "yup" are well understood in Old England but are
>>used less frequently than "yes". Their USA slang origin is
>>recognised.
>>
>>The words are not quite so affirmative as "yes" and have a
>>slightly dismissive flavour. So the vow "Yup I will" from
>>the bridegroom would not be accepted by the bride's father
>>with a loaded shotgun.
>>
>>But fine between friends.
>> ---
>>Reg, G4FGQ
>>==========
>>Cecil asked -
>>>
>>> Yep. (Is "yep" a good word in England :-) How about "yup".
>>
>>
>>
>
>For the young-at-heart, what about 'Yeah' (as in 'She loves you, yeah,
>yeah, yeah'). However, this is also a goddamn Merrycan-ism.
>
>Ian.
>

328. Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Proctenna <doc@conduit.net>
Message-ID: <veqnts8in3d3soaolfbk4sjfflhu1jg3dc@4ax.com>
Source record: 178376

Gentlemen of the newsgroup:

I am today announcing my patent-pending new invention, the Proctenna. This revolutionary device, while amazingly successful, unfortunately cannot be described in detail due to it's current pending status.

Briefly, the device is based on a 23" flexible tube, similar to smooth electrical flexible conduit, with a special conical tip, which acts as an insertion waveguide. The antenna operates on the principle of biofeedback, is self tuning, and also self grounding, as long as the operator stands barefoot in moist soil. In tests, the device has generated much excitement among our users, bringing some, in fact, to tears!

I will make additional details available about this thoroughly proven and documented device once the US Patent and Trademark Office has given it their scholarly and most critical review. The patent application was submitted last Tuesday, and they have given me every assurance that the patent will be granted by the end of this week.

Stay tuned for some illuminating news over the next few weeks!

Yours truly,

Harding D. Beezler, PhD.
Creator of Proctenna

329. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: pvale <pvale@swbell.net>
Message-ID: <39DBEE0A.FC8B3792@swbell.net>
Source record: 178377

Actually, the documentation says that the 8-9' whip will only tune down to 40 meters. Needs a 23' length to tune 75 meters. I'm gonna take about 16-17' of antenna wire and put an insulator on one end of it and a alligator clip on the other. When I'm stationary at the lake, etc, I'll throw the end of the wire up over a tree limb and operate 75 meters that way.

I'm a bit concerned anyway bout the CD grade mount I bought. There probably isn't 1/8" of insulation between the stud and ground in that mount. Probably will have to break down and buy the whip ICOM sells for use with this tuner.

P. Vale N0MXJ

CAM wrote:
>
>
> SGC doesn't put coax connectors on the output of their autotuners for
> good reasons. Coax cannot stand the voltages involved in feeding an
> 8' whip on 75m. What you are planning will probably work OK on
> 20m-10m but I certainly wouldn't use coax between the tuner
> and an 8' whip on the lower bands.
>
> At a California shootout, I tested an SGC-230 with a 11.5' whip on
> 75m. Weather was misty and the base of the antenna arced over to the
> grounded part of the antenna mount. Don't know why anyone would even
> try an 8' whip on 75m since only about 1/4w makes it to the antenna
> from a 100w transmitter. Talk about QRP!
> --
> http://www.mindspring.com/~w6rca

330. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: K7SAM <k7sam@arrl.net>
Message-ID: <xISC5.3156$q9.125788@news-west.usenetserver.com>
Source record: 178378

One of the best places I have found is

The Dillsburg Aeroplane Works
Charles T. Vogelsong - W3BQA
114 Sawmill Road
Dillsburg, PA
17019
Phone (717) 432-4589

Charles is a ham and is very helpful in getting you the tubing you need. I purchased all the materials I needed to build a 6 element 6 meter beam from him with no problems. He specializes in aircraft, race car and machine shop raw materials. Nice place to do business with. He does not advertise, just word of mouth from satisfied customers. Give him a try.

K7SAM

331. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <OffbOUpjSuzH78GvTGue=H8yfvQ5@4ax.com>
Source record: 178379

On Tue, 03 Oct 2000 21:18:19 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>On Tue, 03 Oct 2000 22:31:15 GMT, rwclark@seanet.com (Richard Clark)
>wrote:
>><snip>
>>And yes, I have consulted a patent attorney, my partner. He smiles
>>and informally extends his regrets to the aggrieved party. He is one
>>sharp dude who averages 4 times the claims as the patent we are
>>currently considering. He is the one with the master's touch. Claims
>>are the asset - nothing else.
>>
>>73's
>>Richard Clark, KB7QHC
>
>Several others have e-mailed me suggesting exactly the same thing
>Richard.
>
>Seems like nearly everyone is in agreement.
>
>73 Tom

Hi Tom,

I was sure there would be some dissenting voice to confound your accuracy.

I was wrong.

Everyone is in agreement!

This thread is closed ;->

73's
Richard Clark, KB7QHC

332. Fractal Antennas for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rgtvcdn1@iac5.navix.net>
Source record: 178380

Taking orders for the W4JLE fractal antenna.
This antenna is similar to an M12 type design. This unpatented antenna can be yours for a small investment of $431.27 Plus shipping and handling.

Remember in Popeye, inspite of all the bad things people said about Brutus, Olive Oil kept saying "But he's large". In this case you can substitute "But it's small".

If enough interest exists, we will start production and shipment of this antenna oddity and remember "But it's small"

Performance and EZNEC files available on a number of websites near you...

333. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <h=7bOa8HTUSsfhSE4T8GiqSihFxH@4ax.com>
Source record: 178381

On Wed, 04 Oct 2000 04:50:35 GMT, F6BOM <gilbert.mouget@waika9.com> wrote:

>
>Bug between the chair and the keyboard ;-)
>
Dï¿½licieux

334. Re: http://clik.to/n0vfp

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: "Stephen M.H. Lawrence" <poppabear1968@my-deja.com>
Message-ID: <8rfo3p$7hg$1@nnrp1.deja.com>
Source record: 178419
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

You've not been reading the other radio newsgroups, have you?

If anything, he's posting more senseless garbage than before.

I'll cite references, if you'd like.

Profit NutsacKKK's a Mongoloid racist. No mercy for the likes of him.

Steve

"Orb" <orb@sphere.org> wrote:
> Lloyd seems to have calmed down. Please try to be friendly with him.
>
> "Mr. Davies" <n0SPAMvfp@BELL_SOUTH_RED_DWARF_.net> wrote in message
news:ztuC5.6240$Jf1.43336@news4.atl...
> > On my page, You will find:
> >
> > Radio Shack webpages
> > MW DX page
> > Politics Pages
> > Message Board
> > Free for all Links pages
> > NEW! Radio of the month! This month it is the Pro-2006!
>
>

--
Stephen M.H. Lawrence
Omaha, Nebraska - home of STRATCOM
"People generally quarrel because they cannot argue." - G.K. Chesterton

Sent via Deja.com http://www.deja.com/
Before you buy.

335. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e360fa.413926084@news.seanet.com>
Source record: 178420

On Wed, 04 Oct 2000 04:39:21 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:

>http://people.aero.und.edu/~nordlie/papers/irridium.html
>
>
>"With the satellites acting in the role the ground-based cellular
>transmitters acted in cities, Motorola hopes to offer worldwide
>cellular phone service to anyone, anywhere at any time. With each
>satellite being capable of carrying 2,800 conversations at once, a
>total of 215,000 users could use the system at any given time6. The 77
>satellites will travel in 7 different orbital planes, with 11
>satellites in each orbit. The orbits are 413.5 nautical miles in
>height."
>
>So the answer is a few hundred nautical miles.

Hi Gilbert,

Actually that distance is closing every day. Soon, it could be as
little as from your phone to the backyard - providing the satellite
survives re-entry... and misses your house.

73's
Richard Clark, KB7QHC

336. Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: John Harper <ae5x@qsl.net>
Message-ID: <39DB63BF.5BE8D590@qsl.net>
Source record: 178421

Good morning all,

After years of reading about home-made Yagis, verticals, quads, etc that use aluminum tubing, I finally decided to build something (2 el vert for 80m) myself. A lot of articles in QST and various books call for using 12' sections of aluminum with diameters ranging from 1-1/4" to 1/2" that will "telescope" into each other in order to achieve the desired length. I went to Home Depot then Loews and then a local hardware store and not only do they not have it, they don't have any idea where I can get my hands on even a 10' length of aluminum. Who sells this stuff?! Seems to be as scarce as hen's teeth around here.

Thanks & 73,

John Harper, AE5X
HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
Outdoor QRP http://www.qsl.net/ae5x

337. WTB: 220MHz dipole array antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: ve2tso@altavista.com
Message-ID: <8rfpca$8o1$1@nnrp1.deja.com>
Source record: 178422

I'm looking for a 2 or 4 dipole array antenna for a 220MHz repeater.
Let me know what you have.

Eric VE2TSO
ve2tso@altavista.com

Sent via Deja.com http://www.deja.com/
Before you buy.

338. Re: 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DB64AB.A7F9EC2F@oio.net>
Source record: 178423

Andy,
If the antenna was made for mobile use then I would
expect that without a ground plane of some type, it isn't
going to work very well. Providing a ground plane (radials)
shouldn't be that difficult, why not do that? Done properly,
it should work 'better' than the 'rubber duck'.
'Doc

339. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DAEEB9.418F8B98@eznec.com>
Source record: 178424
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

This is really amazing. In the late '60's and early '70's I lived in an apartment very close to a moderately busy street, and my main antenna was a ground mounted vertical. Most cars going by didn't bother me, but sometimes I could hear ignition noise from one a block away, and it was overpowering as it went by. These noisemakers were invariably Fords -- just like Jerry said. I guess some things never change.

Roy Lewallen, W7EL

Jerry Oxendine wrote:
> . . .
> All joking aside, I don't know what it is about Fords and ignition
> noise. It seem to always have been that way. When we used to run
> AM rigs back in the '60s we could tell there was a Ford passing by
> because of the pulse noise in the receiver--increasing in pitch and
> speed as the driver shifted gears, slowing down when he pressed the
> clutch. Look out the window, VOILA, there'd be a Ford going by. LOL!
> It still happens to my 706 in the car. Some Fords make no noise, others
> completely blank out the receiver.
>
> If you are having trouble with noise, I wish you the best of luck in
> curing it. Glad we can razz each other and have a little fun.
>
> 73
> Jerry
> K4KWH
>
> Chas wrote:
> >
> > In article <39DA7C1B.FD8@bellsouth.net>,
> > joxendi@bellsouth.net wrote:
> > > Well, Chas,
> > >
> > > I can't agree with the mechanical troubles on Chevrolet, either. I
> > went
> > > to Chevrolet for good after having several Fords that, not only gave
> > me
> > > noise trouble (to the point that a radio was almost unusable), but
> > left
> > > me stranded a number of times. I abandoned Ford for good in 1973 and
> > > never looked back. I've had 5 Chevrolets since that time (I used to
> > > trade just to keep up with the Joneses when I was younger)--two of
> > which
> > > I own now. The '87 Celebrity station wagon I bought new in

> > August '87.
> > > It now has 197,000 miles on it. It has never had the engine or trans-
> > > mission opened except for routine maintenance and they are both the
> > ori-
> > > ginals. I replaced the OEM starter at 189,000, the OEM water pump
> > > shortly after. It has never quit except for a dead battery. Except
> > for
> > > belts, brakes, several alternators over 13 years, I have replaced
> > almost
> > > nothing. I did rebuild the front recently replacing the CV joints and
> > > the inner tie rods. It drives almost as new except for a couple
> > squeaks
> > > in the rear I can't seem to locate. But I would drive it to the West
> > > Coast in a heartbeat. It doesn't tick, click or smoke.
> > >
> > > The other Chevy is sort of a toy--a 1993 Lumina that I have put less
> > > than 30,000 miles on in the last 4 years. It is a Z34 that has proven
> > > to be reliable, mechanically sound, economical to drive, and just
> > plain
> > > FUN. It is my Sunday go-to-meetin' car and it gets babied to death
> > and
> > > both cars have always been garaged. The wagon is my "beater" that I
> > > drive every day, have my mobile ham rigs in, pull my lawn tractor
> > with,
> > > haul lumber in, and even firewood! While Ford seems to be extremely
> > > popular, I can't agree that Chevrolets are prone to mechanical
> > failure.
> > >
> > > Since 1966, I have owned quite a few from a '61 to the '93 without
> > hav-
> > > ing ANY recurring failures. The failures I had were with the Fords
> > that
> > > had a habit of leaving me to walk back home. I learned to spell Ford
> > > backwards (D-river R-eturning On F-oot). LOL! I got extremely pissed
> > > at them after the fiasco with the '73 Mustang, and Ford's refusal to
> > > honor their tranny warranty. I cussed them out, stormed out the door,
> > > and traded down to a '69 Impala just to get rid of it! LOL! Funny,
> > > that 4 year old Chevy NEVER left me stranded NOR did it make ignition
> > > noise--and that was without doing anything to it.
> > >
> > > It's what you get used to, I reckon!
> > >
> > > Best 73
> > >
> > > Jerry
> > > K4KWH
> >
> > I knew I would get a rise out of you Chevy lovers. I had a 92 Z34
> > also. Actually I have had 2 92 Z34's. The first one only lasted 2
> > weeks because of a screwed up neighbor kid who decided that it looked

> > better burnt to a crisp. Almost burned the house down too because it
> > was in the garage when the little dirt bag set it a blaze. Went down
> > with check in hand and got another. Wish I still had it but houses
> > come before pleasure.
> >
> > Chuck
> > KC0GUK
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

340. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB66C4.C00FBC1A@bigfoot.com>
Source record: 178425

W4JLE wrote:
> Whoa! I have stayed out of this because it was more a matter of semantics
> than anything else. But! a 100% modulated AM Transmitter 100 Watt Carrier
> Power would show 50 watts in the carrier and 25 watts in each sideband
> (average power) still adding to 100 watts. What am I missing?

You are missing the 50 watts added by the modulator. 100w + 50w = 150w
Remember the conservation of energy principle?
--
http://www.mindspring.com/~w6rca

341. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8rfnpi$1okc$1@heap.juniper.net>
Source record: 178426

kc5cqa <kc5cqa@devtex.net> wrote:
>I have a question, bear with me. During the Desert Storm War, I
>'heard' reports from the ''front'', and they would be by 'satellite
>phone', and there would be a '''delays in the transmit and receive
>messages '', maybe lasting a second or two, because the 'repeater' was
>in space. I am guessing those repeaters were located at about 22,000
>miles out. ????. I don't really know what the distance was.
>Soooooo, with saying all this, my question IS if satellites were
>placed in space and were used as the cell phones are used
>today, how high up would they have to be???????????. Or another words
>how low could the ""repeaters"" be before they did not run in to the
>problem of ===delay===., and still stay in their orbit.??? (As I look
>over this question, I see I am not asking the question right, but I
>hope you ''see'' what I am trying to ask. :) C.
>Lorentson 73

The rule-of-thumb that phone companies use is that you need to limit the total round-trip delay to under 200 milliseconds to avoid annoying users. A circuit through a geosynchronous satellite at 22,300 miles altitude presents a 90,000 mile round trip, or not quite 500 milliseconds of round-trip delay at the 186,000 mile/second speed of light. If you want to keep the delay under the 200 ms budget the satellites will need to be kept under 9,000 miles altitude.

Once you've dropped below the 22,300 mile altitude, however, the satillites are no longer geosynchronous and instead move with respect to the earth's surface. This means that you'll now need a lot of satellites to ensure continuous coverage of any particular point on the surface, with the number of satellites being mostly independent of the altitude they are at, so you might as well drop the satellites a lot lower, say under 1,000 miles, as this will minimize both the cost of launching the satellites and the gain requirements for the phones.

The economics of doing this haven't been very attractive compared to ground-based systems, however. If you search the Motorola web site for "Iridium" you'll find straggling references to an attempt to do this, including pictures of the phones. Iridium had about 60 satellites up several hundred miles. The company went bankrupt, and they started de-orbiting the satellites early this year. Globalstar (www.globalstar.com) is another company taking a shot at this, with 48 satellites. Teledesic (www.teledesic.com) is planning to launch 288 satellites, 900 miles up, to provide bigger bandwidth data services. We'll see how that goes.

Dennis Ferguson

342. Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <bAHC5.4126$mC.261654@monger.newsread.com>
Source record: 178427

From reading recent posts on this news group, it is evident that serious misconceptions still prevail concerning virtual open and short circuits on transmission lines, and whether total re-reflection of power can occur in impedance matching operations. My position is that both of these concepts are valid, and are the basis for the statements appearing in my book 'Reflections' concerning impedance matching.

Some posters on the NG deny that these concepts are valid, and therefore condemn Reflections for propagating incorrect information. An article has been published so stating.

So I propose a simple transmission-line problem, with five questions for the group's consideration to stimulate thinking that could ultimately reverse the position of the naysayers. I'm confident that everyone in the group will answer the questions correctly. However, if they answer the questions correctly, it will prove they consider the concepts of virtual short circuits and total re-reflection valid. The naysayers who answer correctly must merely rethink the semantics of the problem.

The setup for the problem consists of a lossless transmission line of any length, with a characteristic impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0 of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main transmission line at any place along the line. The stub can be either a l /2 line at frequency f, short-circuited at the far end, or a l /4 line at frequency f, open-circuited at the far end.

Now for questions concerning what occurs after the stub is connected.

1. What is the amount of current now flowing in the load?

1.. 2.0 amp
2.. 1.0 amp
3.. 0.5 amp
4.. 0.0 amp
5.. None of the above
2. What is the line voltage at the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
3. What is the line voltage l /4 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts

5.. None of the above
4. What is the line voltage l /2 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
5. What occurs on the line at the stub point?

1.. Voltage and current are totally transmitted past the stub point and their energies are totally absorbed in the load.
2.. Voltage and current are partially transmitted past the stub point and partially reflected back toward the source.
3.. Voltage and current are totally reflected back toward the source.
D. None of the above

343. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB6BBF.4EA58841@bigfoot.com>
Source record: 178428

Richard Harrison wrote:
> The Bird will show that in a matched line there is no reflected power in
> the matched section of line while the matching line section may have any
> required amount of reflected power.

This is one of my problems with Steve's analysis which requires phantom reflected power to exist where it cannot be detected. We are asked to have faith in its existence. If you have to chose between phantom undetectable reflected power and a virtual short, which would you choose? :-)

RE reflections: Let's say a 71v/1.4a generated wave is incident to a 51.5/300 ohm impedance bump. Let's say the incident waves are at zero degrees. Since this is an impedance step up, the reflected voltage will stay at zero degrees but the reflected current will shift to 180 degrees. This reflected wave will contain 50w of reflected power. Assuming a 1/2WL 300 ohm line with a 51.5 ohm load, the returning reflected power will cause the originally existing reflected power at the 51.5/300 ohm impedance bump to cease to exist because of destructive interference. Since there is no reflected power flowing toward the transmitter any more (none can be measured) that previous 50w cannot be traveling back towards the transmitter. Since it only has a choice of two directions, it must continue on toward the transmitter. In fact, since there are no reflections on the coax (none can be measured) ALL real power, incident to the Z0-match from either direction, is forced to head for the antenna. What other choice does it have?
--
http://www.mindspring.com/~w6rca

344. here's a 6 meter yagi at good price-a company doing something right

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001004135109.18101.00000227@ng-fl1.aol.com>
Source record: 178429

Hey gang

I am not a paid promoter or anything, but I just bought a 4 element Arrow antenna for 6 meters. I am totally impressed by the workmanship and the ease of assembly...this antenna is a winner.

Antenna is far more durable than the brand name suggests...While I would not put it up at 100' feet on the Kansas prairie, the city dweller with a 40 ft tower gets an antenna that is a good value.

I bought mine for 100 bucks...new in box, but originally bought by WP4O. They are around 20 bucks more from Arrow.

I know that you can go pick tubing at the aluminum farm; I have done so many times and built many an antenna, but for those with a "time is money" situation, like me, or someone new to 6 meters and antenna building, what a nice deal the Arrow is.

I will take a few photos of the antenna, up close...to show the workmanship...and post 'em in the near future.

73
Doug N8WWM EN81

345. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB6C88.A74074DB@bigfoot.com>
Source record: 178430

VE9SRB wrote:
> The work of Johnson, Slater, Kraus and others predate our discussions over
> the past few years and there work is not in dispute. In all of these works,
> they clearly describe the wave reflections as a function of load impedance
> for the forward wave and "output" impedance for the rearward arriving back
> at the source.

Do they allow phantom undetectable power waves flowing all over the place?
Methinks you have enhanced their work a mite.
--
http://www.mindspring.com/~w6rca

346. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8rfs09$b6i$1@nnrp1.deja.com>
Source record: 178431

http://www.metalmart.com/

In article <39DB63BF.5BE8D590@qsl.net>,
ae5x@qsl.net wrote:
> Good morning all,
>
> After years of reading about home-made Yagis, verticals, quads,
> etc that use aluminum tubing, I finally decided to build
> something (2 el vert for 80m) myself. A lot of articles in QST
> and various books call for using 12' sections of aluminum with
> diameters ranging from 1-1/4" to 1/2" that will "telescope" into
> each other in order to achieve the desired length. I went to
> Home Depot then Loews and then a local hardware store and not
> only do they not have it, they don't have any idea where I can
> get my hands on even a 10' length of aluminum. Who sells this
> stuff?! Seems to be as scarce as hen's teeth around here.
>
> Thanks & 73,
>
> John Harper, AE5X
> HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
> Outdoor QRP http://www.qsl.net/ae5x
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

347. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB6D9A.3B634B09@bigfoot.com>
Source record: 178432
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Jerry Oxendine wrote:
> Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
> Turns my head every time.

Check the crash test results. That turn in your head might become
permanent.
--
http://www.mindspring.com/~w6rca

348. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB6F0D.DF3E093B@bigfoot.com>
Source record: 178433

Dennis wrote:
> I've used hamsticks there on 40-10M with great success.

Try a 75m Hamstick and tell us the results. How about 12dB
down from a bugcatcher? How does 1/3 watt radiated from a
100w transmitter sound?
--
http://www.mindspring.com/~w6rca

349. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Bob Wells <bobwells@hansenengineering.com>
Message-ID: <39db7129$0$24053@wodc7nh6.news.uu.net>
Source record: 178434

John,
Try looking around the directory at:
http://www.tubenet.org/usa_alum.html

Hope This Helps!
Bob
KF6ZQH

"John Harper" <ae5x@qsl.net> wrote in message
news:39DB63BF.5BE8D590@qsl.net...
> Good morning all,
>
> After years of reading about home-made Yagis, verticals, quads,
> etc that use aluminum tubing, I finally decided to build
> something (2 el vert for 80m) myself. A lot of articles in QST
> and various books call for using 12' sections of aluminum with
> diameters ranging from 1-1/4" to 1/2" that will "telescope" into
> each other in order to achieve the desired length. I went to
> Home Depot then Loews and then a local hardware store and not
> only do they not have it, they don't have any idea where I can
> get my hands on even a 10' length of aluminum. Who sells this
> stuff?! Seems to be as scarce as hen's teeth around here.
>
> Thanks & 73,
>
> John Harper, AE5X
> HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
> Outdoor QRP http://www.qsl.net/ae5x

350. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <39DB724B.A855A7DE@NO.excite.SPAM.com>
Source record: 178435

Hugh is right, RTLT (round trip light time) for geo-stationary satellite is about 1/4 second, to the moon is about 2.5 seconds. Even earth bound there is some delay and can be easily measured. Best example of this is radar. Also, ever get echo in a local phone call? It does not require a satellite link to generate this effect. The phone company has suppressers for this, but sometimes they don't engage for some reason.

351. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DB7089.9B7B0BEE@uci.edu>
Source record: 178436

CAM wrote:

> On the contrary, "power flow" is a concept accepted by the IEEE but
> not by some on this newsgroup.

What do they have to say about the polarity of the charges which
move in a circuit? ;-)

73, Jim AC6XG

352. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB712C.6AC24FD8@bigfoot.com>
Source record: 178437

pvale wrote:
> I bought a ICOM AH-4 to use with my IC706. I'm mounting this on my
> pickup and feeding a 8' CB whip on the back bumper. There is no place at
> the back of the truck to mount this tuner, so I'd like to mount it up
> under the cab and run coax back to the antenna feed point. Is this
> do-able, or does the feed point voltage at the output of the tuner get
> too high?

SGC doesn't put coax connectors on the output of their autotuners for
good reasons. Coax cannot stand the voltages involved in feeding an
8' whip on 75m. What you are planning will probably work OK on
20m-10m but I certainly wouldn't use coax between the tuner
and an 8' whip on the lower bands.

At a California shootout, I tested an SGC-230 with a 11.5' whip on
75m. Weather was misty and the base of the antenna arced over to the
grounded part of the antenna mount. Don't know why anyone would even
try an 8' whip on 75m since only about 1/4w makes it to the antenna
from a 100w transmitter. Talk about QRP!
--
http://www.mindspring.com/~w6rca

353. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DB7610.6EC4@wt.net>
Source record: 178438
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Jerry Oxendine wrote:
>
> Tom,
>
> You couldn't have a Z34 in your Ford truck! You'd never be able to
> CATCH one! LOL. And even the Lightning series wouldn't be able to
> catch one on a crooked road--it'd turn over while the Z34 took the
> S turns with ease. LOL!
>
> Everybody's experiences are different. Mine just happened to be bad
> with FoMoCo. I didn't like being Found On Road Dead! LOL!
>
> Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
> Turns my head every time.

Yea, that PT is pretty neat looking, but I was surprised how small they are when I finally saw one in person. Not as big as I was expecting from the ad's. Myself, I drive old beaters here, and have both ford and chevy. Have an old 68 ford f-250 that I've been kinda restoring. It has very little rust and was garage kept all it's 32 years. I drive it the most lately. Also have an old 81 chevy MC. I've been driving that thing for years and years it seems and I can attest to Tom's statements about the paint on GM cars. Fairly pathetic. The paint has peeled something awful on that car and looks terrible. But, the car still drives almost like new and has never left me stranded once. It's the car I take if I want a smooth highway trip. I do most the work myself. Thats why I can get away with old beaters. Half the parts on both vehicles are almost new. I keep thinking about springing for a new car, but I'm just too cheap. And I'm not one that needs a fancy car to feel stylish. A new car is one of the worst investments of money you can choose. I save 1000's every year from driving beaters. 100's a year just in insurance. Also I just like old cars anyway...I have a sickness for old trucks. I've had quite a few of those. I once had a new chevy Z-28 about 20 years ago. Real nice.. But it drove me crazy trying to keep people from dinging it up, etc. Seems like the first 2 weeks I had it I got 14 small door chips. Would drive me ballistic. My brother later totaled it when a dingbat slammed into him on the freeway... I don't have to worry as much with the beaters. MK
--
http://web.wt.net/~nm5k

354. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <QGKC5.17449$tl2.1218219@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178439

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DB5517.7ECD9602@bigfoot.com...
>
> The phasors add vectorially, the scalars add non-vectorially.
>
>
> Measurements prove otherwise. There are no reflections on the coax.
Therefore
> all the generated power enters the Z0-match.
>
>
> Powers are ***SCALAR*** values. It is impossible to add them "in phase".
> Voltages add in phase. Currents add in phase. Powers do not add in phase.
>
> We do not disagree on basic transmission line theory, Steve. I have taken
> a devil's advocate position and tried to defend the steady state math
model.
> All math models are flawed. My entire purpose was to ascertain exactly how
> well the traditional steady state model, including the Smith Chart and
stub
> design, could be defended. How did I do?
> --
> http://www.mindspring.com/~w6rca

Cecil:

I snipped a bit out of your post, sorry.

How did you do? Well, I think the discussion went fine, not really a matter of how well either of us did. More important did we learn anything? My personal opinion - I think that you limit yourself by not looking beyond the steady state conditions. Most notably in the discussion of power. Power is a net scalar quantity determined from the addition of vectors. Power is the determined quantity, the addition occurs with the vectors.

Here is an example that will tie your use of the Smith Chart to my transient analysis and my discussion on the addition of power.

We have a 50 ohm line connected to a 300 ohm line. The 300 ohm line is 1 wavelength long. We measure a forward power of 100 watts in the 50 ohm line. We measure a forward power of 87.1795 watts in the 300 ohm line and a reflected power of 25.6410 watts in the 300 ohm line. What is the actual impedance terminating the 300 ohm line? I would like the answer in the form of R + jX. Use only your knowledge of voltage and power at the impedance junction. Hint, the answer lies in the addition of power in the 300 ohm line. Do not use the Smith Chart yet, please.

73,
Steve

355. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: matjake@aol.com
Message-ID: <20001004143114.05326.00000229@ng-fc1.aol.com>
Source record: 178440

John,

What I have done is gone to a metal supply place. Look in your yellow pages
under
Aluminum tubes
Metal Supply
Tubing
You can also order from Texas Towers but the freight will probably kill you.

If you go to a metal supply place tell them what you want to do and they will
be more the glad to assist you at least the ones around here were helpful.

Hope this helps,
Matt

356. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001004145648.14546.00000138@ng-ff1.aol.com>
Source record: 178441

> The output power averaged over an entire sinusoidal modulation cycle can be shown
to be 150 watts, 100 watts in the carrier and 25 in each of the sidebands.<

Despite all that dynamic willywag, my RMS wattmeter stays glued at 100 watts output, regardless of the phase or amplitude of the modulating signal. In addition, the average current level drawn by my amplifying device doesn't budge. Where'd my 50 watts go?

Rick K1BQT

357. Help with NEC4WIN please!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Andy Lake <andy.lake@bt.com>
Message-ID: <39DB7D97.D9A37E0F@bt.com>
Source record: 178442

Hi Peeps,

I'm having a bit of bother with NEC4WIN.
I'm trying to model a simple monopole antenna, and look at the
change in impedance with a wide range of frequencies.

I've created a 3 metre long groundplane antenna a zero height
above perfect earth. (I know this isn't accurate for real-life
situations, but I want to get a feel for what's happening..)
If I sweep the impedance over the range 4-40MHz I get pretty much the
expected results, *except* that the imaginary part of the
impedance never goes positive.
It sweeps up and down as expected, but always negative...

What am I doing wrong..?

Thanks...

73
Andy

358. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <39DB7ECA.536C1AFB@inreach.com>
Source record: 178443
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

if both the house and the senate passed it unamimously, why not just
override the veto and tell the governor to shove it.

Phil Kane wrote:
>
> On Mon, 02 Oct 2000 23:13:36 GMT, Brian Kelly wrote:
>
> >>
> >> I am returning Senate Bill 1714 without my signature.
> >>
> >> This bill would require the Office of Planning and Research to: (1) prepare
> >> and publish a technical assistance bulletin for use by local planners in the
> >> preparation of local ordinances regulating amateur radio antennas; (2)
> >> prepare a model ordinance suitable for local regulation of those antennas;
> >> (3) and report by July 1, 2001, regarding any recommendations for changes to
> >> the state statutes regarding regulation of amateur radio antennas.
> >>
> >> This bill may encourage local officials to accommodate the needs of amateur
> >> radio operators when adopting ordinances. The cost of this bill however, is
> >> not included in the Budget Act of 2000. Additionally, this is a local rather
> >> than a state issue.
>
> >The feds wimped out, the most populous state in the country
> >wimped out, now it's down to the neighborhood no-clues. Get
> >educated on stealth antennas . .
>
> We who were on the "SB-1714" Task Force were amazed that the
> Governor vetoed the Bull because both the State Senate and the
> Assembly passed the Bill UNANIMOUSLY.
>
> In typical California style the legislators decided to make a
> "study project" out of what all the other states with similar
> legistation did as a "done deal", and the veto was solely on
> the basis of "no funds allocated".
>
> The issue was the "costs" involved ... heck, I could sit down
> and crank out the "Technical Assistance Bulletin" and Model
> Ordinance over a weekend at no cost to the taxpayers - I did
> both for a client county two years ago and it's still on my
> wordprocessor.
>
> We'll try next year.
>

> 73 de Phil Kane - K2ASP
> ARRL Volunteer Counsel

359. Re: Cell Band Beam Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8rfufo$286p$1@heap.juniper.net>
Source record: 178444

Prof. Curt M. Breneman <brenec@rpi.edu> wrote:
>There is another consideration as well: For digital cellular service,
>there is a time-delay problem that shows up at around 15 miles from the
>cell site. I believe that this is related to the frame rate of the data
>packets. Using gain antennas to get greater range would lead to
>problems. (Someone more familiar with the intricacies of this problem
>may want to elaborate.)

I think this is a characteristic of TDMA systems in particular (GSM may also work like this). As I understand it each phone synchronizes to the cell tower it is using, and is assigned a time slot in which to transmit a frame. As the phone is moved further from the tower, the start of the transmission as viewed from the tower moves later and later into the timeslot. Eventually, at some distance, it will slip far enough that the tail of the transmitted frame ends up in the following timeslot and is interfered with by the phone using that timeslot. I don't know any details beyond this, but 15 miles does represent a 0.16 ms slip, which is larger than the 8 kHz timing that phones are often attached to, so that number sounds vaguely plausible.

I don't think CDMA (spread spectrum) systems have this problem, nor do older analog systems.

Dennis Ferguson

360. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rfv55$ef6$1@iac5.navix.net>
Source record: 178445

I think that your finger slipped on the keyboard. Did you not mean 186,000?

"KF6HHS" <hrbcrb@aol.com.goaway> wrote in message
news:20001004021851.16567.00000196@ng-cr1.aol.com...
> The answer to your delay questions is rather simple math. Radio signals
travel
> at the speed of light, ie 286,000 miles per second. If the distance to
the
> repeater is aproximately 22,000 miles, add 22,000 miles for the return
(44,000)
> total, and divide by 286,000. The path delay is 153 milli-seconds, or
0.153
> seconds. If the repeater does some type of signal/voice processing/error
> correction that time should be added to the path time.
>
> Hope this helps, regards, Hugh KF6HHS
>
> PS Retired engineer with 40 years of experience, now just a technician.
> Retired, now life moves at my pace.
> please note spam filter

361. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39db5318.9419925@news.akorn.net>
Source record: 178446

Hi Steve,

Thanks for the reply. If I use some non-standard jargon, excuse me.

On Wed, 04 Oct 2000 14:00:20 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

I wrote:
>> I assume this discussion centers around a system with an extermely
>> wide bandwidth transmission, much wider than conventional TV
>> transmitters. Amateur radios and even TV BC transmitters certainly
>> can't deliver such a signal.
>>
>> But let's get past this, and assume a transmitter does behave that
>> way. I'll assume we have a transmitter up and running, and then at
>> some point after the tank circuit and harmonic filtering we have a
>> bounceless switch we open and close. That would allow me to create
>> the outgoing wave you describe.
>>
>> I assume also we are working with lines that have very long delay
>> times compared to the rise time of the transient.

>Your points are well spoken and correct. The practical matters associated
>with this discussion are another matter entirely and will overshadow most of
>the concepts discussed here.

OK. I'm glad we agree it won't work this way with the real
transmitters we all use. I'd still like to understand the analysis you
are using.

>Keeping the discussion at the level where it
>has been is really an effort to address some fundamental concepts - IE. Does
>a total re-reflection of power really occur at the match point? What is the
>mechanism creating the steady state impedance match? etc. From there, the
>practical realities you mention come into play.

I think the actual concept is a total re-reflection of all "reflected
power" occurs at the match point. I'm not aware of any claim that
"power" was reflected.

>We have first assumed that the "relative" phase angle of the voltage
>arriving at the match point is 0 degrees. The phase angle of the reflection
>coefficient is 0 degrees because we have assumed that the ZO of each
>transmission line is purely resistive.

How can you do that? The line appears as a series of energy storage
and forwarding systems, an infinite number of series inductances and

shunt capacitances. Each of those components stores and releases
energy, and hopefully forwards it along the line to a load in our
application. Every transmission line has bandwidth considerations.

The line Zo isn't anything like the **characteristic impedance**
unless something is absorbing energy at the same rate as it is being
applied to the line, and the across (voltage) and through (current)
vectors are in the correct ratio at the load end of the line.

Now it's true an infinitely long perfect transmission line will behave
as a perfect resistance, but we aren't using a zero frequency source.
We are using an infinite frequency source, or at least you have
mentioned line wavelength or source frequency.

It is a line that just "is" what the impedance label says at all
frequencies.

Are you considering we are actually exciting the line with a pulse so
short that the line appears to be infinitely long, allowing us to
disregard the end termination and any reflections? (Or have I missed
something?)

If so, can you tell me how our generator will "see" the line as a
perfect "resistance" that is based entirely on the characteristic
impedance of the line? In other words, can you describe the mechanics
of how the line has a ratio of across (voltage) and through (current)
vectors that are not determiuned by what is connected to the far end
and the length of the line? Or does that come later?

>The total voltage at the match point is the vector sum of the incident and
>reflected voltage. The voltage transmitted through ("delivered to") any
>impedance junction is equal to this total voltage.

OK, I read up on that last night. I follow that concept, but my
textbooks all considered a steady state condition and I had to work
from the load back towards the source to find voltages and impedances
along the line. I couldn't start at the "middle" of the system.

I wrote:
>> That's why an open lossless transmission lossless line steps up
>> voltage to infinity, while a shorted lossless line has zero voltage
>> and infinite current...if we could somehow feed power into a line with
>> voltage and current 90 degrees out-of-phase.
>>
>> I'm lost at this point. How do we double the voltage without reducing
>> the current?
>>
>
>At an open circuit load, the current will be zero but the voltage will not
>be infinity, Z = V/0 = infinity. At a short circuit load, the voltage will
>be zero bit the current will not be infinity, Z = 0/I = 0.

I beg to differ! With a lossless unterminated 1/4 wl line, if we could somehow feed power into that line, the voltage across the open end would be infinite.

The rub is the impedance at the generator would be zero ohms. We can't apply ANY power to the line because the across vector is zero. We have no voltage, and can have no power.

The reverse is true for a shorted lossless line. The end current would be infinite if we could some excite the infinite input impedance line.

Power reflection works well for understanding the above cases. Reflected power equal forward power. Net power flow into the line is zero watts in either case.

>Let's look at the short circuit using the way I handle the math with the
>current. A forward power of 100 watts arrives at this short circuit from a
>50 ohm line. The incident voltage is 70.711 v. The incident current is
>1.41 a. Since the reflection coefficient is -1, the reflected voltage
>is -70.711 v and the reflected current is -1.41 a. At the short circuit,
>the total voltage is +70.711 + (-70.711) = 0 volts. The total current is
>1.41 - (1.41) = 2.82 a. Z = 0/2.82 = 0 ohms, the short circuit.

How I can measure 2.82 amperes into a short circuit with a voltage of zero volts? Can you describe a test setup that will allow me to prove 2.82 amperes will exist?

>+71.8 v in the 51.5 ohm line (100 watts) arrives at the 300 ohm line and
>sees an impedance discontinuity.

I don't understand how the 100 watts (I assume that is average power) at 51.5 ohms impedance arrives at the 300 ohm load, and why that load is 300 ohms. It seems as if we are looking at the system backwards.

When you define power, are you talking about RMS power, instantaneous power, or average power?

How do we make our generator source a given ratio of E/I without having a load impedance defined by the line's load? How can we define power as power flowing into a line when we don't define the line length or frequency of the source?

If I have a zero source-impedance transient source feeding a transmission line, what is the mechanisim that limits the source power to 100 watts and the ratio of E/I as ~50 ohms?

I can't get past this point, but when I do I'll go through the rest. Right now I vapor lock at the lines looking infinitely long and/or the transients being what we can consider infinitely short, and the actual applied power only being 100 watts but the reflected power being 400 watts in a system with only a single transient that is so fast the lines look infinitely long.

I can't understand why we would want to use a model that is so far from the operating condition that we can't even build a model, or

measure what we predict!

Unless I'm missing something. Can you tell me how to build a system like that, so I can measure the voltages and currents? Can we build an measure what you are describing? I know for a fact I can build and measure the system Cecil described, and the measuremenbts will agree with his analysis.

I'm not saying you are wrong, I'm just trying to understand why the reflected power concept is wrong...when I can build and measure exactly what that reflected power model predicts.

I'm trying to balance the advantages of using a model I can't build or measure against using a simple model that I can build and measure, and decide how the one I can't build can be verified to prove the one I can build and measure is wrong.

When I use models, I always like to use the most simple model that behaves like the system I'm emulating. Virtually all models have boundaries. We might find a theoretical case (that we can't actually build) that violates the boundaries but that doesn't make the model incorrect in real-world applications!

In all the arguing, bickering and feather preening that has gone on in this newsgroup, it's great to discuss a new concept in rational conversation. I appreciate your time Steve, and I'm sure many people are learning things from you in this exchange. No need to hurry with any answer, I have work to do until lunch tomorrow.

73 Tom

362. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39db8160.21269900@news.akorn.net>
Source record: 178447
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Wed, 04 Oct 2000 12:44:03 -0400, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
>Turns my head every time.
>
>Best 73 to ya,
>
>Jerry
>K4KWH

Yeah me too. But it mostly affects my stomach instead of my head.
Ha.

73 Tom

363. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39db8219.21454100@news.akorn.net>
Source record: 178448

On 04 Oct 2000 18:56:48 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>> The output power averaged over an entire sinusoidal modulation cycle can be
>shown
>to be 150 watts, 100 watts in the carrier and 25 in each of the sidebands.<
>
>Despite all that dynamic willywag, my RMS wattmeter stays glued at 100 watts
>output, regardless of the phase or amplitude of the modulating signal. In
>addition, the average current level drawn by my amplifying device doesn't
>budge. Where'd my 50 watts go?
>
>Rick K1BQT

Is your RMS reading wattmeter reading average RMS power or peak RMS
power?

Even a PEP meter reads RMS power, it just reads the peak of the RMS
value.

Aside from that, I agree with you. If you have a true average reading
RMS meter...it stays put with 100% positive and negative symmetrical
modulation. So does the anode current meter.

However, a peak reading RMS meter will indicate a PEP value four times
the RMS average value while the current and voltage in the output
device appear stable.

73 Tom

364. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DB8A4B.5FB0@wt.net>
Source record: 178449

Roy Lewallen wrote:
>
> Yes, you can look at an antenna with more than 20 segments, including
> the ones I posted, with the EZNEC demo View Antenna display. You just
> can't do any calculations.
>
> Roy Lewallen, W7EL

Thanks. I finally got a chance to look at them. I'd never looked at the M12 .All I can say is why???? Those antennas look like too much work for me. All those twists and bends... Must be a construction and support nightmare.. I think I'll stick with fairly straight wires. Or as they say here, waaar's. MK
--
http://web.wt.net/~nm5k

365. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DB8E51.1FBE94D7@west.raytheon.com>
Source record: 178450

Rick Littlefield wrote:
>
> > The output power averaged over an entire sinusoidal modulation cycle can be
> shown
> to be 150 watts, 100 watts in the carrier and 25 in each of the sidebands.<
>
> Despite all that dynamic willywag, my RMS wattmeter stays glued at 100 watts
> output, regardless of the phase or amplitude of the modulating signal.

Perhaps we are talking about two different transmitter configurations.
Based on your original post, I assumed you were describing a high
level plate modulated transmitter whose unmodulated output power was
100 watts. When 100% modulated by a single sinusoid, the average
envelope power should increase to 150 watts.

On the other hand, maybe your wattmeter doesn't actually measure
average RF output power. I seriously doubt it measures RMS power
either. Most inline RF wattmeters square the rectified, weighted sum
of the instantaneous voltage and current, and display the result as
either forward or reverse power. The relative weighting of the
voltage and current are determined by the characteristic impedance of
the transmission line the instrument is calibrated for.

The average rectified voltage (current) of an AM transmitter output
will not change with the application of modulation. The envelope
voltage (or current) will vary sinusoidially between zero and twice
the unmodulated value resulting in an average value independent of
modulation, up to 100%. The RMS output voltage (or current) will
increase by 22.5% when modulation is applied however. Note that the
classical thermal type RF ammeter is responsive to RMS current while
a current transformer, followed by a rectifier and DC voltmeter
responds to average current. The thermal ammeter will show an increase
of 22.5% when modulation is applied but the averaging type will stay
unchanged.

bart
wb6hqk

366. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001004164402.04390.00000239@ng-mf1.aol.com>
Source record: 178451

>However, a peak reading RMS meter will indicate a PEP value four times the RMS average value while the current and voltage in the output device appear stable.<

Right--and thanks for that destinction. But, I still can find the extra 50 watts.

For a 100-watt AM signal, aren't we talking about a dynamic mixing process that yields output from 0 watts PEP to 400 watts PEP while exhibiting a true average output power of 100 watts?

Further, isn't the requirement for 50 watts of baseband audio only needed when the method of mixing involves the use of a modulation transformer in the process we call "high level" modulation?

Consequently, isn't a 100-W AM transmitter a 100-Watt AM transmitter regardless of how we make it happen?

Rick K1BQT

367. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13474-39DB920A-49@storefull-114.iap.bryant.webtv.net>
Source record: 178452

Cecil, W6RCA wrote:
"Assuming a 1/2 WL 300 ohm line with a 51.5 ohm load, the returning reflected power will cause the originally existing reflected power at the 51.5 / 300 ohm impedance lump to cease to exist because of destructive interference."

I tend to think of some same-voltage batteries paralleled through a resistor. No current flows through the resistor because there is no difference of potential. Or, some oppositely polarized batteries adding to cause an increased current flow.

The reflected wave is nullified because it doesn`t appear on a 51.5 ohm coax connecting the transmitter with the 300 ohm line. It has ceased or it would re-enter the transmitter.

The transmitter sees 51.5 ohms thanks to the 1/2-wave impedance repeater (the 1/2-wave line). There is no impedance bump presented to the transmitter. The reflected wave can be thanked for eliminating the bump that the 300-ohm line would cause if it really looked like 300 ohms. It looks like 51.5 ohms.

The reflected voltage must add to the incident voltage at the 300 ohm line input to cause more current to flow into the line than would normally flow without the reflection.

I`ll speculate this happens due to 180 degrees between the transmitter and load, another 180 degrees in the reflection process, and a third 180 degrees between the load and transmitter. The odd number of phase reversals makes the incident and reflected waves additive across the input to the 300 ohm line. This increases the current into the line so that the voltage to current ratio in this case is in fact 51.5 ohms.

But we have two 1/4-wave line sections making up the 1/2-wave line. The 1/4-wave transformer impedance ratios apply and the voltage in the middle of the 1/2-wave section is high and the current is low. The 300-ohm line impedance is the intermediate between the high mid point impedance and the low 51.5-ohm impedance.

Best regards, Richard Harrison, KB5WZI

368. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <GIMC5.14746$s76.1019727@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178453

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39db5318.9419925@news.akorn.net...
>
>

I wrote:

>>
> >We have first assumed that the "relative" phase angle of the voltage
> >arriving at the match point is 0 degrees. The phase angle of the
reflection
> >coefficient is 0 degrees because we have assumed that the ZO of each
> >transmission line is purely resistive.
>
> How can you do that? The line appears as a series of energy storage
> and forwarding systems, an infinite number of series inductances and
> shunt capacitances. Each of those components stores and releases
> energy, and hopefully forwards it along the line to a load in our
> application. Every transmission line has bandwidth considerations.
>
> The line Zo isn't anything like the **characteristic impedance**
> unless something is absorbing energy at the same rate as it is being
> applied to the line, and the across (voltage) and through (current)
> vectors are in the correct ratio at the load end of the line.
>
> Now it's true an infinitely long perfect transmission line will behave
> as a perfect resistance, but we aren't using a zero frequency source.
> We are using an infinite frequency source, or at least you have
> mentioned line wavelength or source frequency.
>
> It is a line that just "is" what the impedance label says at all
> frequencies.
>

In the discussion, I simply assumed that the line had a characteristic
impedance that was real. The example as presented stated that ZO in one
line was 51.5 ohms and the ZO in the other line was 300 ohms. We also
assumed that each line was lossless. The concepts in the discussion would
not have changed had the ZO's been complex or the lines lossy.

More important are the concepts associated with wave travel. Here's an
interesting concept to think about. If the ZO of a line is complex, real
power can be delivered to a load having a reflection coefficient equal to 1.

> Are you considering we are actually exciting the line with a pulse so
> short that the line appears to be infinitely long, allowing us to

> disregard the end termination and any reflections? (Or have I missed
> something?)
>
>
> If so, can you tell me how our generator will "see" the line as a
> perfect "resistance" that is based entirely on the characteristic
> impedance of the line? In other words, can you describe the mechanics
> of how the line has a ratio of across (voltage) and through (current)
> vectors that are not determiuned by what is connected to the far end
> and the length of the line? Or does that come later?
>

There are no pulses. What I am considering is that when our perfect transmitter is instantly energized, it does not see the load, only the characteristic impedance of the line. The transmitter will have no knowledge of the load impedance until reflections from the load reach the line input. Once the reflections reach the line input, the effective line impedance (Vtotal/Itotal) changes but the physical characteristic impedance of the line does not (in theory). The transmitter will continue to drive a *forward* voltage, current and power consistent with ZO. The *total forward* voltage, current and power at the line input will change as a function of the re-reflections at the line input.

>
> >The total voltage at the match point is the vector sum of the incident
and
> >reflected voltage. The voltage transmitted through ("delivered to") any
> >impedance junction is equal to this total voltage.
>
> OK, I read up on that last night. I follow that concept, but my
> textbooks all considered a steady state condition and I had to work
> from the load back towards the source to find voltages and impedances
> along the line. I couldn't start at the "middle" of the system.
>
> I wrote:
> >> That's why an open lossless transmission lossless line steps up
> >> voltage to infinity, while a shorted lossless line has zero voltage
> >> and infinite current...if we could somehow feed power into a line with
> >> voltage and current 90 degrees out-of-phase.
> >>
> >> I'm lost at this point. How do we double the voltage without reducing
> >> the current?
> >>
> >
> >At an open circuit load, the current will be zero but the voltage will
not
> >be infinity, Z = V/0 = infinity. At a short circuit load, the voltage
will
> >be zero bit the current will not be infinity, Z = 0/I = 0.
>
> I beg to differ! With a lossless unterminated 1/4 wl line, if we could

> somehow feed power into that line, the voltage across the open end
> would be infinite.
>

We can feed power into a lossless unterminated 1/4 WL line. We just can't deliver any *net* power to it. With a wattmeter, you would measure a forward and a reflected power, both being equal. As a result, there is forward voltage and current in the line as well as rearward voltage and current.

Why would the voltage be infinite? Let's assume we have this lossless 50 ohm 1/4 WL line with 100 watts forward and 100 reflected. The forward voltage would have a magnitude equal to 70.71 volts. Arriving at the open circuit, it sees a reflection coefficient of +1. The total voltage is therefore 70.71 + 70.71 = 141.42 v. The current would be 0 and the line impedance at that point is infinite.

> The rub is the impedance at the generator would be zero ohms. We can't
> apply ANY power to the line because the across vector is zero. We have
> no voltage, and can have no power.
>

Again, there is a difference between forward power and delivered power. Although we are delivering no *net* power to the line, there is forward and reflected voltage and current in the line itself.

>
> The reverse is true for a shorted lossless line. The end current would
> be infinite if we could some excite the infinite input impedance line.
>

The end current would not be infinite. We are dealing with a combination of transmission line theory and circuit theory. See the comments below **

> Power reflection works well for understanding the above cases.
> Reflected power equal forward power. Net power flow into the line is
> zero watts in either case.

Correct - *net* power flow. Current and voltage are still traveling in the line.

>
> >Let's look at the short circuit using the way I handle the math with the
> >current. A forward power of 100 watts arrives at this short circuit from
a
> >50 ohm line. The incident voltage is 70.711 v. The incident current is
> >1.41 a. Since the reflection coefficient is -1, the reflected voltage
> >is -70.711 v and the reflected current is -1.41 a. At the short circuit,
> >the total voltage is +70.711 + (-70.711) = 0 volts. The total current is
> >1.41 - (1.41) = 2.82 a. Z = 0/2.82 = 0 ohms, the short circuit.
>
> How I can measure 2.82 amperes into a short circuit with a voltage of
> zero volts? Can you describe a test setup that will allow me to prove

> 2.82 amperes will exist?

** We are dealing with the discontinuity between the end of the transmission line and the connected short circuit. The boundary conditions at this connection point are determined through the reflection coefficient. It is not a matter of determining current flow through the short circuit, rather we determine total current at the end of the transmission line. The reflection coefficient is equal to -1. The total current at the end of the transmission line is Iforward - Ireflected. Irefected = -Iforward.

In a measurement set up, you could measure forward and reflected power at the short circuit (in the line). You could also measure voltage at the end of the transmission line. In the case of the transmission line, we determine V and I from the boundary conditions. We then determine Z = V/I = 0. I think you may be having difficulty with this in thinking that I = V/Z, since Z = 0, I must = infinity. We define I at the end of the transmission line, not *in* the short itself, so we don't calculate I in this manner with a short circuit at the end of the line. Current *in* the short circuit is meaningless. We are determining I at the end of the line, through the defined boundary conditions.

> >+71.8 v in the 51.5 ohm line (100 watts) arrives at the 300 ohm line and
> >sees an impedance discontinuity.
>
> I don't understand how the 100 watts (I assume that is average power)
> at 51.5 ohms impedance arrives at the 300 ohm load, and why that load
> is 300 ohms. It seems as if we are looking at the system backwards.
>

A 300 ohm line is connected at the end of a 51.5 ohm line. When a forward traveling wave arrives at the end of the 51.5 ohm line it sees a 300 ohm impedance. When a rearward traveling wave in the 300 ohm line arrives at the 51.5 ohm line, it sees a 51.5 ohm impedance.

The issue is understanding the difference between a physical impedance discontinuity and line impedance. The physical impedance discontinuity at the junction never changes. The line impedance changes only as a function of changing Vtotal and Itotal at the junction. Line impedance is never a mechanism for wave transmission or wave reflection.

>
> When you define power, are you talking about RMS power, instantaneous
> power, or average power?
>

I define power as P = |V| |I| Cos(T), where |V| and the |I| are RMS values and the T is the phase angle difference between V and I. This is fine as long as I am consistent in relating V, I and P.

> How do we make our generator source a given ratio of E/I without
> having a load impedance defined by the line's load? How can we define
> power as power flowing into a line when we don't define the line
> length or frequency of the source?

>

The initial forward power delivered to the line is a function of ZO, not the load impedance. When reflections from the load arrive back at the source, re-reflections are created as a function of the source's output impedance. These re-reflections add to the initial forward power.

>
> If I have a zero source-impedance transient source feeding a
> transmission line, what is the mechanisim that limits the source power
> to 100 watts and the ratio of E/I as ~50 ohms?
>

ZO.

> I can't get past this point, but when I do I'll go through the rest.
> Right now I vapor lock at the lines looking infinitely long and/or the
> transients being what we can consider infinitely short, and the actual
> applied power only being 100 watts but the reflected power being 400
> watts in a system with only a single transient that is so fast the
> lines look infinitely long.
>

Forget about the relationship between 100 watts and 400 watts at this point.

> I can't understand why we would want to use a model that is so far
> from the operating condition that we can't even build a model, or
> measure what we predict!
>

What we predict from the model are the steady state conditions. These are what we measure. There is no disagreement in this discussion as to the steady state power levels anywhere in the system.

> Unless I'm missing something. Can you tell me how to build a system
> like that, so I can measure the voltages and currents? Can we build an
> measure what you are describing? I know for a fact I can build and
> measure the system Cecil described, and the measuremenbts will agree
> with his analysis.
>
> I'm not saying you are wrong, I'm just trying to understand why the
> reflected power concept is wrong...when I can build and measure
> exactly what that reflected power model predicts.
>
> I'm trying to balance the advantages of using a model I can't build or
> measure against using a simple model that I can build and measure, and
> decide how the one I can't build can be verified to prove the one I
> can build and measure is wrong.
>
> When I use models, I always like to use the most simple model that
> behaves like the system I'm emulating. Virtually all models have
> boundaries. We might find a theoretical case (that we can't actually
> build) that violates the boundaries but that doesn't make the model

> incorrect in real-world applications!
>

To understand this, we need to run through a transient analysis in detail. The model of reflected power predicts the steady state conditions based on already knowing the steady state conditions. If you know the answer, it's easy to come up with numerous ways to explain it. We need an answer that is consistent with all aspects of transmission line theory and circuit theory.

Here's an important first point to consider. In all transmission line systems,
matched or mismatched, the power delivered to the transmission line is always equal to Pforward - Preflected at the transmission line input. The total reflection model was developed based on assuming that Pforward = Pdelivered + Pre-reflected, where Pre-reflected is the total re-reflection of Preflected. This would mean that in all transmission lines
systems, a total re-reflection of power is always occurring at the transmission line input.

>
> In all the arguing, bickering and feather preening that has gone on in
> this newsgroup, it's great to discuss a new concept in rational
> conversation. I appreciate your time Steve, and I'm sure many people
> are learning things from you in this exchange. No need to hurry with
> any answer, I have work to do until lunch tomorrow.
>
> 73 Tom

73,
Steve

369. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DB9B92.4F3F5885@eznec.com>
Source record: 178454

I've seen the term "RMS power" show up a couple of times on this thread, so it's time to repeat some comments about this.

RMS is a mathematical calculation which finds a use in relating the heating effect (or ability to do work) of power to a voltage or current. As it turns out, the AVERAGE power = Vrms^2 / R or Irms^2 * R. It's because of the relationship between the RMS values of voltage and current and the AVERAGE power that they're widely used. An RMS value can be calculated for any periodic waveform, including a power waveform, but the RMS value of a power waveform has no everyday practical use. The heating effect, or ability to do work, is equal to the AVERAGE, not RMS, value of a power waveform. RMS and average are different for most waveforms. They are of course the same if the power doesn't change with time, but this is an exception. If the power varies with time, and you want to know the overall effect it will have, calculate and use the AVERAGE value, not the RMS.

I sometimes see "RMS power" used with respect to audio amplifiers. As far as I can tell, this is due to ignorance, or perhaps it has some marketing advantage. But I know of no real use for this value in everyday electrical or electronic calculations.

Roy Lewallen, W7EL

370. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14549-39DB9A6F-49@storefull-115.iap.bryant.webtv.net>
Source record: 178455

Rick, K1BQT wrote:
"---my RMS wattmeter stays glued at 100 watts output."

That`s a possible problem. My wattmeter reads average watts. My voltmeter and ammeter read r.m.s. values.

Unless you have a very selective wattmeter which is capable of separating the carrier from its sidebands, the a-m carrier and sidebands increase the total input to your meter with modulation.

The carrier`s average power is unchanged with linear amplitude modulation. But, the total of the carrier and its sidebands rises by 50% from the unmodulated carrier total power output. This is the steady state 100% modulated average power output of the transmitter.

That modulator power has no other load than the final amplifier in the ordinary plate modulated stage. The audio power is not dissipated in the transmitter but is mixed with the r-f in the final stage. It exits the transmitter as the product of mixing (the sum and difference frequencies) which is r-f generated in the final amplifier, along with the carrier itself.

Best regards, RIchard Harrison, KB5WZI

371. Re: 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: andy@equinox22.f9.co.uk
Message-ID: <J1NC5.29764$CI1.638632@stones>
Source record: 178456

On 2000-10-04 w5lz@oio.net said:
>Newsgroups: rec.radio.amateur.antenna
>Andy,
>If the antenna was made for mobile use then I would
>expect that without a ground plane of some type, it isn't
>going to work very well. Providing a ground plane (radials)
>shouldn't be that difficult, why not do that? Done properly,
>it should work 'better' than the 'rubber duck'.
>'Doc
As you can probably imagine,i've had a *lot* of replies to my post. I'll be
adding atleast 2 radials before i put it up :)

Regards
--
Andy - G7MJV
Southampton,UK

372. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39DBA66B.716@bellsouth.net>
Source record: 178457
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Mark,

I know the feeling exactly. And I don't worry so much about putting holes in the old ones for antennas. My wife (ex) used to say when I'd come home with a new car, "WELL, I guess you're gonna poke holes in this one, too, for them dumb radios". LOL!! Ever heard that from an XYL before? I betcha most of the hams in here can relate to that!

I used to think I had to have a new car every other year or so, but time "heals" all wounds (pocketbook) I never thought I'd keep that "new" 1987 Celebrity for 13 years, either. But it still runs just as well as a new one, it's long since paid for, and if I want to stick another antenna on it, it doesn't exactly hurt anything.

My ex-Mother-in-law bought a 1980 Monte Carlo in '80, and just recently sold it after voluntarily surrendering her drivers license. She realized that at age 86, she just wasn't as sharp as in her younger days. The Monte still looked as new, no rust, and, with a good wax job, would look great. It still drove as new, smoothe and quiet, with---get this- 37,000 ACTUAL miles. The interior was like new. I should have bought it myself, but can't justify 3 cars. I ain't getting rid of my Z34.

BTW, have you ever seen people that put antennas on their cars for no reason? One or two radios and 6 antennas all over the trunk? I know someone like that! Going down the road, his Aurora looks like a moving field of sawgrass!! I can remember the days when a ham might have 4 or 5 separate radios in the mobile. But now, with the multi-band rigs and antennas, one can get by with no more than 3. I have 2: HF and 2M/440. I think it is so silly to "decorate" one's car with antennas when 1 or 2 will do. LOL!

Jerry
K4KWH
Mark Keith wrote:
>
> Jerry Oxendine wrote:
> >
> > Tom,
> >
> > You couldn't have a Z34 in your Ford truck! You'd never be able to
> > CATCH one! LOL. And even the Lightning series wouldn't be able to
> > catch one on a crooked road--it'd turn over while the Z34 took the
> > S turns with ease. LOL!
> >
> > Everybody's experiences are different. Mine just happened to be bad

> > with FoMoCo. I didn't like being Found On Road Dead! LOL!
> >
> > Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
> > Turns my head every time.
>
> Yea, that PT is pretty neat looking, but I was surprised how small they
> are when I finally saw one in person. Not as big as I was expecting from
> the ad's. Myself, I drive old beaters here, and have both ford and
> chevy. Have an old 68 ford f-250 that I've been kinda restoring. It has
> very little rust and was garage kept all it's 32 years. I drive it the
> most lately. Also have an old 81 chevy MC. I've been driving that thing
> for years and years it seems and I can attest to Tom's statements about
> the paint on GM cars. Fairly pathetic. The paint has peeled something
> awful on that car and looks terrible. But, the car still drives almost
> like new and has never left me stranded once. It's the car I take if I
> want a smooth highway trip. I do most the work myself. Thats why I can
> get away with old beaters. Half the parts on both vehicles are almost
> new. I keep thinking about springing for a new car, but I'm just too
> cheap. And I'm not one that needs a fancy car to feel stylish. A new car
> is one of the worst investments of money you can choose. I save 1000's
> every year from driving beaters. 100's a year just in insurance. Also I
> just like old cars anyway...I have a sickness for old trucks. I've had
> quite a few of those. I once had a new chevy Z-28 about 20 years ago.
> Real nice.. But it drove me crazy trying to keep people from dinging it
> up, etc. Seems like the first 2 weeks I had it I got 14 small door
> chips. Would drive me ballistic. My brother later totaled it when a
> dingbat slammed into him on the freeway... I don't have to worry as
> much with the beaters. MK
> --
> http://web.wt.net/~nm5k

373. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39DBA769.4A10@bellsouth.net>
Source record: 178458

HI Walter!,

I am not exactly trying to answer your post. I just would like to
obtain a copy of your book "Reflections" which I hear ARRL no longer
carries. How may I do that?

Thank you for the opportunity to correspond with you in this forum.

Jerry
K4KWH

Walter Maxwell wrote:
>
> From reading recent posts on this news group, it is evident that
> serious misconceptions still prevail concerning virtual open and short
> circuits on transmission lines, and whether total re-reflection of
> power can occur in impedance matching operations. My position is that
> both of these concepts are valid, and are the basis for the statements
> appearing in my book 'Reflections' concerning impedance matching.
>
> Some posters on the NG deny that these concepts are valid, and
> therefore condemn Reflections for propagating incorrect information.
> An article has been published so stating.
>
> So I propose a simple transmission-line problem, with five questions
> for the group's consideration to stimulate thinking that could
> ultimately reverse the position of the naysayers. I'm confident that
> everyone in the group will answer the questions correctly. However, if
> they answer the questions correctly, it will prove they consider the
> concepts of virtual short circuits and total re-reflection valid. The
> naysayers who answer correctly must merely rethink the semantics of
> the problem.
>
> The setup for the problem consists of a lossless transmission line of
> any length, with a characteristic impedance Z0 =1.0, terminated in a
> purely resistive load, R = Z0, and fed with continuous voltage V = 1.0
> of frequency f. All energy available from the source is absorbed by
> the load. Thus, the initial current flowing in the load is 1.0 amp. We
> now connect a lossless transmission-line stub in shunt with the main
> transmission line at any place along the line. The stub can be either
> a l /2 line at frequency f, short-circuited at the far end, or a l /4
> line at frequency f, open-circuited at the far end.
>
> Now for questions concerning what occurs after the stub is connected.
>

> 1. What is the amount of current now flowing in the load?
>
> A. 2.0 amp
> B. 1.0 amp
> C. 0.5 amp
> D. 0.0 amp
> E. None of the above
>
> 2. What is the line voltage at the stub point?
>
> A. 2.0 volts
> B. 1.0 volt
> C. 0.5 volts
> D. 0.0 volts
> E. None of the above
>
> 3. What is the line voltage l /4 toward the source from the stub
> point?
>
> A. 2.0 volts
> B. 1.0 volt
> C. 0.5 volts
> D. 0.0 volts
> E. None of the above
>
> 4. What is the line voltage l /2 toward the source from the stub
> point?
>
> A. 2.0 volts
> B. 1.0 volt
> C. 0.5 volts
> D. 0.0 volts
> E. None of the above
>
> 5. What occurs on the line at the stub point?
>
> A. Voltage and current are totally transmitted past the stub point
> and their energies are totally absorbed in the load.
> B. Voltage and current are partially transmitted past the stub point
> and partially reflected back toward the source.
> C. Voltage and current are totally reflected back toward the source.
>
> D. None of the above

374. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3420-39DBA183-79@storefull-112.iap.bryant.webtv.net>
Source record: 178459

Rick, K1BQT wrote:
"Consequently, isn`t a 100-W AM transmitter a 100-watt AM transmitter no matter how we make it happen?"

Yes. But, when an unmodulated low-level, high-level, out-phased modulated, or whatever a-m transmitter is on the air its rated output is being transmitted (hopefully). When modulated, that same carrier signal is still there (and unphased by the modulation?). Symmetrical sidebands appear on either side (both sides) of the unchanged carrier signal. Their power is an addition to the unmodulated carrier power.

Best regards, Richard Harrison, KB5WZI

375. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001004174640.27068.00000479@ng-cg1.aol.com>
Source record: 178460

>Thanks. I finally got a chance to look at them. I'd never looked at the
>M12 .All I can say is why???? Those antennas look like too much work for
>me

A leisurely hour, perhaps.

. All those twists and bends... Must be a construction and support
>nightmare.

Nope. Quite straightforward. See KF7BS's article in Oct 99 73 Amateur radio or

http://www.fractenna.com/ham/hampage1.html

> I think I'll stick with fairly straight wires. Or as they
>say here, waaar's. MK
>--
>http://web.wt.net/~nm5k
>

If you don't have need for a cheap, easy to make, transformer and matching
system-less, high performance, light, rugged, and above all SMALL 2 element
yagi, then this is definitely not for you.

On the other hand...

73
Chip N1IR

376. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DBA79D.9AA2BD0F@mwci.net>
Source record: 178461

Roy Lewallen wrote:

> I sometimes see "RMS power" used with respect to audio amplifiers. As
> far as I can tell, this is due to ignorance, or perhaps it has some
> marketing advantage. But I know of no real use for this value in
> everyday electrical or electronic calculations.

I found out the answer to this usage of RMS power. The audio folks have co-opted the RMS idea to mean the following: If the signal is a single sine wave, then RMS power is understood to mean the average power output due to that sine wave. It is deceptive to the following extent: An amplifier with a certain "RMS power rating" may go completely flat on peaks that are only a little greater than the RMS rating. Anyway, the use of the term is pervasive.

Bill W0IYH

377. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001004182306.14608.00000273@ng-ff1.aol.com>
Source record: 178462

Okay, we're making progress. I have bids of 0%, 22-1/2%, nearly 50%, and 50% for anticipated average power increases on voice peaks--depending on how you meter it or interpret it. The ARRL Handbook says to expect a 50% increase. Shouldn't this be a cut-and-dried issue after 75 years?

Rick K1BQT

378. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <mvbnts4n1mqkvf5sm6mbe9ql1ulcjditkh@4ax.com>
Source record: 178463

On Sun, 1 Oct 2000 15:27:33 -0400, "David" <k4zzrNONSPAM@gate.net>
wrote:

>A web
>search for them turned up lots and lots of wholesale distributors for
>silicon bronze bolts, but they all failed to mention where Joe Public can
>actually purchase them.

Silicon bronze is commonly used in the boat building industry,
especially for wooden boats. Check with a marine supply company.

73, Bill W7TI

379. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Chas <chas0001@my-deja.com>
Message-ID: <8rgd79qnt1@nnrp1.deja.com>
Source record: 178464
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

> Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
> Turns my head every time.

The wife wants one of those now too. I wonder if that thing sends out
the garbage like the Fords.

Sent via Deja.com http://www.deja.com/
Before you buy.

380. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DBB3A1.7D427074@bigfoot.com>
Source record: 178465

VE9SRB wrote:
> The
> total reflection model was developed based on assuming that Pforward =
> Pdelivered + Pre-reflected, where Pre-reflected is the total re-reflection
> of Preflected. This would mean that in all transmission lines
> systems, a total re-reflection of power is always occurring at the
> transmission line input.

This is a misleading statement. The total reflection model was based on
assuming there is no measurable reflected energy reaching the transmitter,
i.e. based on the existence of a Z0-match somewhere in the system beyond
which point no detectable reflections exist. The Conservation of Energy
principle then comes into play. If there are no reflections seen by the
transmitter, all of its power is delivered into the system. There is
simply no place for reflected energy to go except back to the load so
it is no stretch of the imagination to declare that all reflected energy
has been re-reflected.

In a system containing a Z0-match, the reflected energy simply has no
"choice" of which way to go. It cannot go toward the generator, it cannot
stand still, and there's only one other place left. Call it anything
you want, the energy in the reflected wave is sent packing back toward
the load by the Z0-match.

There is absolutely nothing in the steady state model that prohibits
reflected energy from reaching the generator. In that case, there is
obviously NOT total re-reflection. Total re-reflection, in that case,
is a convention, not a scientific fact. I doubt that anyone knows
exactly what happens inside a generator that has reflected energy
flowing backwards through the tank circuit to/through the source.
--
http://www.mindspring.com/~w6rca

381. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8rgcvb$3sf$1@slb2.atl.mindspring.net>
Source record: 178466

It should be Rick, but few hams of today know little about the technique(s) behind the subject. I think it falls into that new category of ham radio called outmoded, outdated, irrelevant or some such term. Most of the new hams don't fool with anything that does not suit their immediate need. They declare it useless unless it fits exactly what they want. I would venture a guess that most of them do not even have a technical handbook to which they could refer.

Dean Craft -- W4IHK

Rick Littlefield wrote in message
<20001004182306.14608.00000273@ng-ff1.aol.com>...
>Okay, we're making progress. I have bids of 0%, 22-1/2%, nearly 50%, and
50%
>for anticipated average power increases on voice peaks--depending on how
you
>meter it or interpret it. The ARRL Handbook says to expect a 50% increase.
>Shouldn't this be a cut-and-dried issue after 75 years?
>
>Rick K1BQT

382. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39DBAE74.1D55387B@dialpoint.net>
Source record: 178467

You have received some answers about the delay time due to the radio waves. There can also be some delay in the way the signal is processed. I am not up on the relay system for the telephone circuits, but it is a factor to add in. Also it may not be a simple repeat, but the signal could travel over some ground stations, back to a sat and back down again or it could pass from several sats then to the ground.

kc5cqa wrote:
>
> I have a question, bear with me. During the Desert Storm War, I
> 'heard' reports from the ''front'', and they would be by 'satellite
> phone', and there would be a '''delays in the transmit and receive
> messages '', maybe lasting a second or two, because the 'repeater' was
> in space. I am guessing those repeaters were located at about 22,000
> miles out. ????. I don't really know what the distance was.
> Soooooo, with saying all this, my question IS if satellites were
> placed in space and were used as the cell phones are used
> today, how high up would they have to be???????????. Or another words
> how low could the ""repeaters"" be before they did not run in to the
> problem of ===delay===., and still stay in their orbit.??? (As I look
> over this question, I see I am not asking the question right, but I
> hope you ''see'' what I am trying to ask. :) C.
> Lorentson 73
>

383. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DBB940.A5D4E92B@bigfoot.com>
Source record: 178468

VE9SRB wrote:
> More important did we learn anything? My
> personal opinion - I think that you limit yourself by not looking beyond
> the steady state conditions. Most notably in the discussion of power.

I certainly looked at the transient conditions. I have Walter C. Johnson's book copyright 1950. That's why I am sure that reflections on the coax are snuffed out at the Z0-match point immediately upon their appearence during steady state. Canceling the reflections leaves the reflected energy with nowhere to go except back toward the load. You can call that re-reflection or a virtual short or gibbildysquatch, but the reflected energy does indeed change direction at the Z0-match point and conservation of energy is the only reason we need.

> Power is a net scalar quantity determined from the addition of vectors.
> Power is the determined quantity, the addition occurs with the vectors.

I think I remember you calculating the power before adding the coherent scalars in those phantom reflected waves on the coax. IMO, that's a mistake. Power is a scalar value resulting after the vector addition of the coherent phasor values and is simply energy measured while passing a point. There's no reflected energy passing any point on the coax.

> Do not use the Smith Chart yet, please.

How about the equations that generate the Smith Chart? :-) I'll take a look at your puzzle after choir practice.
--
http://www.mindspring.com/~w6rca

384. Where to find information about LP antenna on internet?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: yjack@my-deja.com
Message-ID: <8repp4emg1@nnrp1.deja.com>
Source record: 178481

Would you like to tell me where to find information about log-period
antenna on internet?Thank you very much!

Sent via Deja.com http://www.deja.com/
Before you buy.

385. Hygain 18AVT Info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <39dae871$0$20817$7f31c96c@news01.syd.optusnet.com.au>
Source record: 178482

G'day Fellas,can anyone inform me of the RF Power handling capibilities of
the Hygain 18avt/avq ??
rgds Dennis

386. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: "John K. Johansen" <johansen@jpt.net>
Message-ID: <ikqlts0lp1eivugp023ps7cf7bbl17s6d7@4ax.com>
Source record: 178483
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

On Tue, 03 Oct 2000 21:15:06 GMT, Back Door Man <echurch@triad.rr.com>
wrote:

>
>I'm very interested if it's still available.
>
>E Church
>echurch@triad.rr.com
>

I'd only offer this guy $200. That's what I sold it to him for. The
guy's a profiteer!!!!

387. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DAED51.BD104E6@eznec.com>
Source record: 178484

To my knowledge, two patents have been issued, the one being discussed (6,104,349), and just within the last couple of days, number 6,127,977, for an implementation of a fractal microstrip (patch) antenna. Saying a patent is for a type of antenna is almost always misleading. A patent covers only, and exactly, what is described in the claims (and modifications which are "obvious to one skilled in the art", as interpreted by a court as necessary). To see what a patent is for, you have to read the claims. You can look at these and other U.S. patents at http://www.uspto.gov.

Roy Lewallen, W7EL

Dick Carroll wrote:
>
> Is that his only patent on these devices? Does he in fact own a valid patent
> on this "type" olf antenna or just what is mentioned here, questionable that
> it is?
>
> Dick
>
> Roy Lewallen wrote:
>
> > There are actually two independent claims in the patent, 1 and 13,
> > although they differ only very slightly from each other, and both deal
> > with a method of tuning.

388. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DAED45.F842920B@oio.net>
Source record: 178485

pvale wrote:
>
> I bought a ICOM AH-4 to use with my IC706. I'm mounting this on my
> pickup and feeding a 8' CB whip on the back bumper. There is no place at
> the back of the truck to mount this tuner, so I'd like to mount it up
> under the cab and run coax back to the antenna feed point. Is this
> do-able, or does the feed point voltage at the output of the tuner get
> too high?
>
> Thanks-In-Advance
> Perry Vale N0MXJ

Perry,
You can do that, but use a coax with the highest voltage
rating you can find. Depending on frequency of use, you may
not be 'happy' with the performance of the 8' whip. That
whip on the lower HF bands leaves a ~lot~ to be desired.
'Doc

389. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Al Patrick <arp@inet4u.com>
Message-ID: <39DB06CF.EDBC9306@inet4u.com>
Source record: 178486
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

"John K. Johansen" wrote:

> On Tue, 03 Oct 2000 21:15:06 GMT, Back Door Man <echurch@triad.rr.com>
> wrote:
>
> >
> >I'm very interested if it's still available.
> >
> >E Church
> >echurch@triad.rr.com
> >
>
> I'd only offer this guy $200. That's what I sold it to him for. The
> guy's a profiteer!!!!

Who cares? YOU are the one who sold it for $200. He's only asking $250 which is about $150 off the price of a new one. Seems to me it's your mistake, not his. I'm not sorry you lost money, but you shouldn't be jealous because he is making a buck. He probably had a shipping fee to come out of that extra $50, had to advertise it, answer emails (and he did) and will have to package it for resale. He's not getting rich off your mistake, maybe getting a few bucks for his troubles. SMILE. Things could be a LOT worse. :-)

73,

Al

390. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DB1040.935BFE5F@mwci.net>
Source record: 178487

William E. Sabin wrote:

> Nick Kennedy wrote:
>
> > Is this shift in calculated
> > resistance the non-dissipative resistance we're taking about? If it is, I
> > still don't see how it's going to affect efficiency.
>
> Yes, it is a dynamic, lossless resistance. The output resistance of a tube or
> transistor PA is actually an internal negative feedback effect. That is, the
> variations of *plate voltage* produce variations of *plate current* because of
> an inherent characteristic of the vacuum tube design, called its plate
> resistance. This plate resistance is equivalent to a gain reduction. That is,
> the voltage gain of the tube with plate resistance is *less* than the voltage
> gain of the tube without the plate resistance "effect". Plate resistance itself
> does not dissipate power. It is not a physical entity. For example, it does not
> get hot and it is not a source of thermal noise, like an ordinary resistor.
>
> If a tube without the plate resistance effect is replaced with an almost
> identical tube that does have a plate resistance effect, that effect can be
> nullified by increasing the grid drive a little. This restores the tube to its
> previous voltage gain and its previous power output and efficiency.

This sentence should be "This restores the tube to it previous voltage *output* and
its previous power output and efficiency"

> This
> verifies that plate resistance is a lossless "resistance" (dV/dI).
>
> Bill W0IYH

Bill W0IYH

391. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8rf61k$n5k$1@nnrp1.deja.com>
Source record: 178488

Matt,
As stated above I don't see an advantage to shortening either a vertical 1/4 wave GP or a 1/2 wave dipole for 10 and/or 15M. Full size just isn't that large!
But, I have used helically wound 10M ants for mobile and potable operations very successfully! I have played with wrapping my own on an old fishing pole but that can be tedious and tuff to tune / stabilize the wraps. It is much easier to buy an 11M (CB) helical mobile antenna (cheap at a flea market!) and remove coils from the top load (most are top loaded) until it tunes for 10M. Be sure and buy an antenna that is plastic covered. Some use a resin which is very difficult to remove. The plastic coatings are soft and flexible. Be sure and seal the top when done either with the original cap and some silicone or some epoxy glue.
No reason why this wouldn't work for a GP antenna's radiator.... or even as a rotatable dipole if you used two of them!
Hope this helps.
73
Den W2DEN _._

In article <20000930194621.10678.00000373@ng-cb1.aol.com>, matjake@aol.com (MatJake) wrote:
> Hi
>
> I have been reading this newsgroup for a year and I was just wondering if
> anyone had any experience with helical antennas on HF. I like to experiment and
> was considering building one for ten or 15 meters. Does anyone have any hints
> or know of anyone who has been succesful with idea?
>
> Thanks and 73,
> Matt
>

Sent via Deja.com http://www.deja.com/
Before you buy.

392. Re: East Kentucky Fractail Virus

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rf51m$p3t$1@plutonium.btinternet.com>
Source record: 178489

Done that. Now what do I do.
>

393. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001004075723.14371.00000171@ng-cu1.aol.com>
Source record: 178490

```
>
>> Dr. Nathan Cohen, PhD (fractenna@aol.com) has sent you a news article
>
><rest of the html snipped>
>
>So now the twit is posting html to a newsgroup...
>
>I had to read this three times to figure out what the hell he's complaining
>about; usual Chip marginal English construction.
>
>Looks to me like the first real harrassment law suit born of this newsgroup
>is going to be filed by someone other than the "scientwist".
>
>Jim Pennino
>

No; I did no such thing. This is a bogus and malicious attribution. I would
never post such a press release on this NG. Nor would need to.

Nathan Cohen, Ph.D.
```

394. Re: East Kentucky Fractail Virus

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <cv6mtsokiksfts0vpltqrsio97oovkom52@4ax.com>
Source record: 178491

I don't have an MS-DOS prompt on my machine, either... Odd, that.

[sideband@rosie sideband]$ format c:
bash: format: command not found

Bummer.

::smirk::

-SSB

On or about Wed, 4 Oct 2000 12:43:45 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com>, using the forum rec.radio.amateur.antenna
did say:

:Done that. Now what do I do.
:>
:

395. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Dennis <wa8shc@stratos.net>
Message-ID: <970661550.598407@newscache.cleveland.core.com>
Source record: 178492

Have to agree with all the comments on the antenna being mounted on the trailer hitch. Get some 1/8" aluminum and make urself a bracket that you can mount above the taillites. I've used hamsticks there on 40-10M with great success. ABOVE ALL, make sure you have a good ground to the sheet metal of the body (qwhich may also be ur problem using the trailer hitch)
As for the RFI, I can't help. Had a 94 Cherokee 4.0L and never had a bit of RFI on any freq. Suggest trying the ususal plugs/ wires route 1st, then hitting tthe handbook for more suggestions

--
Dennis

J.T. Johnston <jt@central-web.com> wrote in message news:stk35e6lahet6b@corp.supernews.com...
> I have unsuccessfully tried to run 75M in my Jeep using a Hamstick mounted
> on the trailer hitch. After managing to get it close to resonance (ha, ha!)
> by trimming the whip, I put my trusty MFJ tuner in line and made it match
> the rig. The problem is that nobody can hear me outside of my local area.
> It is nearly impossible to check into our 75M traffic net in the evenings,
> unless I move the rig in the house and hook up to the G5RV.
>
> My question is this: Has anyone had any luck with a similar setup? I
> assume my problem is that the rear of the Jeep is severely distorting my
> radiation pattern, but if I put the antenna on the roof of the Jeep
> (obviously the preferred location), the tip would be over 12' off the
> ground. Though it should stay out of power lines at that height, there are
> several trees in my neighborhood with which it would not get along.
>
> One other thing, my Jeep also puts out a great deal of RFI on most every
> band. Most problematic is the fact that one of the frequencies that is
> strongest in the output frequency of our 2M repeater (147.16). The mobile
> rig is fine, but I have to turn the HT off when I have it in the Jeep, or
> the squelch will stay open all of the time.
>
> I welcome any helpful advice.
>
> TNX & 73,
> J.T. Johnston, N4ZWV
>
>

396. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ojFC5.1698$Pw1.97607@bgtnsc04-news.ops.worldnet.att.net>
Source record: 178493

<klocko@toad.net> wrote in message news:8rdi1s$f3u$1@nnrp1.deja.com...
>
> Here's a quote from another reference: From the first paragraph of
> Section 5 of Slater, "Thus we see that at a discontinuous boundary
> between two lines a reflection will be set up... If a wave
> approaches such a boundary from the left, there will be reflected wave
> in the line to the left, a transmitted wave in the line to the right.
> Similarly, a wave approaching a boundary from the right will give rise
> to a reflected wave on the right, a transmitted wave on the left.
> [Here's the good part]-> By assuming both a reflected and a transmitted
> wave in each section of line and imposing the boundary condition ... we
> have enough equations to determine all the amplitudes of the waves and
> to solve the problem completely." Notice that Slater sez "each section
> of line", not "some sections". He doesn't add "(except for inputs to a
> transformer)." This quote is directly applicable to the partial
> reflection/transmission model of the transformer.
>
> The Kraus model has been around at least since 1973. The Slater quote is
> from a Dover reissue of the original first published in 1942. So for at
> least 58 years, partial reflection and partial transmission have been
> fully accepted concepts. I believe people on this NG are savvy enough to
> follow and fully comprehend this concept.
>
> I want to thank you again for giving me the opportunity to get the word
> out to a LOT of people.
> Bill N3WK

Thanks Bill. These are the fundamental basis of all wave reflection
behavior in any transmission line system.

Steve

397. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <0WFC5.755$co6.173586@nntp0.chicago.il.ameritech.net>
Source record: 178494
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

Well $240 is a good price. Sorry to hear you sold it for $200. Have another one???

Kent, K9EZ

"John K. Johansen" <johansen@jpt.net> wrote in message news:ikqlts0lp1eivugp023ps7cf7bbl17s6d7@4ax.com...
> On Tue, 03 Oct 2000 21:15:06 GMT, Back Door Man <echurch@triad.rr.com>
> wrote:
>
> >
> >I'm very interested if it's still available.
> >
> >E Church
> >echurch@triad.rr.com
> >
>
> I'd only offer this guy $200. That's what I sold it to him for. The
> guy's a profiteer!!!!

398. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <P1GC5.14471$s76.1003794@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178495

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DAB4AD.2444C417@bigfoot.com...
>
> Look at a Smith Chart and observe what impedance that 71 volts is seeing.
It
> is NOT 300 ohms. The reflections have changed the impedance from 300 ohms
> to 51.5 ohms.
>
>
> V/I at the Z0-match is 51.5 ohms and varies from there around a
> 5.83:1 SWR circle on the Smith Chart.
>
> I never said that. The 71v doesn't see 300 ohms. The 71v sees 51.5 ohms.
> With an SWR of 5.83:1, 300 ohms is never seen because 300 ohms is the
> center of the SWR circle. (Total Voltage)/(Total Current) is NEVER 300
> ohms. At the Z0-match, it is 51.5 ohms.
> --
> http://www.mindspring.com/~w6rca

I snipped a bit out Cecil and really just want to address some of the basics
at this point.

In your previous post you did say the following: "It remains 71v as it
flows unmolested through the virtual 50 ohms at the Z0-match."

The 71 v does not travel or flow through the ZO match into the 300 ohm line
as a forward voltage of 71 v. A forward voltage of 71 v in a 300 ohm line
is equivalent to 16.8 watts of forward power, so we know this is not the
case. The forward voltage of 71 v *always* sees the 300 ohm impedance
discontinuity. This is the basis of all transmission line theory from which
the steady state conditions can be determined.

The fact of the matter is that the forward 71 v traveling in the 51.5 ohm
line never really "sees" the ZO match at the match point. A forward or
rearward traveling wave only sees the characteristic impedance of the
transmission line in which they travel and they "see" any physical impedance
discontinuity in that transmission line. The 51.5 ohm impedance at the
match point is the steady state "line impedance". Line impedance is never a
mechanism for wave transmission nor is it a mechanism for wave reflection.
The line impedance in the center of the 300 ohm line is 1748 ohms, but this
does not impede forward or rearward wave travel in any way.

As you correctly state above, line impedance is simply the ratio of total
voltage to total current at the match point. It is no more complex than
that. At all times, Vforward/Iforward = ZO and Vrearward/Irearward = ZO.
The total voltage at any single point is Vforward + Vrearward. The total

current is Iforward - Irearward (this depends on the convention used for current. In some conventions, Itotal = Iforward + Irearward, in which case, Irearward = - Vrearward / ZO)

How is this total voltage (line impedance) determined at the match point in our example?

The forward voltage at the match point from the 51.5 ohm line is +71 v. The reflected voltage at the match point is +50.2 v. The rearward voltage from the 300 ohm line is -173.2 v and the re-reflected voltage is +122.5 v. The total steady state voltage at the match point is 71 + 50.2 -173.2 + 122.5 = +71 v (some rounding errors). Line impedance is a steady state result of how the forward and rearward voltages interact at the match point, it is *never* the cause of wave reflection or transmission. The only mechanism for wave reflection is the physical impedance discontinuity at the junction.

Understanding these concepts requires a lot more analysis than looking at a Smith Chart or looking at only the steady state power levels.

As for 100 w + 100 w = 200 watts, power is a scalar quantity but the voltages and currents that combine to create the total power are not. They are complex quantities having magnitude and phase. Let's assume for the moment that the forward source power in the 300 ohm line is 100 w and that the re-reflected power is 100 watts. Let's designate one power P1 having a voltage V1 and a current I1. Let's designate the other P2 having a voltage V2 and a current I2. If Zo is a pure resistance (cos(theta) = 1) we know the following:

P1 = |V1| * |I1| and P2 = |V2| * |I2|

Since both powers are in the same 300 ohm line we know the following is true at all times: |V1| = |V2| and |I1| = |I2|. We can also determine that |V1| = |V2| = 173.2 v and |I1| = |I2| = 0.577 (ignoring rounding errors)

Now what happens when these two signals add together. In all cases, the total voltage is equal to V1 + V2 and the total current is equal to I1 + I2. What happens if V1 and V2 are not in phase?

What if V1 = 173.2 v @ 45 degrees (P1 = 100 watts) and V2 = 173.2 @ 20 degrees(P2 = 100 watts)?

The total forward voltage will be equal to 338.2 @ 32.51 degrees and the total forward power will be equal to 381 watts. If V1 and V2 are in phase, the total forward power will be 400 watts. If V1 and V2 are 90 degrees out of phase the total forward power will be 200 watts. If V1 and V2 are 180 degrees out of phase, the total forward power would be 0 watts (in which case 100 w + 100 w = 0 w).

As this relates to our example, the actual forward source power in the 300 ohm line is 50 watts and the forward re-reflected power is also 50 watts. When these two powers add in phase, the total forward power is 200 watts.

Since we disagree at such a fundamental level re: basic transmission line theory, I thank you for the discussion and will end it here.

73,
Steve

399. Re: Hygain 18AVT Info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001004091403.01247.00000137@ng-fs1.aol.com>
Source record: 178496

>
>G'day Fellas,can anyone inform me of the RF Power handling capibilities of
>the Hygain 18avt/avq ??
>rgds Dennis
>
>

I think it takes 1000W, make sure you have a ball at the tip of the whip, if
not it will arc and burn off.

Yuri, K3BU

400. Re: http://clik.to/n0vfp

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: etagg <etagg@twcny.rr.com>
Message-ID: <y1GC5.21350$355.2686204@typhoon.nyroc.rr.com>
Source record: 178497
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

```
and my dumpster address
"Mr. Davies" <n0SPAMvfp@BELL_SOUTH_RED_DWARF_.net> wrote in message
news:ztuC5.6240$Jf1.43336@news4.atl...
> On my page, You will find:
>
> Radio Shack webpages
> MW DX page
> Politics Pages
> Message Board
> Free for all Links pages
> NEW! Radio of the month! This month it is the Pro-2006!
>
>
>
> --
> LLoyd Davies, N0VFP /4 NCI 2841
> B.A.R.F. Chief of Communications
> http://clik.to/n0vfp
>
>
>
```

401. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Al Patrick <arp@inet4u.com>
Message-ID: <39DB2DFB.62750E39@inet4u.com>
Source record: 178498
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

Al Patrick wrote:

> his. I'm not sorry you lost money, but you shouldn't be jealous because he is

Folks,

That should have read I'm SORRY YOU LOST MONEY....

Sorry about the boo boo!

Al

402. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <UJGC5.14498$s76.1006384@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178499

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39da4e81.43194886@news.akorn.net...
>
> OK, we can round numbers if you like. I like to only use my fingers
> and toes whenever possible. We have about 70v RMS and 1.4 amperes.
>
> The problem is, we don't have that as a transient on a conventional
> transmitter unless it has a problem like a slow TR relay.
>
> What we have is a slowly changing voltage that gradually builds over
> many RF cycles from zero to about 70 volts (in a perfect transmitter).
>
>
> If the transmitter has a bandwidth many times the operating frequency,
> we can have a situation where the output appears close to full voltage
> instantly. Like a TDR would generate.
>
> I assume this discussion centers around a system with an extermely
> wide bandwidth transmission, much wider than conventional TV
> transmitters. Amateur radios and even TV BC transmitters certainly
> can't deliver such a signal.
>
> But let's get past this, and assume a transmitter does behave that
> way. I'll assume we have a transmitter up and running, and then at
> some point after the tank circuit and harmonic filtering we have a
> bounceless switch we open and close. That would allow me to create
> the outgoing wave you describe.
>
> I assume also we are working with lines that have very long delay
> times compared to the rise time of the transcient.
>
> Because that isn't something I do not consider in my normal line of
> work, I'll have to ask questions as we go along. But then that's how I
> learn things, and that's what I really enjoy and appreciate about this
> newsgroup.
>

Tom:

Your points are well spoken and correct. The practical matters associated with this discussion are another matter entirely and will overshadow most of the concepts discussed here. Keeping the discussion at the level where it has been is really an effort to address some fundamental concepts - IE. Does a total re-reflection of power really occur at the match point? What is the mechanism creating the steady state impedance match? etc. From there, the

practical realities you mention come into play.

> >This forward voltage arrives at the junction between the 51.5 ohm line
and
> >the 300 ohm line. It sees the 300 ohm impedance as a discontinuity. A
> >reflection is created at this impedance junction. The reflection
> >coefficient is equal to +0.707.
>
> I assume the angle of the reflection is zero degrees so you are able
> to just ignore it? ...and the reason phase angle is zero is because
> the 300 ohm line is infinitely long for the high-speed transient pulse
> we are considering...which is nothing like anything from a real
> transmitter we would use?
>

We have first assumed that the "relative" phase angle of the voltage
arriving at the match point is 0 degrees. The phase angle of the reflection
coefficient is 0 degrees because we have assumed that the ZO of each
transmission line is purely resistive.

> Now here's what I don't quite remember. Does the reflected voltage add
> to the incident voltage at that point? What about the current?
>
> As I recall, when the load impedance is higher than the sourcing
> impedance at a mismatched junction the voltage reflection is more
> in-phase while the current caused by the reflection is to some extent
> out-of-phase with the arriving wave. The end result is the voltage
> increases while the current decreases.
>

The total voltage at the match point is the vector sum of the incident and
reflected voltage. The voltage transmitted through ("delivered to") any
impedance junction is equal to this total voltage.

Current is handled in a similar manner but there have been several
mathematical conventions used to handle it. Some people like to use the
convention that reflected current is equal to incident current time a
negative reflection coefficient, others like to use incident current times a
positive reflection coefficient. Both can be considered correct, so long as
the math is consistent throughout the analysis. In my case, I prefer to use
a positive reflection coefficient and then determine total current at any
point on the line to be Iforward - Ireflected.

> That's why an open lossless transmission lossless line steps up
> voltage to infinity, while a shorted lossless line has zero voltage
> and infinite current...if we could somehow feed power into a line with
> voltage and current 90 degrees out-of-phase.
>
> I'm lost at this point. How do we double the voltage without reducing
> the current?
>

At an open circuit load, the current will be zero but the voltage will not be infinity, Z = V/0 = infinity. At a short circuit load, the voltage will be zero bit the current will not be infinity, Z = 0/I = 0.

Let's look at the short circuit using the way I handle the math with the current. A forward power of 100 watts arrives at this short circuit from a 50 ohm line. The incident voltage is 70.711 v. The incident current is 1.41 a. Since the reflection coefficient is -1, the reflected voltage is -70.711 v and the reflected current is -1.41 a. At the short circuit, the total voltage is +70.711 + (-70.711) = 0 volts. The total current is 1.41 - (1.41) = 2.82 a. Z = 0/2.82 = 0 ohms, the short circuit.

The issue of adding two forward voltages and currents is different because both waves are traveling in the same direction. In our specific example we are talking about adding a forward source wave to a forward re-reflected wave. In this case, Vtotal = V1 + V2 and Itotal = I1 + I2. Since both V1, I1 and V2, I2 are traveling in the same impedance, when V1 is in phase with V2, I1 will be in phase with I2. If V1 and V2 are in phase, the total forward voltage will double and the total forward current will double causing the total V*I product to increase by a factor of 4. If V1 and V2 are 180 degrees our of phase, the total forward power will be 0.

> >The rest has been explained in several of my previous posts.
>
> I haven't had time to follow all the posts until now, and I know your
> not going to be like someone else would be and tell me to go back and
> read them all! I need to understand the stuff above before going on!
>

Yes, I will be happy to continue the discussion in this post. I will restate it here:

+71.8 v in the 51.5 ohm line (100 watts) arrives at the 300 ohm line and sees an impedance discontinuity. As a result, a voltage reflection occurs. The reflection coefficient is +0.707. The reflected voltage is equal to +50.7 volts (50 watts reflected in the 51.5 ohm line). The total voltage transmitted into the 300 ohm line is equal to +122.5 volts (71.8 + 50.7). This is 50 watts of forward power in the 300 ohm line.

Continuing, we know that the steady state reflected voltage arriving at the impedance
junction is equal to -173.2 volts (100 watts in a 300 ohm line). It too sees the impedance discontinuity. The reflection coefficient in this direction is -0.707. The re-reflected voltage at the junction is +122.5 volts (50 watts in a 300 ohm line). As a result, the total forward voltage in the 300 ohm line is 245 volts, which is the total 200 watts of *total* steady state forward power. The rearward voltage transmitted back into the 51.5 ohm line is equal to -50.7 volts (50 watts ina a 51.5 ohm line). This rearward voltage adds to the original reflected voltage (+50.7 volts) and the two cancel to a net *total* rearward voltage of 0 volts. Hence, no rearward traveling wave past the match point - the steady state match.

The impedance discontinuity between the 51.5 and 300 ohm lines never changes. The effective steady state line or input impedance at that point is 51.5 ohms only because the rearward voltages cancel each other leaving a total voltage at that point equal to 71.8 volts:

Total voltage at match point = (forward V in 51.5 ohm line + reflected V in 51.5 ohm line) + (reflected V in 300 ohm line + re-reflected V in 300 ohm line) = (71.8 + 50.7) + (-173.2 + 122.5) = 71.8 v

>
>
> I'm just trying to get a handle on what the fuss is all about.
>
>
> 73 Tom

From my perspective, the issue goes back to understanding the fundamental concepts - is it correct to state that a total re-reflection of power is occurring at the match point, thereby claiming that the impedance discontinuity at the junction (or match) is not the mechanism for wave re-reflection. This being incorrect, why not just explain the process in a manner consistent with theory?

73,
Steve

403. 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: andy@equinox22.f9.co.uk
Message-ID: <xHGC5.28736$CI1.626238@stones>
Source record: 178500

Having recently moved to this house i've had little chance to work out what my neighbours feelings are towards aerials. I have a 2x5/8 2mtrs (white fiberglass) base aerial in the garage that i could bolt to the back of the (terraced) house, i wonder if it's possible to use a mobile aerial on a small bracket for the time being. I'm on fairly high ground and have so far been getting quite good results with just a hand-held with it's little 'rubber duck' aerial.

I've noticed that you can get some very nice looking stainless steel 2x5/8 aerials which ,i hope, would have a very low visual impact. I hav'nt managed to find my radio catalogues yet (i think i packed them !) but i seem to remember reading that some of these areials will work with out a ground-plane. Yes,i realise that normally the car acts as the ground but i'm curious to know whether i really have read about these aerials ..

Any ideas ?

Regards
--
Andy - G7MJV
Southampton ,UK

404. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3420-39DB3816-20@storefull-112.iap.bryant.webtv.net>
Source record: 178501

Rick, K1BQT wrote:
"---shouldn`t my wattmeter read 150 watts (100 watt transmitter, 50 watts modulator power) at 100% modulation?'

Exactly.

My experience is the current in the common-point r-f ammeter in an a-m broadcast station rises by 22.5% at 100% modulation. 1.225 squared (power is current squared times the common-point resistance) is 1.5, which indicates exactly 50% increase in power output.

Best regards, Richard Harrison, KB5WZI

405. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3421-39DB3A03-7@storefull-112.iap.bryant.webtv.net>
Source record: 178502

Steve, VE9SRB wrote:
"Does a total re-reflection occur?"

A total reflection requires an open circuit, a short circuit, or a pure reactance at a discontinuity.

Best regards, Richard Harrison, KB5WZI

406. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39db3b0b.3261335@news.akorn.net>
Source record: 178503
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Wed, 04 Oct 2000 01:12:20 -0400, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>It's all in what you get used to. The Z34 is quite a cream puff be-
>cause I refuse to take it out in the rain even--unless I get caught
>out. It is just fun to drive. On trips, it is very comfortable and
>gets right at 30 MPG--even with the 3.4L engine. People think because
>it's a 6 cyl, that it won't really get up and go, but it will. I just
>don't do that, but it's nice to know that I CAN, and it is handy in
>tight passing maneuvers.

I carry a Z34 around for ballast in the back of my SD F250 with the
turbo diesel.

Unfortunately, the turbo diesel has noise exactly like ignition noise.

It comes from the injectors, which have a 1000 volt pulse generated
when the voltage is removed to close the injector!

Mechanically, I've never had a problem and have driven Ford trucks
since 1980. I quit buying GM in 78, after getting screwed on a new
Monte Carlo V-8 with a 4 cylinder transmission and factory installed
rust under the paint. That car had a cam lobe go flat in 1980, at
52000 miles. Since it had holes in the body (the friggin ROOF none the
less), I got rid of it..

73 Tom

407. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3420-39DB3F85-31@storefull-112.iap.bryant.webtv.net>
Source record: 178504

Cecil, W6RCA wrote:
"Would you believe that my physics book had a dangling participle?"

You still using that Shortly and Williams? I haven`t seen mine for about 50 years.

Best regards, Richard Harrison, KB5WZI

408. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rfgi4$8cp$1@iac5.navix.net>
Source record: 178505

Whoa! I have stayed out of this because it was more a matter of semantics than anything else. But! a 100% modulated AM Transmitter 100 Watt Carrier Power would show 50 watts in the carrier and 25 watts in each sideband (average power) still adding to 100 watts. What am I missing?

The real advantage of SSB was the eliminating first the carrier (now 50 watts each sideband) for a 3dB gain. Next the elimination of the unneeded sideband (100 watts in the single sideband) for an additional 3dB. A total of 6dB, and a total system gain of 9db when taking a receiver/transmitter in account.

"Bart Rowlett" <BHRowlett@west.raytheon.com> wrote in message news:39DA252D.EFC5B59A@west.raytheon.com...
>
>
> Rick Littlefield wrote:
> >
> > Cecil--
> >
> > I have a 100 watt transmitter with a 50 watt AM modulator installed in the PA's
> > B+ line. Following your logic, shouldn't my wattmeter read 150 watts output at
> > 100% modulation?
>
> > Except it only reads 100.
>
> Are you sure?
>
> An AM transmitter with a carrier output of 100 watts will reach a peak
> instantaneous output power of 400 watts during modulation peaks.
> Assuming the modulation is a single tone, the average output power (at
> 100% modulation depth) will be 150 watts, 100 watts in the carrier and
> 25 each in the upper and lower sideband.
>
> >Yet, to replicate the same
> > waveform and power meter reading using my AL-80, it's gotta deliver 400 watts!
>
> Right, 400 watts PEP and 150 watts average.
>
> bart
> wb6hqk

409. Re: http://clik.to/n0vfp

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Orb <orb@sphere.org>
Message-ID: <YAHC5.116$kO2.67479@paloalto-snr1.gtei.net>
Source record: 178506
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Lloyd seems to have calmed down. Please try to be friendly with him.

"Mr. Davies" <n0SPAMvfp@BELL_SOUTH_RED_DWARF_.net> wrote in message
news:ztuC5.6240$Jf1.43336@news4.atl...
> On my page, You will find:
>
> Radio Shack webpages
> MW DX page
> Politics Pages
> Message Board
> Free for all Links pages
> NEW! Radio of the month! This month it is the Pro-2006!

410. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB44D5.8EEF141@bigfoot.com>
Source record: 178507

Richard Harrison wrote:
>
> Steve, VE9SRB wrote:
> "Does a total re-reflection occur?"
>
> A total reflection requires an open circuit, a short circuit, or a pure
> reactance at a discontinuity.

How about a complete interference cancellation of the energy moving in
one direction when only two directions exist?
--
http://www.mindspring.com/~w6rca

411. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB4599.A9926B16@bigfoot.com>
Source record: 178508

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "Would you believe that my physics book had a dangling participle?"
>
> You still using that Shortly and Williams? I haven`t seen mine for about
> 50 years.

How did you know? Mine's a second edition, Copyright 1953, 1955 and was
my Texas A&M physics book.
--
http://www.mindspring.com/~w6rca

412. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB4DF8.993C6734@bigfoot.com>
Source record: 178509

VE9SRB wrote:
> The impedance discontinuity between the 51.5 and 300 ohm lines never
> changes.

If that were true, the Smith Chart and stubs would not work. Obviously the *physical* impedance discontinuity never changes but the apparent discontinuity disappears because of the reflections which effect a Z0-match and provide a virtual 51.5 ohm load at the Z0-match point. The physical discontinuity is the foundation for the virtual impedance achieved at steady state just as the physical discontinuity at the end of a stub is the foundation for whatever virtual impedance we may achieve at the other end. If the impedance looking into a Z0-match never changes then the impedance looking into a shorted 1/4WL stub never changes. What is the impedance looking into a shorted 1/4WL stub?

> From my perspective, the issue goes back to understanding the fundamental
> concepts - is it correct to state that a total re-reflection of power is
> occurring at the match point, thereby claiming that the impedance
> discontinuity at the junction (or match) is not the mechanism for wave
> re-reflection. This being incorrect, why not just explain the process in a
> manner consistent with theory?

Sounds like you're begging the question and setting up a straw man. Nobody says the impedance discontinuity is not the mechanism for wave re-reflection. Without the impedance discontinuity, a Z0-match could not exist. The steady-state model simply drops out all the transient model parameters that cancel or wind up with a zero value and it treats all powers as scalars.

The issue, from my perspective, is: Does the steady-state model continue to be a good enough tool for most everything we do, including stubs and Smith Charts? Since there is no argument about steady-state conditions (except maybe for phantom waves which can't be measured and have no effect) why is a more complicated model needed? If a more complicated model is needed, why not drag out the entire set of quantum physics equations?
--
http://www.mindspring.com/~w6rca

413. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <25812-39DB4EFA-15@storefull-116.iap.bryant.webtv.net>
Source record: 178510

Tom, W8JI wroyte:
"I assume the angle of reflection is zero degrees so you are just able to ignore it?"

A reflection requires a reversal of current or voltage, but not both. The phase angle is thus 180 degrees. The reflected voltage adds to the incident voltage at a high impedance discontinuity. The reflected current adds to the incident current at a low impedance discontinuity.

Neither voltage nor current rise to infinity at an open or short circuit. They double. The E & H fields contain equal amounts of energy. Kill one, and its energy must be transferred to the other to save the energy.

Tom wrote: "I`m just trying to get a handle on what all the fuss is about."

Me too.

For sure, you have a transmission line and system between a transmitter and load, and if that system has negligible loss, the power delivered to the load is the same as that from the transmitter. The voltage to current ratio at any point is the impedance at that point. But, the power at any point is the same. There are forward and, with reflections, there are reverse powers. These oppositely traveling powers can be separated using a directional coupler because the voltage and current are placed in phase opposition by the first reflection of the incident wave. It is easy to take current and voltage samples and adjust their magnitudes to be equal. If they are out of phase the samples cancel. If they are in phase they double the magnitude of either voltage or current sample alone. Thus we have the Bird wattmeter.

The Bird will show that in a matched line there is no reflected power in the matched section of line while the matching line section may have any required amount of reflected power.

Best regards, Richard Harrison, KB5WZI

414. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: DooFloppy <NOSPAMcpo@usnavy.net>
Message-ID: <39DB524D.3F2A5F34@usnavy.net>
Source record: 178511
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

Geezus ...here is a case of sour grapes if ever I saw one! At $250
bucks, the deal is STILL a good one. Kick your own butt for selling out
for less if you want to, but don't blame your mistakes on a smarter guy.
==========

"John K. Johansen" wrote:
>
> On Tue, 03 Oct 2000 21:15:06 GMT, Back Door Man <echurch@triad.rr.com>
> wrote:
>
> >
> >I'm very interested if it's still available.
> >
> >E Church
> >echurch@triad.rr.com
> >
>
> I'd only offer this guy $200. That's what I sold it to him for. The
> guy's a profiteer!!!!

415. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <IrIC5.1820$Pw1.104609@bgtnsc04-news.ops.worldnet.att.net>
Source record: 178512

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39DB3665.1A9E6541@mwci.net...
> As my input to this magnificant (really!) discussion I would like to
submit, for
> the third time, a post from July 1998 and repeated in Feb 2000. It
expresses
> concisely, and in my opinion, correctly, the development of steady state
> transmission line behavior from a succession of transient transmissions
and
> reflections from both ends of a transmission line. I have been reluctant
to do
> this for the third time, but I believe it is worth doing. So here goes:
>
> This is a repeat of my post in July 18 of 1998 on this subject. I believed
> it was correct then and I believe it is correct now. It tells me
> everything about this subject that I feel that I need to know.W.C.
> Johnson's book "Transmission Lines and Networks, McGraw-Hill, 1960, on
> page 100, Equation 4.23, tells the story about reflections as follows:
>
> 1) The initial voltage at t = 0 into the line Z0 from a generator with an
> internal
> impedance Zg is just Eg Zo / (Z0 + Zg), a simple voltage divider.
>
> 2) After an infinite number of reflections (the steady state) the value in
> part 1) is
> modified by the factor 1 / (1 - kr kg exp^(-2 gamma L)), where kr is the
> load reflection coefficient, kg is the generator reflection coefficient
> and L is the length of the line. This factor is a steady state amplitude
> correction factor that results after all the significant reflections from
> the generator end have occurred. It is nothing more than that. If kg is
> zero there is no reflection from the generator. If kr is zero, there is
> nothing available for the generator to re-reflect. If kg or kr is zero
> this factor is equal to 1.0.
>
> 3) The rest of Equation 4.23 is the steady state factor
> exp(-gamma x) + kr exp(-2 gamma L) exp(gamma x)
> where x is the distance from the generator and L is the length of the
> line.
>
> 4) The factor in 3) is the sum of two waves, a composite wave that travels
> from
> generator to load and a composite wave that is reflected from the load
> with reflection coefficient kr. Each of these composite waves is the
> superposition (sum) of the initial wave (when the switch is closed) and a

> series of reflections.
>
> 5) In the steady state, each composite wave is indistinguishable from a
> single wave that has the same composite amplitude and the same composite
> phase. At each instant a complete history of reflections is on the line at
> each point x. For the purpose of steady state calculations we can
> therefore regard the system as a single forward wave and a single reverse
> wave. There are no errors in this practice. This is what Equation 4.23 is
> and it is what the rest of the book assumes.
>
> 6) However, in the transient period the situation is different. After each
> reflection at the load, the voltage and current in the load makes an
> adjustment. At the generator there is an adjustment of the voltage and
> current that the generator sends to the line.
>
> 7) If there are linear transformers or stubs involved, at the junction of
> each pair of devices (lines, stubs, transformers, loads, transmatches)
> there are, on each side of the junction, a reflection coefficient and a
> transmission coefficient. The steady state is traced by adding up the
> sequence of reflections and transmissions at each side of each junction,
> starting at the time that the signal is turned on. For an excellent
> example of this process, see Kraus "Electromagnetics" regarding the 1/4
> wave transformer.
>
> 8) After a time these adjustments become trivial. Then the usual steady
> state analyses, using the Smith chart and the design equations, are valid.
> The 100 ohm quarter wave transformer, for example, has a 50 ohm input
> impedance and delivers the full power to a 200 ohm load. At the junction
> of the 50 ohm coax the phase, amplitude and impedance are identical across
> the junction. There is no reflection on the 50 ohm line but the
> transformer has a 2:1 VSWR. The forward wave on the 50 ohm line exactly
> "counterbalances" the vector sum of the forward and reverse waves on the
> 100 ohm line. This vector sum on the 100 ohm line is indistinguishable
> from a single stationary standing wave that would be produced by exactly
> two waves, one forward and one reverse.
>
> 9) This result has been achieved by tracing the entire sequence, starting
> at t = 0, of transmissions across, and reflections from, each side of the
> junction of the 50 ohm and 100 ohm lines and at the junction of the 100
> ohm line and the 200 ohm load.
>
> [28 Jan 2000 Note: I consider this description by Johnson and Kraus to
> be the most articulate, concise and sensible description of the
> development of a steady state wave from a series of reflections that I
> have ever seen].
>
> Bill W0IYH
>

Bill:

Just wanted to comment, good summary.

The work of Johnson, Slater, Kraus and others predate our discussions over the past few years and there work is not in dispute. In all of these works, they clearly describe the wave reflections as a function of load impedance for the forward wave and "output" impedance for the rearward arriving back at the source. In the case of an impedance junction, as in the 1/4 wl transformer, they clearly describe the wave reflections and re-reflections as a function of the ZO discontinuity at the junction. In no case do any of these works state or imply that a total re-reflection of power is occurring at a match point as a result of an impedance match. This concept was independently developed, presented and then became widely accepted as it was an easy concept to understand (correct or not). My discussions are not original nor are they new, they have only been presented to challenge the widely accepted concept that a total re-reflection of power occurs in impedance matching.

On one other point, you made the following statement: "At the generator there is an adjustment of the voltage and current that the generator sends to the line." Many people read this statement and believe it to mean that the generator is "actively" adjusting its output levels as if in a direct response to the reflected energy arriving back at the generator output from the mismatched load. In my opinion (this may be a matter of semantics) the generator is not actively adjusting it forward driving output at all, rather the "net" output from the generator is changing. The net output from the generator is a function of the generator's forward driving output (a function of ZO) and the re-reflected forward energy created at the generator output. The internal voltage and current within the generator are changing only as a function of the level of rearward reflected energy delivered back into the generator. In the steady state, the internal stages of the generator see two "sources". One is the internal forward driving source within the generator and the other is the external rearward driving source created at the generator output as a result of wave reflections. This can be appreciated by comparing the internal power dissipation occurring within a transmitter when it operates into a match load or a mismatched load. A transmitter delivering X watts of power to a matched load may have more internal power dissipation occurring than when it delivers X watts of power (Pf - Pr) to a mismatched load (in this case load R > Zo).

73,
Steve

416. Re: FS: Kiwa MW Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: mankind@aol.com
Message-ID: <8FC3714F2mankindaolcom@24.23.26.113>
Source record: 178513
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.antenna

>Geezus ...here is a case of sour grapes if ever I saw one! At $250
>bucks, the deal is STILL a good one. Kick your own butt for selling out
>for less if you want to, but don't blame your mistakes on a smarter guy.

Yeah ! I guess some people get pissed when someone else benefits from their mistake.

417. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DB5517.7ECD9602@bigfoot.com>
Source record: 178514

VE9SRB wrote:
> The 71 v does not travel or flow through the ZO match into the 300 ohm line
> as a forward voltage of 71 v. A forward voltage of 71 v in a 300 ohm line
> is equivalent to 16.8 watts of forward power, so we know this is not the
> case.

The voltage doesn't know it's in a 300 ohm line. The reflections have caused a virtual impedance of 51.5 ohms. The measured voltage on each side of of a Z0-match is almost the same and the Smith Chart tells us why. Consider the Z0-match as a smooth on ramp to an SWR circle.

> The forward voltage of 71 v *always* sees the 300 ohm impedance
> discontinuity. This is the basis of all transmission line theory from which
> the steady state conditions can be determined.

But once steady state conditions have been achieved, all the zero terms and the terms which cancel can be dropped from the equation. Simplifying the equation requires introduction of the virtual impedance concept, upon which the Smith Chart is based. Take away the virtual impedance concept and you have to throw away the Smith Chart.

> The fact of the matter is that the forward 71 v traveling in the 51.5 ohm
> line never really "sees" the ZO match at the match point.

Of course it sees the virtual impedance at the Z0-match point. Otherwise there would be reflections on the coax. Consider the following:

100w --->---51.5 ohm coax---x---1/2WL 300 ohm twinlead----300 ohm load

100w --->---51.5 ohm coax---x---1/2WL 300 ohm twinlead----51.5 ohm load

There are reflections on the coax in example one. There are no reflections on the coax in example two. The physical impedance bumps are identical but the virtual impedances are not.

> Understanding these concepts requires a lot more analysis than looking at a
> Smith Chart or looking at only the steady state power levels.

The concepts are easy to understand. The question is whether they are needed or not. After all, those concepts are just a math model that exists in human minds and may or may not bear any resemblence to reality. Why is a more complicated model necessary and if it is necessary, why not make it even more complicated? You are chosing to omit a lot of the quantum physics equations for your model. Why?

> Since both powers are in the same 300 ohm line ...

But they are not in the same 300 ohm line. One is in a 51.5 ohm line and
one is in a 300 ohm line and those powers must combine or be dissipated.
Those powers are ***SCALAR*** values.

> Now what happens when these two signals add together.

Vg + V- = V+ and Ig - I- = I+ Vg*Ig=100w, V-*I- = 100w, V+*I+ = 200w

The phasors add vectorially, the scalars add non-vectorially.

> As this relates to our example, the actual forward source power in the 300
> ohm line is 50 watts and the forward re-reflected power is also 50 watts.

Measurements prove otherwise. There are no reflections on the coax. Therefore
all the generated power enters the Z0-match.

> When these two powers add in phase, the total forward power is 200 watts.

Powers are ***SCALAR*** values. It is impossible to add them "in phase".
Voltages add in phase. Currents add in phase. Powers do not add in phase.

> Since we disagree at such a fundamental level re: basic transmission line
> theory, I thank you for the discussion and will end it here.

We do not disagree on basic transmission line theory, Steve. I have taken
a devil's advocate position and tried to defend the steady state math model.
All math models are flawed. My entire purpose was to ascertain exactly how
well the traditional steady state model, including the Smith Chart and stub
design, could be defended. How did I do?
--
http://www.mindspring.com/~w6rca

418. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39DB3D92.7650@pacbell.net>
Source record: 178515

William E. Sabin wrote:
>
> Reg Edwards wrote:
>
> > Incidentally, the mathematical description of the mechanics
> > of radiation and e.m. fields presented in modern text books,
> > frequently quoted by ambitious newsgroup guru's and
> > attributed by habit to Clerk Maxwell, is in fact entirely
> > due to the work of Heaviside.
>
> The usual smug, supercilious crap from Reg.
>
> We know about Heaviside and what he did, and the usual textbook
> Maxwell's equations are what work for us ordinary ignoramuses.
>
> Bill W0IYH

What Heaviside did was to recast Maxwell's original equations into
the simpler form made possible by vector calculus, which both
he and Gibbs were championing at the time. He and Hertz
worked on this problem, and the equations they came up with
were originally called the Heaviside-Hertz equations. Time
and textbook writers have transmogrified that into the familiar
"Maxwell's equations."

Tom Donaly KA6RUH

419. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DB5B95.66041044@west.raytheon.com>
Source record: 178516

W4JLE wrote:
>
> Whoa! I have stayed out of this because it was more a matter of semantics
> than anything else. But! a 100% modulated AM Transmitter 100 Watt Carrier
> Power would show 50 watts in the carrier and 25 watts in each sideband
> (average power) still adding to 100 watts. What am I missing?

100 Watt Carrier Power would show 50 watts in the carrier... ???
Sounds like the fuzzy math I heard a guy talk about on the radio last
night :-)

As I understood the original post, the system being discussed was a
plate modulated transmitter. The steady state carrier power without
modulation was 100 watts. Introduction of the modulation, through the
modulation transformer has the effect of doubling the plate voltage
during positive audio peaks. During negative audio peaks, the plate
voltage is essentially zero. The instantaneous power during positive
modulation peaks is four times the unmodulated carrier power or 400
watts. At negative modulation peaks, the RF output is zero. The output
power averaged over an entire sinusoidal modulation cycle can be shown
to be 150 watts, 100 watts in the carrier and 25 in each of the
sidebands.

The derivation can be found in nearly any textbook on radio
engineering. If you are interested and can't find it, let me know and
I'll post it.

bart
wb6hqk

420. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39DB5E53.6E77@bellsouth.net>
Source record: 178517
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Tom,

You couldn't have a Z34 in your Ford truck! You'd never be able to
CATCH one! LOL. And even the Lightning series wouldn't be able to
catch one on a crooked road--it'd turn over while the Z34 took the
S turns with ease. LOL!

Everybody's experiences are different. Mine just happened to be bad
with FoMoCo. I didn't like being Found On Road Dead! LOL!

Currently, I am having a hard time ignoring the Chrysler PT Cruiser!
Turns my head every time.

Best 73 to ya,

Jerry
K4KWH

Tom W8JI wrote:
>
> On Wed, 04 Oct 2000 01:12:20 -0400, Jerry Oxendine
> <joxendi@bellsouth.net> wrote:
>
> >It's all in what you get used to. The Z34 is quite a cream puff be-
> >cause I refuse to take it out in the rain even--unless I get caught
> >out. It is just fun to drive. On trips, it is very comfortable and
> >gets right at 30 MPG--even with the 3.4L engine. People think because
> >it's a 6 cyl, that it won't really get up and go, but it will. I just
> >don't do that, but it's nice to know that I CAN, and it is handy in
> >tight passing maneuvers.
>
> I carry a Z34 around for ballast in the back of my SD F250 with the
> turbo diesel.
>
> Unfortunately, the turbo diesel has noise exactly like ignition noise.
>
> It comes from the injectors, which have a 1000 volt pulse generated
> when the voltage is removed to close the injector!
>
> Mechanically, I've never had a problem and have driven Ford trucks
> since 1980. I quit buying GM in 78, after getting screwed on a new
> Monte Carlo V-8 with a 4 cylinder transmission and factory installed
> rust under the paint. That car had a cam lobe go flat in 1980, at
> 52000 miles. Since it had holes in the body (the friggin ROOF none the
> less), I got rid of it..

>
> 73 Tom

421. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <25814-39DB5A56-1@storefull-116.iap.bryant.webtv.net>
Source record: 178518

Cecil, W6RCA wrote:
"How did you know?"

Easy. You quoted that physics text before. I paid attention because it was the same as I had used in one of my physics courses. But mine had to be the first edition because my use predates the copyright of the second edition.

Best regards, Richard Harrison, KB5WZI

422. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:36:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rdu2r$401$1@208.206.142.106>
Source record: 178470

CAM wrote:

> Dick Carroll wrote:
> > Doesn't the fact that current is flowing past the measure point make it
> > prima facie evidence that power is being consumed downstream? If not, no
> > current would flow.
>
> Too bad "consume" is not in the IEEE dictionary. To me, the word
> "consume" would conote being "used up" so a lossless antenna radiating
> in free space would not "consume" any power. What definition of "consume"
> did you have in mind?

Ah, The Dictionary again :-) What I had in mind is *any* flow of current is evidence of power being consumed, or dissipated, if you prefer. Even a radiating antenna in the most remote corner of space is doing "work" by sending out RF energy. I know, the energy doesn't actually do "work" until it is dissipated into a load somewhere, if it ever is...but still, the "work" has been done, if not other than in the transmission of the RF.
Looks like you're trying to say that power moves even if it doesn't do any work. I thought The Dictionary ruled that out.

423. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:42:14 UTC
From: k6mhe@arrl.net
Message-ID: <39da7c09.553278@news.mcn.org>
Source record: 178472
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Tue, 03 Oct 2000 21:00:29 GMT, "Phil Kane" <Phil.Kane@nospam.spam>
wrote:

>On Mon, 02 Oct 2000 23:13:36 GMT, Brian Kelly wrote:
>
>>>
>>> I am returning Senate Bill 1714 without my signature.
>>>
>>> This bill would require the Office of Planning and Research to: (1) prepare
>>> and publish a technical assistance bulletin for use by local planners in the
>>> preparation of local ordinances regulating amateur radio antennas; (2)
>>> prepare a model ordinance suitable for local regulation of those antennas;
>>> (3) and report by July 1, 2001, regarding any recommendations for changes to
>>> the state statutes regarding regulation of amateur radio antennas.
>>>
>>> This bill may encourage local officials to accommodate the needs of amateur
>>> radio operators when adopting ordinances. The cost of this bill however, is
>>> not included in the Budget Act of 2000. Additionally, this is a local rather
>>> than a state issue.
>
>>The feds wimped out, the most populous state in the country
>>wimped out, now it's down to the neighborhood no-clues. Get
>>educated on stealth antennas . .
>
> We who were on the "SB-1714" Task Force were amazed that the
> Governor vetoed the Bull because both the State Senate and the
> Assembly passed the Bill UNANIMOUSLY.
>
> In typical California style the legislators decided to make a
> "study project" out of what all the other states with similar
> legistation did as a "done deal", and the veto was solely on
> the basis of "no funds allocated".
>
> The issue was the "costs" involved ... heck, I could sit down
> and crank out the "Technical Assistance Bulletin" and Model
> Ordinance over a weekend at no cost to the taxpayers - I did
> both for a client county two years ago and it's still on my
> wordprocessor.
>
> We'll try next year.
>
> 73 de Phil Kane - K2ASP
> ARRL Volunteer Counsel

>

Phil,

That well could be, however, what started out as a *simple* low or no cost item was changed greatly by all the politicians involved... There is no good reason -except pork barreling- that something so simple had to be made SO complex and * very* costly... While I sure there are many who would disagree with me I feel the veto justified.

Danny, K6MHE

424. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 00:48:17 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rduoh$401$2@208.206.142.106>
Source record: 178471

Roy Lewallen wrote:

> Dick Carroll wrote:
> >
> > Doesn't the fact that current is flowing past the measure point make it
> > prima facie evidence that power is being consumed downstream? If not, no
> > current would flow.
> >
> > 73, Dick
>
> No. You also have to look at the voltage. If the voltage is in
> quadrature with (i.e. 90 degrees with respect to) the current, no power
> is flowing. This is the situation when the current is flowing through a
> pure reactance. The power being delivered is V * I * cos(theta) where
> theta is the phase angle between the voltage and current.
>
> Roy Lewallen, W7EL

"Pure reactance" sounds as elusive as a "Conjugate match". Does that happen
often?

425. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 01:19:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8re1b2$9gs$1@plutonium.btinternet.com>
Source record: 178473

Dear Tom, Steve, et al,

If you are unable to sort out your problems on imaginary ideal lines with purely resistive Zo and terminations, how on on earth are you going to manage in the real world with real lines and complex Zo and terminations.

Did you know that reflection coefficients on real lines can approach 2.4 ? How would you manage your calculations in such cases. Smith Charts ? - don't make me laugh !

Hint: reflections and echos are much better analysed as functions of time rather than of frequency and wavelength. Think in terms of transient response to sudden shocks. What happens following t = 0 when the morse key is depressed. ?

Go back well before Kraus, Terman, Everitt, et al, to Oliver Heaviside who had it all worked out 110 years back and then to Carson.

Incidentally, the mathematical description of the mechanics of radiation and e.m. fields presented in modern text books, frequently quoted by ambitious newsgroup guru's and attributed by habit to Clerk Maxwell, is in fact entirely due to the work of Heaviside. Heaviside translated the ideas of Maxwell into the form we (or some of us) are familiar with. Let's give credit where credit is due.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp
----

426. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 01:48:46 UTC
From: Chas <chas0001@my-deja.com>
Message-ID: <8re29u$sj0$1@nnrp1.deja.com>
Source record: 178475
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

In article <39DA7C1B.FD8@bellsouth.net>,
joxendi@bellsouth.net wrote:
> Well, Chas,
>
> I can't agree with the mechanical troubles on Chevrolet, either. I
went
> to Chevrolet for good after having several Fords that, not only gave
me
> noise trouble (to the point that a radio was almost unusable), but
left
> me stranded a number of times. I abandoned Ford for good in 1973 and
> never looked back. I've had 5 Chevrolets since that time (I used to
> trade just to keep up with the Joneses when I was younger)--two of
which
> I own now. The '87 Celebrity station wagon I bought new in
August '87.
> It now has 197,000 miles on it. It has never had the engine or trans-
> mission opened except for routine maintenance and they are both the
ori-
> ginals. I replaced the OEM starter at 189,000, the OEM water pump
> shortly after. It has never quit except for a dead battery. Except
for
> belts, brakes, several alternators over 13 years, I have replaced
almost
> nothing. I did rebuild the front recently replacing the CV joints and
> the inner tie rods. It drives almost as new except for a couple
squeaks
> in the rear I can't seem to locate. But I would drive it to the West
> Coast in a heartbeat. It doesn't tick, click or smoke.
>
> The other Chevy is sort of a toy--a 1993 Lumina that I have put less
> than 30,000 miles on in the last 4 years. It is a Z34 that has proven
> to be reliable, mechanically sound, economical to drive, and just
plain
> FUN. It is my Sunday go-to-meetin' car and it gets babied to death
and
> both cars have always been garaged. The wagon is my "beater" that I
> drive every day, have my mobile ham rigs in, pull my lawn tractor
with,
> haul lumber in, and even firewood! While Ford seems to be extremely
> popular, I can't agree that Chevrolets are prone to mechanical
failure.
>

> Since 1966, I have owned quite a few from a '61 to the '93 without
hav-
> ing ANY recurring failures. The failures I had were with the Fords
that
> had a habit of leaving me to walk back home. I learned to spell Ford
> backwards (D-river R-eturning On F-oot). LOL! I got extremely pissed
> at them after the fiasco with the '73 Mustang, and Ford's refusal to
> honor their tranny warranty. I cussed them out, stormed out the door,
> and traded down to a '69 Impala just to get rid of it! LOL! Funny,
> that 4 year old Chevy NEVER left me stranded NOR did it make ignition
> noise--and that was without doing anything to it.
>
> It's what you get used to, I reckon!
>
> Best 73
>
> Jerry
> K4KWH

I knew I would get a rise out of you Chevy lovers. I had a 92 Z34
also. Actually I have had 2 92 Z34's. The first one only lasted 2
weeks because of a screwed up neighbor kid who decided that it looked
better burnt to a crisp. Almost burned the house down too because it
was in the garage when the little dirt bag set it a blaze. Went down
with check in hand and got another. Wish I still had it but houses
come before pleasure.

Chuck
KC0GUK

Sent via Deja.com http://www.deja.com/
Before you buy.

427. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 01:58:33 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8re2s9$401$3@208.206.142.106>
Source record: 178474

Well, well......the TRUTH is out. And Freaktenna is outed.

Richard Clark wrote:

> All claims appear to be bloated and ambiguous except to a lawyer
> (something about an ugly child only a mother could love). I speak
> from the experience of having some 300+ claims allowed among my 5
> patents and having had to read more than one action to dismiss, and
> then writing appeals. The key factor to this fractal patent list of
> claims is found in the first one, which through the successive claims
> is constrained and reduced in scope for this patent (not remarkably
> written either). In effect, there is only one claim with
> subordinating clauses for a process to tune an antenna. Not much to
> speak of. I would suggest my own patents for pointers, but I hesitate
> to impose that soporific on anyone.
>
> If you read the text and read the claims you will notice a disconnect
> between the two. Simple fact of the matter is that the original
> claims (suggested by the textual content) have NOT survived and the
> review process whittled down the application to the method now
> patented. This is, no doubt, a source of great disappointment for the
> patentee. My original patents probably totaled 1000 claims (easy to
> lose track when the Patent Office sends you a final notice of
> rejection four or five times for each application - ah! the process of
> appeal, what a game). The difference is that my text and
> illustrations probably exhibit more coherence with the surviving
> claims than most patents (it takes the master's hand to accomplish
> this).
>
> In general, the text and the images are of no particular merit, except
> where the images are referenced specifically in the claims. Many
> naive readers would assume that upon seeing those familiar fractal
> designs, that those same images and their application as antennas were
> covered by the patent publication. NOPE, NADA, NOT IN YOUR LIFETIME.
>
> This would not be possible as those topics were revealed here in this
> forum more than 2 years before the patent was applied for. Many of
> these images where published at my various web sites more than 4 years
> ago. This created prior art which now disallows the patentability for
> anyone. I would suggest that being demanded to provide notice that
> the design elements were "patent pending" are now exposed to have been
> a fraudulent statement (base stupidity works as a defense - maybe).
> But to be fair, I am sure that upon examination of the exact
> statements made, these were inferences (as much of that correspondence
> is), with the ambiguity leveraged to present the illusion of legal

> authority.
>
> Another point, you can LOSE your patent if you are aware of
> infringement and fail to act (and act means more than posting a
> "notice" :-> to a newsgroup).
>
> And yes, I have consulted a patent attorney, my partner. He smiles
> and informally extends his regrets to the aggrieved party. He is one
> sharp dude who averages 4 times the claims as the patent we are
> currently considering. He is the one with the master's touch. Claims
> are the asset - nothing else.
>
> 73's
> Richard Clark, KB7QHC

428. Re: Dentron Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 03:36:45 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <hBxC5.2690$np1.345042@newshog.newsread.com>
Source record: 178476

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"'Doc" <w5lz@oio.net> wrote in message news:39D9F6C1.39F78C65@oio.net...
>
>
> Bill Ogden wrote:
> >
> > It seems there are more Dentron tuners put up for auction (on ebay) than
> > equivalent sized MFJ tuners. Are the Dentrons generally considered
inferior
> > to MFJ? Any other thoughts as about their frequency on the auction
site?
> >
> > Bill Ogden W2WO
>
> Bill,
> MFJ does make ~good~ tuners, but I think Dentron made
> some of the ~best~. No matter who makes the tuner, always
> use one that's rated much higher than what you think you
> need (no such thing as 'over-kill' with tuners).
> 'Doc

I've used an MFJ 989C for some time, but I still prefer the old MT3000 "I
used to have" for ease of tuning.
Now you have me thinking of checking out e-bay again even though large
auctions usually result in the bidder paying quite a bit more than the verge
used price.

Roger
```

429. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 04:34:18 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rec0a$8lv$0@208.206.142.85>
Source record: 178477

Is that his only patent on these devices? Does he in fact own a valid patent on this "type" olf antenna or just what is mentioned here, questionable that it is?

Dick

Roy Lewallen wrote:

> There are actually two independent claims in the patent, 1 and 13,
> although they differ only very slightly from each other, and both deal
> with a method of tuning.

430. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 05:06:54 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DABAEE.1F41E516@mwci.net>
Source record: 178479

Reg Edwards wrote:

> Incidentally, the mathematical description of the mechanics
> of radiation and e.m. fields presented in modern text books,
> frequently quoted by ambitious newsgroup guru's and
> attributed by habit to Clerk Maxwell, is in fact entirely
> due to the work of Heaviside.

The usual smug, supercilious crap from Reg.

We know about Heaviside and what he did, and the usual textbook
Maxwell's equations are what work for us ordinary ignoramuses.

Bill W0IYH

431. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 05:12:20 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39DABC34.14ED@bellsouth.net>
Source record: 178478
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Waal,

It's all in what you get used to. The Z34 is quite a cream puff be-
cause I refuse to take it out in the rain even--unless I get caught
out. It is just fun to drive. On trips, it is very comfortable and
gets right at 30 MPG--even with the 3.4L engine. People think because
it's a 6 cyl, that it won't really get up and go, but it will. I just
don't do that, but it's nice to know that I CAN, and it is handy in
tight passing maneuvers.

All joking aside, I don't know what it is about Fords and ignition
noise. It seem to always have been that way. When we used to run
AM rigs back in the '60s we could tell there was a Ford passing by
because of the pulse noise in the receiver--increasing in pitch and
speed as the driver shifted gears, slowing down when he pressed the
clutch. Look out the window, VOILA, there'd be a Ford going by. LOL!
It still happens to my 706 in the car. Some Fords make no noise, others
completely blank out the receiver.

If you are having trouble with noise, I wish you the best of luck in
curing it. Glad we can razz each other and have a little fun.

73
Jerry
K4KWH

Chas wrote:
>
> In article <39DA7C1B.FD8@bellsouth.net>,
> joxendi@bellsouth.net wrote:
> > Well, Chas,
> >
> > I can't agree with the mechanical troubles on Chevrolet, either. I
> went
> > to Chevrolet for good after having several Fords that, not only gave
> me
> > noise trouble (to the point that a radio was almost unusable), but
> left
> > me stranded a number of times. I abandoned Ford for good in 1973 and
> > never looked back. I've had 5 Chevrolets since that time (I used to
> > trade just to keep up with the Joneses when I was younger)--two of
> which
> > I own now. The '87 Celebrity station wagon I bought new in
> August '87.
> > It now has 197,000 miles on it. It has never had the engine or trans-

> > mission opened except for routine maintenance and they are both the
> ori-
> > ginals. I replaced the OEM starter at 189,000, the OEM water pump
> > shortly after. It has never quit except for a dead battery. Except
> for
> > belts, brakes, several alternators over 13 years, I have replaced
> almost
> > nothing. I did rebuild the front recently replacing the CV joints and
> > the inner tie rods. It drives almost as new except for a couple
> squeaks
> > in the rear I can't seem to locate. But I would drive it to the West
> > Coast in a heartbeat. It doesn't tick, click or smoke.
> >
> > The other Chevy is sort of a toy--a 1993 Lumina that I have put less
> > than 30,000 miles on in the last 4 years. It is a Z34 that has proven
> > to be reliable, mechanically sound, economical to drive, and just
> plain
> > FUN. It is my Sunday go-to-meetin' car and it gets babied to death
> and
> > both cars have always been garaged. The wagon is my "beater" that I
> > drive every day, have my mobile ham rigs in, pull my lawn tractor
> with,
> > haul lumber in, and even firewood! While Ford seems to be extremely
> > popular, I can't agree that Chevrolets are prone to mechanical
> failure.
> >
> > Since 1966, I have owned quite a few from a '61 to the '93 without
> hav-
> > ing ANY recurring failures. The failures I had were with the Fords
> that
> > had a habit of leaving me to walk back home. I learned to spell Ford
> > backwards (D-river R-eturning On F-oot). LOL! I got extremely pissed
> > at them after the fiasco with the '73 Mustang, and Ford's refusal to
> > honor their tranny warranty. I cussed them out, stormed out the door,
> > and traded down to a '69 Impala just to get rid of it! LOL! Funny,
> > that 4 year old Chevy NEVER left me stranded NOR did it make ignition
> > noise--and that was without doing anything to it.
> >
> > It's what you get used to, I reckon!
> >
> > Best 73
> >
> > Jerry
> > K4KWH
>
> I knew I would get a rise out of you Chevy lovers. I had a 92 Z34
> also. Actually I have had 2 92 Z34's. The first one only lasted 2
> weeks because of a screwed up neighbor kid who decided that it looked
> better burnt to a crisp. Almost burned the house down too because it
> was in the garage when the little dirt bag set it a blaze. Went down

> with check in hand and got another. Wish I still had it but houses
> come before pleasure.
>
> Chuck
> KC0GUK
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

432. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 06:18:51 UTC
From: hrbcrb@aol.com.goaway
Message-ID: <20001004021851.16567.00000196@ng-cr1.aol.com>
Source record: 178480

The answer to your delay questions is rather simple math. Radio signals travel at the speed of light, ie 286,000 miles per second. If the distance to the repeater is aproximately 22,000 miles, add 22,000 miles for the return (44,000) total, and divide by 286,000. The path delay is 153 milli-seconds, or 0.153 seconds. If the repeater does some type of signal/voice processing/error correction that time should be added to the path time.

Hope this helps, regards, Hugh KF6HHS

PS Retired engineer with 40 years of experience, now just a technician.
Retired, now life moves at my pace.
please note spam filter

433. Re: Where to find information about LP antenna on internet?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 17:11:19 UTC
From: wgewald@att.net
Message-ID: <20001004171107.BZDN9211.mtiwmhc21.worldnet.att.net@webmail.worldnet.att.net>
Source record: 178382

From: yjack@my-deja.com

>Would you like to tell me where to find information
>about log-period antenna on internet? Thank you very
>much!

Here's one.

http://www.funet.fi/pub/dx/text/antennas/zigzag.txt

--
Posted from mtiwmhc21.worldnet.att.net [204.127.131.46]
via Mailgate.ORG Server - http://www.Mailgate.ORG

434. Re: Hygain 18AVT Info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 21:00:22 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <39dba000$0$12433$7f31c96c@news01.syd.optusnet.com.au>
Source record: 178383

Thanks Yuri

435. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 23:06:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rgg8f$4qa$1@uranium.btinternet.com>
Source record: 178385

Roy, quite correct.

To refer to RMS watts is meaningless.

Only amps and volts have RMS, Average and Peak values. The relationship between these values depends only on the waveshape over a complete cycle - sinewave, square, triangular, etc.

Power meters which use rectifier diodes + capacitor smoothing, eg., swr meters, respond linearly to peak values but indicate power on the assumption of a sinusoidal waveshape. The meter scale-graduations follows a square law and are cramped together at the lower indicated power levels.

The keywords in this subject are what a meter "responds to" and what it "indicates".

Reg.

436. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-04 23:33:58 UTC
From: on4caf@qsl.net
Message-ID: <nmentskntld9e8nrf5qtqr7lhni1l5oj5j@4ax.com>
Source record: 178384

On Wed, 04 Oct 2000 16:43:34 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>
>Is your RMS reading wattmeter reading average RMS power or peak RMS
>power?
>
>Even a PEP meter reads RMS power, it just reads the peak of the RMS
>value.
>
>Aside from that, I agree with you. If you have a true average reading
>RMS meter...it stays put with 100% positive and negative symmetrical
>modulation. So does the anode current meter.
>
>However, a peak reading RMS meter will indicate a PEP value four times
>the RMS average value while the current and voltage in the output
>device appear stable.
>
>73 Tom

setup:
hp8640B generator with 100mv output to a
50 ohm termination at the hp3403C true RMS volt meter:

Without modulation: 100 mv (pwr= 0.2 mw)
with (about) 100% AM modulation : 122 mv (pwr= 0.297 mw)
=1.488 * unmodulated power.
QED
A mechanical coil meter or a simple detection circuit will indicate average
which is of course 100 mv, also when modulated.

73,
Jan

437. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DC8F9A.80027E38@bigfoot.com>
Source record: 178319

jefff_b@my-deja.com wrote:
> I use a hustler 75m resonator (the low power one),
> and it works just fine in this mounted position, along with one of
> those big springs off the ball mount.

"Works just fine" in this context means 9dB down from a well-designed
bugcatcher. :-)
--
http://www.mindspring.com/~w6rca

438. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DC9026.ED1D798B@bigfoot.com>
Source record: 178320

Fractenna wrote:
> As to fractal antennas, there does not exist a non-fractal design that beats
> the MI2.

How about a seven element Yagi? ;-)
--
http://www.mindspring.com/~w6rca

439. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ri423enu2@208.207.71.155>
Source record: 178321

Gilbert Mouget wrote:

> Tue, 03 Oct 2000 23:23:21 -0500 dans l'article
> <lhaltskdjv0596v3t3seo6his6mnecku11@4ax.com>
> l'honorable kc5cqa <kc5cqa@devtex.net> escrivit :
>
> :I have a question, bear with me. During the Desert Storm War, I
> :'heard' reports from the ''front'', and they would be by 'satellite
> :phone', and there would be a '''delays in the transmit and receive
> :messages '', maybe lasting a second or two, because the 'repeater' was
> :in space. I am guessing those repeaters were located at about 22,000
> :miles out. ????. I don't really know what the distance was.
> :Soooooo, with saying all this, my question IS if satellites were
> :placed in space and were used as the cell phones are used
> :today, how high up would they have to be???????????. Or another words
> :how low could the ""repeaters"" be before they did not run in to the
> :problem of ===delay===., and still stay in their orbit.???
> :
>
> http://people.aero.und.edu/~nordlie/papers/irridium.html
>
> "With the satellites acting in the role the ground-based cellular
> transmitters acted in cities, Motorola hopes to offer worldwide
> cellular phone service to anyone, anywhere at any time. With each
> satellite being capable of carrying 2,800 conversations at once, a
> total of 215,000 users could use the system at any given time6. The 77
> satellites will travel in 7 different orbital planes, with 11
> satellites in each orbit. The orbits are 413.5 nautical miles in
> height."
>
> So the answer is a few hundred nautical miles.

?????? The last I read Motorola was getting ready to "deorbit" all the failed Irridium satellites and burn them upon rentry to the atmosphere, after the Irridium consortium went bankrupt due to pricing so high they couldn't attract enough customers to make it pay for itself. Even the cost orf maintaining the satellites in orbit was too much to bear, so they said. Has something changed?

Dick

440. Re: Orbit, how low,without voice delay???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ri4jienu3@208.207.71.155>
Source record: 178322

Ralph Mowery wrote:

> You have received some answers about the delay time due to the radio
> waves. There can also be some delay in the way the signal is
> processed. I am not up on the relay system for the telephone circuits,
> but it is a factor to add in. Also it may not be a simple repeat, but
> the signal could travel over some ground stations, back to a sat and
> back down again or it could pass from several sats then to the ground.

Yes indeed. . Following an area code reassignment and split, now when I dial a town 40 miles to my east, there is a very noticable and annoying delay echo on the conversation that was not there previously.

Dick

441. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8ri532ipq1@neptunium.btinternet.com>
Source record: 178323

> The detector output noise (rms amps / sqrt(Hz)) is often
expressed as
> an equivalent input optical noise power. The so called
Noise Equivalent
> Power (NEP) is expressed in RMS watts.
==========
Equivalent to what ? What are NON-rms amps ?

It would make more sense if RMS was deleted wherever it
occurs.

Reg.

442. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ri62ienu4@208.207.71.155>
Source record: 178324

John Harper wrote:

> Good morning all,
>
> After years of reading about home-made Yagis, verticals, quads,
> etc that use aluminum tubing, I finally decided to build
> something (2 el vert for 80m) myself. A lot of articles in QST
> and various books call for using 12' sections of aluminum with
> diameters ranging from 1-1/4" to 1/2" that will "telescope" into
> each other in order to achieve the desired length. I went to
> Home Depot then Loews and then a local hardware store and not
> only do they not have it, they don't have any idea where I can
> get my hands on even a 10' length of aluminum. Who sells this
> stuff?! Seems to be as scarce as hen's teeth around here.

Some hams use steel tubing for vertical antenna elements. Some engineers seem to believe that steel is not good antenna material due to its ferromagnetic properties, but that seems to ignore the fact that broadcasters routinely use in for their antennas in the form of large 1/4 wavelength steel towers, or those loaded to an electrical 1/4 wavelength, evidently without concern for this factor. I've used stainless steel cable for dipole antenna without any noticable deleterious effect. Many hams shunt feed their steel towers as vertical antennas and suffer no adverse affects from it.
Chain link fence top rail tubing comes in 20 foot pieces, swages together at the ends making it easy to use for any practical length of guyed masting or vertical element. It is available at any home center ans is much cheaper than any aluminum tubing.

Dick

443. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <F41D5.19165$tl2.1271302@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178325

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DC8E8A.97ED5B3F@bigfoot.com...

> VE9SRB wrote:
> > No Smith Chart or Smith Chart equations. Just voltage and power at the
> > junction point. We'll do the Smith Chart later - that's an easy
solution to
> > the problem.
>
> Since the math is messy, let me say how it can be done. Conservation
> of energy says that there is 38.4615w reflected on the coax.
>That
> gives a reflection coefficient on the coax of 0.62 and a reflection
> coefficient on the twinlead of 0.54. We have an equation where Rho
> is a function of RL, XL, and Z0. Since the twinlead is one wavelength
> long, the virtual impedance is the same at the 50/300 junction as at
> the load. We now have two simultaneous equations and two unknowns,
> RL and XL, for which we can solve.
>
> Of course, the intersections of those two SWR circles on the Smith
> Chart are the solutions. There are also probably two negative
> resistance solutions.
>

Yes, plot the appropriate SWR circle on 50 ohms and the appropriate SWR
circle on 300 ohms. Where the two intersect is the correct impedance.
Since they intersect at two points, there are two possible solutions: R +
jX and R - jX.

The net power delivered to the 300 ohm line is 61.5385 watts (87.1795 -
25.6410). Therefore, 38.4615 watts is reflected in the 50 ohm line. The
SWR in the 50 ohm line is 4.27 and the SWR on the 300 ohm line is 3.37. The
two correct answers are 100 + j100 ohms and 100 - j100 ohms.

> Steve, let me say that I was not trying to slay any of the sacred
> cows of EM field theory. I give presentations to typical ham clubs
> where I introduce the concept of matching an antenna system directly
> to a 50 ohm transmitter by varying the length of the feedline to
> effect a match without an antenna tuner (transmatch for the OOTC
> members). In order to convey the concept, I introduce the Smith
> Chart along with the SWR circle virtual impedance transformation.
> You can view one of my slides at:
>
> http://people.delphi.com/cecilmoore/scswr2.gif
>

> Would you have me throw that slide out and instead teach EM field
> theory in the two hour allotted time?
> --
> http://www.mindspring.com/~w6rca

Cecil, your Smith Chart methods of impedance matching are valid, correct and not disputed. I would not suggest you change any of your slides or methodology. The points where we disagree are in the total re-reflection of power at the impedance junction and the scalar addition of power.

Let's use the wave reflection concepts that I have presented in this thread to see if we can come up with the correct solution to the example. It may not be as elegant as using the Smith Chart but it should prove my points.

1) Let's determine the magnitude of rho on the 300 ohm line. Pf at the load is 87.1795 watts. Pr at the load is 25.6410 watts. |rho| = sqrt(Pr/Pi) = 0.5423. Now we need to determine the phase angle of rho.

2) Let's determine the forward driving voltage delivered to the 300 ohm line by the source. The 100 watts of forward power in the 50 ohm line is equivalent to 71.7106 v. We will assume that this voltage has a relative phase angle of 0 degrees. The reflection coefficient at the impedance junction is +0.707. The total forward source voltage delivered into the 300 ohm line is 121.2183 v (71.7106 + 0.707*71.7106). Therefore, the total forward source power delivered into the 300 ohm line is 48.9796 watts. It is not 61.5385 watts. There is a significant difference between forward power and net delivered power.

3) Now let's determine the total forward and reflected voltages on the 300 ohm line. Since Pf in the 300 ohm line is 87.1795 watts, the total forward voltage in the 300 ohm line has a magnitude of 161.7125 v (we do not know the phase angle). Since the reflected power in the 300 ohm line is 25.6410 watts, the total reflected voltage on the 300 ohm line has a magnitude of 87.7058 v (we do not know the phase).

4) Now, lets determine the phase angle of all the steady state voltages in the system. How do we do this? We do this from knowing that Ptotal in the 300 ohm is found as follows:

Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) cos(T), where P1 is the forward source power delivered to the 300 ohm line, P2 is the re-reflected power in the 300 ohm line and T is the phase angle difference between the forward source voltage in the 300 ohm line and the steady state re-reflected voltage in the 300 ohm line.

We know that P1 = 48.9796 watts. P2 can be found as follows. The reflected power arriving at the junction is 25.6410 watts. It sees a reflection coefficient of -0.707. Therefore, the re-reflected voltage has a magnitude of 62.6470 v and the re-reflected power is 13.0822 watts. Now we have:

87.1795 = 48.9796 + 13.0822 + 2 sqrt(48.9796) sqrt(13.0822) cos(T)

Solving for T, we find two possible solutions: +60.2551 degrees and -60.2551 degrees. This is the phase angle difference between the forward source voltage in the 300 ohm line and the re-reflected voltage in the 300 ohm line.

5) Now let's determine the phase angle of the total forward voltage in the 300 ohm line. The total forward voltage in the 300 ohm line is equal to the forward source voltage + the re-reflected voltage.

Vf = 121.2183 @ 0 degrees + 62.6470 @ -60.2551 degrees (+60.2551 could be used as well - remember there are two solutions)

The phase angle of Vf is therefore -19.6538 degrees.

6) Now let's determine the phase angle of the reflection coefficient of the load.

We know that the steady state forward voltage, Vf, has a phase angle of -19.6538 degrees. Let's track this as we travel through the 300 ohm line. The phase angle of Vf arriving at the load is -19.6538. After reflection, the phase angle will have changed by X due to the phase angle of the reflection coefficient. The phase angle of the reflected voltage arriving at the junction will be -19.6538 + X. At the junction, the reflected voltage sees a -0.707 reflection coefficient, therefore the re-reflected voltage will have experienced a 180 degree have shift.

We know the phase of the re-reflected voltage is -60.5221 (determined above). Let's solve for X

-60.2551 = -19.6538 - 180 + X. X = 139.3987 degrees.

The reflection coefficient of the load is 0.5423 @ 139.3987.

Z = ZO (1 + rho) / (1 - rho) = 100 + j100 ohms.

73,
Steve

444. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8ri6og$eg7$1@iac5.navix.net>
Source record: 178326

Bravo sir! The ARRL, no code international, and others have worked to
increase the new HAM population.
You in one "stroke" of genius have opened up amateur radio to a whole new
group of people.

You will find many on this newsgroup that will poo poo your ideas, I
encourage you to rise to the challenge and continue with your research.

Have you considered the attachment of sub wavelength flexible capacity hats
spaced approximately every 1/2 inch down the shaft of the proctenna? It is
this writers opinion that and increased sensitivity of about 17.3 dB would
be achieved.

"Proctenna" <doc@conduit.net> wrote in message
news:veqnts8in3d3soaolfbk4sjfflhu1jg3dc@4ax.com...
> Gentlemen of the newsgroup:
>
> I am today announcing my patent-pending new invention, the Proctenna.
> This revolutionary device, while amazingly successful, unfortunately
> cannot be described in detail due to it's current pending status.
>
> Briefly, the device is based on a 23" flexible tube, similar to smooth
> electrical flexible conduit, with a special conical tip, which acts as
> an insertion waveguide. The antenna operates on the principle of
> biofeedback, is self tuning, and also self grounding, as long as the
> operator stands barefoot in moist soil. In tests, the device has
> generated much excitement among our users, bringing some, in fact, to
> tears!
>
> I will make additional details available about this thoroughly proven
> and documented device once the US Patent and Trademark Office has
> given it their scholarly and most critical review. The patent
> application was submitted last Tuesday, and they have given me every
> assurance that the patent will be granted by the end of this week.
>
> Stay tuned for some illuminating news over the next few weeks!
>
> Yours truly,
>
> Harding D. Beezler, PhD.
> Creator of Proctenna

445. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: wgvideo@kill.attglobal.junkmail.net
Message-ID: <39DCA063.33326F31@attglobal.net>
Source record: 178327

Dear Kind Sir, may I inform you of a blatant patent infringement on my design... "The Rectal Flyer". My design is far superior as nothing has to be inserted from the south end. All that is needed to make the Rectal Flyer is to ingest small random pieces of wire.... and out it comes! Please note, this design, though far superior to the cheap copy... the proctenna, is not for the faint at heart. The key for first time builders is to try the 2 meter version first. The 80 meter version has been said to feel like passing a twisted sardine can!

Wayne

Proctenna wrote:

> Gentlemen of the newsgroup:
>
> I am today announcing my patent-pending new invention, the Proctenna.
> This revolutionary device, while amazingly successful, unfortunately
> cannot be described in detail due to it's current pending status.
>
> Briefly, the device is based on a 23" flexible tube, similar to smooth
> electrical flexible conduit, with a special conical tip, which acts as
> an insertion waveguide. The antenna operates on the principle of
> biofeedback, is self tuning, and also self grounding, as long as the
> operator stands barefoot in moist soil. In tests, the device has
> generated much excitement among our users, bringing some, in fact, to
> tears!
>
> I will make additional details available about this thoroughly proven
> and documented device once the US Patent and Trademark Office has
> given it their scholarly and most critical review. The patent
> application was submitted last Tuesday, and they have given me every
> assurance that the patent will be granted by the end of this week.
>
> Stay tuned for some illuminating news over the next few weeks!
>
> Yours truly,
>
> Harding D. Beezler, PhD.
> Creator of Proctenna

remove the obvious for email

446. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e8a6a0.497292669@news.seanet.com>
Source record: 178328

On Thu, 05 Oct 2000 00:39:40 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>> Does the IEEE dictionary have an entry for "knows?"
>
>Who nose what's real and what's snot?

Da Shadow do!

447. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <QK1D5.15297$s76.1070333@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178329

Walter Maxwell" <w2du@journey.com> wrote in message
news:bAHC5.4126$mC.261654@monger.newsread.com...

The setup for the problem consists of a lossless transmission line of any length, with a characteristic impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0 of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main transmission line at any place along the line. The stub can be either a l /2 line at frequency f, short-circuited at the far end, or a l /4 line at frequency f, open-circuited at the far end.

***

In order to understand what happens in the example presented by Walter, a very detailed and complex transient analysis of the transmission line system must be performed. Looking at only the steady state conditions, a correct interpretation of what is truly happening cannot be made.

In the steady state, there is a forward voltage of 1 v arriving at the stub junction (1 watt of forward power). There is a rearward voltage at the stub junction of -1 v (1 watt of reflected power). Hence, no *net* power is delivered to the stub junction. In the line connecting the antenna there is no forward voltage and there is no rearward voltage. In the stub itself, there is a forward voltage having a magnitude of 1 v (1 watt of forward power) and there is a reflected voltage having a magnitude of 1 v (1 watt of reflected power). Note the phase of the voltage in the stub line will vary with position in the stub line.

At the stub junction itself, the total voltage will be equal to 0 v and hence, the steady state line impedance will be equal to 0 ohms, a short circuit.

How does this all occur as a function of transient wave reflections?

The forward source voltage arriving at the stub junction sees the characteristic impedances of the stub line and the main line connected in parallel. The reflection coefficient at this point will be -0.33. The total source voltage developed at the stub junction will be +0.66 volts. This source voltage will be delivered as a forward voltage into the stub line and into the section of line connecting the antenna. At the same time, there is a reflected voltage of -0.33 v created in the main line. Now the discussion gets a bit more complex.

Let's look at the forward voltage delivered into the antenna line (+0.66 v). It arrives at the antenna where no reflections occur because the antenna impedance is matched to the main line ZO. (Don't gasp in disbelief quite yet)

Let's look at the forward voltage delivered into the stub line (+0.66). It arrives at the stub termination where a total reflection occurs because of the short circuit. This reflected voltage will arrive back at the stub junction and see the two sections of main line connected in parallel. The reflection coefficient it sees will also be -0.33. Now a re-reflected voltage will be created at this junction and travel back towards the stub

termination. At the same time the total voltage created at the stub junction will be delivered into the main line as a rearward traveling voltage and into the antenna line as a forward traveling voltage. This process of reflection and re-reflection in the stub line will continue until the steady state conditions are reached.

In the steady state, the total voltage delivered rearward into the main line as a result of the reflections in the stub line will be -0.66 v such that the total rearward voltage traveling in the main line is -1 v. The total forward voltage delivered into the antenna line as a result of the reflections in the stub line will also be -0.66 v such that the total forward voltage in the antenna line is 0 v, hence no steady state power is delivered to the antenna. The total steady state voltage developed at the stub junction is the forward source voltage + reflected source voltage + the reflected voltage from the stub line + the re-reflection of the reflected voltage from the stub line. +1 - 0.33 - 0.66 = 0 v, hence the steady state line impedance at the stub junction is 0 v and the effective steady state line impedance is 0 ohms.

73,
Steve VE9SRB

448. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001005121929.15653.00000187@ng-fd1.aol.com>
Source record: 178330

>
>How about a seven element Yagi? ;-)
>--
>http://www.mindspring.com/~w6rca
>
>

>
>Fractenna wrote:
>> As to fractal antennas, there does not exist a non-fractal design that
>beats
>> the MI2.
>
>How about a seven element Yagi? ;-)
>--
>http://www.mindspring.com/~w6rca
>
>
>
>

7 el Yagi is Fractal too. Everything is, don't you get it by now. It is patented, patent pending, or considered to be patented. All antennas belong to Freak, any publicity, reproduction or even pictures are ferbotten!
7 el. Yagi is fairly straight fractal, as soon as you have one bent in the antenna, it is Fractal Antenna Systems's property.
This threat is closet!

Another incoherent patent, referring to abandoned patent applications that cover anything from DC to light. What's next? Method of looking at the Fractals?

Sad and pathetic, and he don't get it, and looks like never will.

bada BUm

449. My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dennis Hessler <spypoint@mindspring.com>
Message-ID: <8ri9ostln1@slb1.atl.mindspring.net>
Source record: 178331

Hi Antenna Gurus,

I've been lurking here for months and got my General ticket about 3 months ago. I have a multi-band trap antenna about 25 feet up over my house and anchored on a live oak tree. I've used it to make some phone and CW contacts and recently I started experimenting with RTTY.

It seems that when I XMT with RTTY, it sets off an error message on my Jenn Aire range. This doesn't happen with CW or phone. I'm sending at 100 watts with a Kenwood TS 570-D and the antenna is maybe 20-30 feet at its closest point to the range.

My question: how can I keep the bleeping stove from bleeping every bleeping time I send RTTY? Thanks in advance.

Dennis, KG4IMG

450. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001005122450.15653.00000189@ng-fd1.aol.com>
Source record: 178332

>
>Dear Kind Sir, may I inform you of a blatant patent infringement on my
>design... "The Rectal Flyer". My design is far superior as nothing has to
>be inserted from the south end. All that is needed to make the Rectal
>Flyer is to ingest small random pieces of wire.... and out it comes!
>Please note, this design, though far superior to the cheap copy... the
>proctenna, is not for the faint at heart. The key for first time builders
>is to try the 2 meter version first. The 80 meter version has been said
>to feel like passing a twisted sardine can!
>
>Wayne
>

Suggestion, if I may (no demands to be included in the patent):

Eat chili of the highest kind, and you will be able to produce Flyers that are so hot, that you will not need no stinkin propagation. Just don't light the match near by.

Hope it helps and have a nice day!

bada BYm

451. Re: here's a 6 meter yagi at good price-a company doing something right

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20001005122623.18107.00000450@ng-fl1.aol.com>
Source record: 178333

>Subject: here's a 6 meter yagi at good price-a company doing something
>right
>From: n8wwm@aol.com (N8wwm)
>Date: Wed, Oct 4, 2000 11:51 AM
>Message-id: <20001004135109.18101.00000227@ng-fl1.aol.com>

Well, Thank You Doug.

This is why we don't have to advertise in the ham Mags.
We put that money into the quality of our products.
Thanks Again.

73 Al Lowe N0IMW <A
HREF="http://members.aol.com/_ht_a/Arrow146/index.html">ArrowAntenna.com</A>

>Hey gang
>
>I am not a paid promoter or anything, but I just bought a 4 element Arrow
>antenna for 6 meters. I am totally impressed by the workmanship and the
>ease of
>assembly...this antenna is a winner.
>
>Antenna is far more durable than the brand name suggests...While I would
>not
>put it up at 100' feet on the Kansas prairie, the city dweller with a 40
>ft
>tower gets an antenna that is a good value.
>
>I bought mine for 100 bucks...new in box, but originally bought by WP4O.
>They
>are around 20 bucks more from Arrow.
>
>I know that you can go pick tubing at the aluminum farm; I have done so
>many
>times and built many an antenna, but for those with a "time is money"
>situation, like me, or someone new to 6 meters and antenna building, what
>a
>nice deal the Arrow is.
>
>I will take a few photos of the antenna, up close...to show the
>workmanship...and post 'em in the near future.
>
>73
>Doug N8WWM EN81

452. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001005122946.15653.00000192@ng-fd1.aol.com>
Source record: 178334

>
>My question: how can I keep the bleeping stove from bleeping every
>bleeping time I send RTTY? Thanks in advance.
>
>Dennis, KG4IMG
>
>

Put the blanket over it :-)

See if it is frequency sensitive, QSY around and switch modes, if no change than it is too much RF getting into the stove (and eating your power?). Either put filters or chokes on the line cord of the stove, or reorient the antenna. Or maybe PSK will be safer mode? RTTY is getting obsolete anyway.

GL Yuri

453. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e9a9a3.498063026@news.seanet.com>
Source record: 178335

On 5 Oct 2000 14:25:16 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>Not only that, is there anything that makes it a fraudulant activity of
>claiming that certain features are "patent pending" when they are not even
>a part of the claims?
>
>Dick

Hi Dick,

Yes. But in this case no contract was entered into, except the moral contract of civil behavior and the Amateur code of open technical discussion.

No fraud was committed - except against that same moral contract, the standards of scientific enquiry, and OUR code.

73's
Richard Clark, KB7QHC

454. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <uc2D5.15315$s76.1072358@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178336

Walter Maxwell" <w2du@journey.com> wrote in message
news:bAHC5.4126$mC.261654@monger.newsread.com...
From reading recent posts on this news group, it is evident that serious misconceptions still prevail concerning virtual open and short circuits on transmission lines, and whether total re-reflection of power can occur in impedance matching operations. My position is that both of these concepts are valid, and are the basis for the statements appearing in my book 'Reflections' concerning impedance matching.

Some posters on the NG deny that these concepts are valid, and therefore condemn Reflections for propagating incorrect information. An article has been published so stating.

****

One more minor point.

If you are only interested in knowing what the steady state conditions of any transmission line system are - forward voltage, current and power; reflected voltage, current and power; line impedance; delivered power etc, the concept of a virtual short circuit does not need to be introduced. Additionally, the transient behavior of the transmission line system does not need to be analyzed. The steady state formulas for line impedance and voltage and current on the line are all that is needed to perform a steady state analysis.

73,

Steve

455. Re: Fractal Antennas for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20001005124404.18107.00000455@ng-fl1.aol.com>
Source record: 178337

>Subject: Fractal Antennas for sale
>From: "W4JLE" w4jle@alltel.net
>Date: Wed, Oct 4, 2000 9:53 PM
>Message-id: <8rgtvcdn1@iac5.navix.net>
>
>Taking orders for the W4JLE fractal antenna.
>This antenna is similar to an M12 type design. This unpatented antenna can
>be yours for a small investment of $431.27 Plus shipping and handling.

I think I can beat your price, but mine would be in very limited
quantities. Sometimes UPS makes them for me. And they pay me
for doing it. What a deal.

73 Al Lowe N0IMW Arrow Antenna

456. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39eab005.499697707@news.seanet.com>
Source record: 178338

On Thu, 05 Oct 2000 07:13:01 -0700, Bart Rowlett
<bart@wb6hqk.ampr.org> wrote:

>Reg Edwards wrote:
>>
>> Roy, quite correct.
>>
>> To refer to RMS watts is meaningless.
>>
>> Only amps and volts have RMS, Average and Peak values. The
>> relationship between these values depends only on the
>> waveshape over a complete cycle - sinewave, square,
>> triangular, etc.
>
>There are a few places where RMS power has application in engineering.
>For example, many types of optical detectors perform a conversion
>(transduction) between optical power and electric current. The
>conversion gain is called the responsivity and is usually expressed in
>amps of detector output current per watt of optical input. Sometimes
>the responsivity is expressed as the quantum efficiency which is output
>electrons per input photon. The two measures are easily interchangeable
>when the optical wavelength is known.
>
>The detector output noise (rms amps / sqrt(Hz)) is often expressed as
>an equivalent input optical noise power. The so called Noise Equivalent
>Power (NEP) is expressed in RMS watts. The measurement of NEP and
>responsivity requires generating a source of optical stimulus whose RMS
>power is known.
>
>bart
>wb6hqk

Hi Bart,

Much of what you describe about photonics is correct (and a surprising
entry - my only exception would be the loss of the mW/cm^2
specification). I've inhabited that side of the spectrum for years
and became used to the terms and measures you speak of. So used to
them in fact, that when I used the term RMS in relation to power I was
put on the carpet in much the same manner exhibited with this
side-topic.

It seems that at the low ends of the spectrum and the highest ends of
the spectrum RMS and power have some application. But lest we turn
this into a 600 posting monster debate, I am satisfied to talk about

vanilla flavored power.

73's
Richard Clark, KB7QHC

457. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ph2D5.1085$aS6.3233@newsfeed.slurp.net>
Source record: 178339

Rick Littlefield <k1bqt@aol.com> wrote in message
news:20001005095840.25108.00000179@ng-da1.aol.com...
> Hiram, as inventor of the machine gun, is also credited with inventing the
> end-fire array.
>
> Rick K1BQT

... and the Maxim silencer?

K3BHJ

458. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DCB344.216E03C@oio.net>
Source record: 178340

Dennis,
I've heard of RF getting into a lot of things but a kitchen
range is a 'first'! It shouldn't be any different than any
other electrical device, except for size (big torroids). Use
ferrite 'beads' on the power cord, and maybe bypassing with caps.
All things considered, it may be easier to move your antenna
further away, either horizontally, or vertically (good excuse
for a tower). You might also ask Jenn Aire if they have any
suggestions. Love to see their faces, wouldn't you?
'Doc

459. Re: Fractal Antennas for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rica8$gl1$1@iac5.navix.net>
Source record: 178341

The price was based on being made on the Chinese labor market. After constructing a sample, the builder was hospitalized with a severe case of the bends. I am thinking of just selling a kit that would consist of a few meters of wire, 2 flower pots, and some PVC along with Frackkys web address. This would reduce the price by at least $411.27

If I ship the kit UPS it should arrived assembled and ready for operation!

"Arrow146" <arrow146@aol.com> wrote in message
news:20001005124404.18107.00000455@ng-fl1.aol.com...
> >Subject: Fractal Antennas for sale
> >From: "W4JLE" w4jle@alltel.net
> >Date: Wed, Oct 4, 2000 9:53 PM
> >Message-id: <8rgtvcdn1@iac5.navix.net>
> >
> >Taking orders for the W4JLE fractal antenna.
> >This antenna is similar to an M12 type design. This unpatented antenna
can
> >be yours for a small investment of $431.27 Plus shipping and handling.
>
>
> I think I can beat your price, but mine would be in very limited
> quantities. Sometimes UPS makes them for me. And they pay me
> for doing it. What a deal.
>
> 73 Al Lowe N0IMW Arrow Antenna

460. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DCB965.47F7073E@bigfoot.com>
Source record: 178342

Reg Edwards wrote:
> It would make more sense if RMS was deleted wherever it
> occurs.

Even in the IEEE Dictionary? :-)
--
http://www.mindspring.com/~w6rca

461. Re: 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: andy@equinox22.f9.co.uk
Message-ID: <113D5.32057$CI1.655664@stones>
Source record: 178343

On 2000-10-05 dennis.spiess@reckitt.com said:
>Newsgroups: rec.radio.amateur.antenna
>Andy,
>An out of the box idea...
>Mount the base antenna (2x5/8) on the terrace at an angle and with a
>decrative flag hanging from it.... know one will know its an antenna
>and @ a 60 degree (0r so) angle it will work just fine!
>73
>Den W2DEN _._
Nice idea but we tend not to fly flags over here.. It'd attract even more
attention i'm afraid..

Thanks anyway
--
G7MJV

462. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DCBE10.DFFF31B6@bigfoot.com>
Source record: 178344

VE9SRB wrote:
> The reflection coefficient of the load is 0.5423 @ 139.3987.
> Z = ZO (1 + rho) / (1 - rho) = 100 + j100 ohms.

Funny, I got the same answer without any wave theory. :-)

Let's take another example.

```
+-------------+
| |--->--->net 200w
net 100w--->--->| Black Box |
| |<---<---net 100w
+-------------+
```

Don't you think it's obvious from a conservation of energy
standpoint that the two 100w quantities are adding up to
the 200w quantity? Because these are scalar values, the
result would be exactly the same if we draw it like this:

```
+-------------+
net 100w--->--->| |--->--->net 200w
| Black Box |
+--->| | +---<---net 100w
| +-------------+ |
| |
+---------------------+
```

--
http://www.mindspring.com/~w6rca

463. Counterpoise radial...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: BJ <nospam@nospam.not>
Message-ID: <if3D5.22$ZR2.19197@nnrp1.sbc.net>
Source record: 178345

I live on the 14th floor of an apartment building and connecting a ground wire is virtually impossible. I want to hook up a counterpoise radial wire for the bands I work the most but have a couple questions.

I want to work 10, 15, 20, and 40 mtrs - do I need a separate counterpoise for each band or just one for the lowest freq (40 mtrs in this case)?

Must the wires be separated with some space between them or can I bundle them all together with tape into one long bundle to lay them out around the room?

Thanks for any help -

BJ

PS - please reply here in the newsgroup - the email address is fake to avoid spammers.

--
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
John Lewis
USA 2Way / Hams Helping Hams (StL)
(314) 353-2Way (9 am - 4 pm M/F Central)
Fax: (314) 457-0106
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

464. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8rig7ogbi1@nnrp1.deja.com>
Source record: 178346
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <cuvyxnansvbet.g1v4zw1.pminews@ca.news.verio.net>,
"Phil Kane" <Phil.Kane@nospam.spam> wrote:
...
> Governor vetoed the Bull

Well, I do hope that was an innocent typo and not a Freudian
slip! :-) At very least, it was good for a laugh here
at this end.

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

465. L/D and bandwith and velocity factor??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: cajo1@my-deja.com
Message-ID: <8rigm2$gp7$1@nnrp1.deja.com>
Source record: 178347

Cant find any information on L/D vs bandwith (practical).F/B 1,5? in %

Not even for the velocity factor comparing to the L/D

For an single radiator.

I have the latest Antenna Handbook.

Best Regards from CAY in SWEDEN.

Sent via Deja.com http://www.deja.com/
Before you buy.

466. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DCBF41.FF2425F9@bigfoot.com>
Source record: 178348

Dennis Hessler wrote:
> I'm
> sending at 100 watts with a Kenwood TS 570-D ...

Ignorant question: Is the Kenwood TS-570-D rated for
100 watts continuous duty?
--
http://www.mindspring.com/~w6rca

467. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <801D5.4520$mC.282580@monger.newsread.com>
Source record: 178349

OK Class, it's time to review the answers to the five-question quiz posed in my previous post. Steve answered them all correctly, and I'm sure all except those who are new to transmission line theory did also. So, for those less acquainted with the theory I'll explain the answers. For convenience the setup is repeated here:

The setup for the problem consists of a lossless transmission line of any length, with a characteristic impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0 of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main transmission line at any place along the line. The stub can be either a l /2 line at frequency f, short-circuited at the far end, or a l /4 line at frequency f, open-circuited at the far end.

1. What is the amount of current now flowing in the load?

1.. 2.0 amp
2.. 1.0 amp
3.. 0.5 amp
4.. 0.0 amp
5.. None of the above
Answer: D, 0.0 amp

2. What is the line voltage at the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
Answer: D, 0.0 volts

3. What is the line voltage l /4 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
Answer: A, 2.0 volts

4. What is the line voltage l /2 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above

Answer: D, 0.0 volts

5. What occurs on the line at the stub point?

1.. Voltage and current are totally transmitted past the stub point and their energies are totally absorbed in the load.
2.. Voltage and current are partially transmitted past the stub point and partially reflected back toward the source.
3.. Voltage and current are totally reflected back toward the source.
D. None of the above

Answer: C. Voltage and current are totally reflected back toward the source.

The answers above occur because either of the two stubs establishes a short circuit on the line at the stub point. However, Steve said it's not necessary to consider the concept of a virtual short circuit, just basic transmission-line theory. As we proceed we'll see that whether the concept of a virtual short circuit is considered or not, the virtual short circuit is there, and it won't go away by simply not considering it.

Let's first define the virtual short circuit. The virtual short circuit (and the virtual open circuit as well) results from interference between two harmonically related electromagnetic waves. When their voltage amplitudes are equal and 180 degrees out of phase, and their current amplitudes are equal and in phase, the result is zero impedance at the point where the interference occurs. The effect of the virtual short circuit on the source wave at the stub point in the example is the same as if a hardware-type short circuit were placed at the stub point.

Before proceeding further let's examine how the wave interference at the input of the l /4 open-circuit stub establishes the (virtual) short circuit at the stub point on the line. I quote from my QEX article appearing in the Apr/May 1998 issue:

"Let us first consider the l /4 open-circuit stub. On arrival at the input of the stub, the source voltage and current are in phase, at which point we assign a reference phase of 0°. On arriving rearward at the input, the voltage and current waves reflected from the open-circuit termination of the stub have traveled 180° relative to those arriving at the input, 90° in traveling from the input to the open-circuit termination, and another 90° in returning to the input. However, keep in mind that, on reflection from an open circuit, angle q of the voltage reflection coefficient experiences no change, while angle q for current changes 180°. Thus, on return to the input, angle q of voltage waves reflected from the open-circuit termination is now 180°; a complete reversal in phase relative to the source. Consequently, the reflected voltage appearing at the input of the stub is of the opposite polarity to that arriving from the source. Continuing, with the 180-angle change in current on reflection at the open-circuit termination, plus the 180° travel on the stub line, on return to the input, angle q for the reflected current is 0°, in phase with the source current. So we have two equal voltages of opposite polarity at the input, the source voltage and the stub voltage, with their currents in phase. The result? Maximum current flow--zero impedance-a virtual short circuit. A perfect DC analogy is two batteries connected in series, plus to minus, and plus to minus-short circuit-maximum current."

With the (virtual) short circuit established at the stub point on the line we can now explain the answers to the five quiz questions.

Question 1. The load current is zero because the virtual short at the stub point prevented any current from flowing past the stub point.

Question 2. The voltage on the line at the stub point is zero because voltage must be zero where the impedance is zero. However, the current at the stub point is 2.0 volts because of the total reflection at the short circuit, as is well known in transmission-line theory. The action of the electric and magnetic field components in the electromagnetic waves during reflection are explained in detail in Reflections.

Question 3. The line voltage l /4 toward the source from the stub point is 2.0 volts. As the current doubles on total reflection at a short circuit the voltage goes to zero. At a point l /4 from the short toward the source the current goes to zero and the voltage is twice the value of the source wave. Typical standing-wave procedure when the reflection is total.

Question 4. The line voltage l /2 toward the source from the stub point is zero, because impedance, voltage, and current repeat on the line at every l /2 interval. Here we are repeating the conditions appearing at the stub point a l /2 away.

Question 5. The answer here is that voltage and current are totally reflected back toward the source, because the virtual short circuit at the stub point prevents any energy to pass. Following the law of conservation of energy, energy cannot be destroyed or made to disappear as if by magic. It has to go somewhere, and the only place it has to go is back up the line toward the source. Contrary to statements made by some of the posters, when waves cancel due to interference the energy in those waves is comprised of real voltage and current, and therefore the energy does not disappear as a result of the cancellation. Consequently, when two waves of equal amplitude and opposite phase mutually cancel, the first result is destructive interference, which forms the virtual short circuit. This is followed by constructive interference, during which the respective voltages and currents of the original waves combine in phase to form the re-reflected waves, emanating from total re-reflection at the virtual short circuit. The changing phase relationships that occur on re-reflection that cause the re-reflected voltage and current waves to emanate from the reflection in phase with the voltage and current waves from the source is explained in detail in Reflections. There are no 'phantom' waves unless an ethereal 'medium' scanning a crystal ball is involved.

I hope this discussion generates some feedback.

Walt, W2DU

PS--Steve has said the virtual short circuit need not be considered. However, he has previously declared that it doesn't exist, and that it cannot cause total reflection. He has made these statements in attempting to show the concepts I presented in Reflections are incorrect. I hope my discussion above clarifies the issue once and for all.

468. FS: GAP Titan DX-Detroit Area

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Paco Soze <pacosoze@hotmail.com>
Message-ID: <8rif31$i6k$1@cwis-1.wayne.edu>
Source record: 178350

Hi guys.
I have a GAP titan dx antenna that i purchased used. I bought all the parts that i thought would make it useable again. For all i know, i just have a short someplace because i cant get the thing to tune up better than 3:1 anywhere. Being that i moved into an apartment, i no longer have a use for the vertical nor the time to trouble shoot it. New they are $300. Make me an offer if you would like to give it a go.
-greg
kb8ltf

469. FS: Wilson 1000 mobile ant

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Paco Soze <pacosoze@hotmail.com>
Message-ID: <8rifh4ikq1@cwis-1.wayne.edu>
Source record: 178351

Hey guys
I have a Wilson 1000 mobile ant for sale. Great condition except that the coax has a small part of the outer layer warn off. Works great on 10 m.
Please email with offer or with request for pic.
-greg
kb8ltf

470. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <5y3D5.19388$tl2.1276145@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178352

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DCBE10.DFFF31B6@bigfoot.com...
> VE9SRB wrote:
> > The reflection coefficient of the load is 0.5423 @ 139.3987.
> > Z = ZO (1 + rho) / (1 - rho) = 100 + j100 ohms.
>
> Funny, I got the same answer without any wave theory. :-)
>
> http://www.mindspring.com/~w6rca

Hi Cecil:

It's all that wave theory that makes the Smith Chart and your calculations
possible. :)

Take care ..

Steve

471. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: RadioAl <ae2j@bellatlantic.net>
Message-ID: <39DCC5F2.94FB1CB8@bellatlantic.net>
Source record: 178353

I am most impressed with your announcement of a new antenna. The brief description provided augurs well for a revolutionary approach to effective communications. Let me encourage you further in your endeavors break new wind in the best tradition of amateur radio. Do not be discouraged by the skeptics, there are always naysayers that will attempt to dampen enthusiasm for any innovative effort. Be assured that their derisory attitudes simply reflects the constipation of their minds.

Allow me to suggest, that your approach brings to mind other attempts that did not meet with widespread acceptance and thus did not become useful fertilizer in the area of antenna dynamics. Specifically the developement 'antenna oil' also known as 'RF Grease'. The developement of which did not meet with much favor due to the necessity of frequent reapplication for full effectiveness. Weathering was its downfall, it just isn't practical to crawl out on your tribander periodically to apply a fresh coating of RF grease. However given the description of your antenna, it might be possible to store it in a sheathlike container that is filled with grease, and in fact if the sheath is made of a thin, non-conducting and non-pourous material the antenna might be used with sheath in place.

I hope that the above is encouraging to you.

Radio Al

P.S. If you wish to experiment with the 'rare' RF Grease, I do have available a small supply from the last military contract. This surplus is stored in 55 gallon containers, and weight approx. 107 lbs. I would need to ship via commercial trucking. Anyone else will be able to obtain it through my postings on Ebay. Look for "RARE-- RF Grease".

I accept PayPal.

Proctenna wrote:

> Gentlemen of the newsgroup:
>
> I am today announcing my patent-pending new invention, the Proctenna.
> This revolutionary device, while amazingly successful, unfortunately
> cannot be described in detail due to it's current pending status.
>
> Briefly, the device is based on a 23" flexible tube, similar to smooth
> electrical flexible conduit, with a special conical tip, which acts as
> an insertion waveguide. The antenna operates on the principle of
> biofeedback, is self tuning, and also self grounding, as long as the
> operator stands barefoot in moist soil. In tests, the device has
> generated much excitement among our users, bringing some, in fact, to

> tears!
>
> I will make additional details available about this thoroughly proven
> and documented device once the US Patent and Trademark Office has
> given it their scholarly and most critical review. The patent
> application was submitted last Tuesday, and they have given me every
> assurance that the patent will be granted by the end of this week.
>
> Stay tuned for some illuminating news over the next few weeks!
>
> Yours truly,
>
> Harding D. Beezler, PhD.
> Creator of Proctenna

472. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Gary Rotter <GR120994@exchange.SanDiegoCA.ncr.com>
Message-ID: <39dcc7ac$1@rpc1284.daytonoh.ncr.com>
Source record: 178354
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Phil,

A model ordinance would have a big help in my experience with the City of Irvine, CA. My local government agency does not have clue. I asked the planning department what the rules were for amateur radio antennas. They insisted that I would be covered by the section of the zoning code that refers to "satellite dish antennas". When I asked what the rules were for TV antennas I was told that the same section applied. Unfortunately, this section of the zoning code makes absolutely no sense in regards to anything other than large satellite dish antennas. For example, a conditional use permit is required for any antenna which exceeds six feet in any dimension!

Phil Kane <Phil.Kane@nospam.spam> wrote in message
news:cuvyxnansvbet.g1v4zw1.pminews@ca.news.verio.net...
> On Mon, 02 Oct 2000 23:13:36 GMT, Brian Kelly wrote:
>
> >>
> >> I am returning Senate Bill 1714 without my signature.
> >>
> >> This bill would require the Office of Planning and Research to: (1)
prepare
> >> and publish a technical assistance bulletin for use by local planners
in the
> >> preparation of local ordinances regulating amateur radio antennas; (2)
> >> prepare a model ordinance suitable for local regulation of those
antennas;
> >> (3) and report by July 1, 2001, regarding any recommendations for
changes to
> >> the state statutes regarding regulation of amateur radio antennas.
> >>
> >> This bill may encourage local officials to accommodate the needs of
amateur
> >> radio operators when adopting ordinances. The cost of this bill
however, is
> >> not included in the Budget Act of 2000. Additionally, this is a local
rather
> >> than a state issue.
>
> >The feds wimped out, the most populous state in the country
> >wimped out, now it's down to the neighborhood no-clues. Get
> >educated on stealth antennas . .
>
> We who were on the "SB-1714" Task Force were amazed that the
> Governor vetoed the Bull because both the State Senate and the

> Assembly passed the Bill UNANIMOUSLY.
>
> In typical California style the legislators decided to make a
> "study project" out of what all the other states with similar
> legistation did as a "done deal", and the veto was solely on
> the basis of "no funds allocated".
>
> The issue was the "costs" involved ... heck, I could sit down
> and crank out the "Technical Assistance Bulletin" and Model
> Ordinance over a weekend at no cost to the taxpayers - I did
> both for a client county two years ago and it's still on my
> wordprocessor.
>
> We'll try next year.
>
> 73 de Phil Kane - K2ASP
> ARRL Volunteer Counsel
>
>
>
>
>
>

473. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8riimr$ih3$1@nnrp1.deja.com>
Source record: 178355

Any data on the near field RF? And can you see better in the dark while
transmitting?

In article <veqnts8in3d3soaolfbk4sjfflhu1jg3dc@4ax.com>,
Proctenna <doc@conduit.net> wrote:
> Gentlemen of the newsgroup:
>
> I am today announcing my patent-pending new invention, the Proctenna.
> This revolutionary device, while amazingly successful, unfortunately
> cannot be described in detail due to it's current pending status.
>
> Briefly, the device is based on a 23" flexible tube, similar to smooth
> electrical flexible conduit, with a special conical tip, which acts as
> an insertion waveguide. The antenna operates on the principle of
> biofeedback, is self tuning, and also self grounding, as long as the
> operator stands barefoot in moist soil. In tests, the device has
> generated much excitement among our users, bringing some, in fact, to
> tears!
>
> I will make additional details available about this thoroughly proven
> and documented device once the US Patent and Trademark Office has
> given it their scholarly and most critical review. The patent
> application was submitted last Tuesday, and they have given me every
> assurance that the patent will be granted by the end of this week.
>
> Stay tuned for some illuminating news over the next few weeks!
>
> Yours truly,
>
> Harding D. Beezler, PhD.
> Creator of Proctenna
>

Sent via Deja.com http://www.deja.com/
Before you buy.

474. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22314-39DC94B3-26@storefull-115.iap.bryant.webtv.net>
Source record: 178356

Roy wrote:
"If you actually do the RMS calculation for power when the voltage and current are sine waves, you get the RMS value---."

I seem to remember that to get average from rms, multiply by 0.9.

But, power is ExI (when they are in-phase and times cos theta when they are not). A positive voltage times a positive current gives a positive power, and a negative voltage times a negative current also gives a positive power (a minus times a minus is a plus).

A power graphic would look like the output of a full-wave rectifier in the simplist case.

Best regards, Richard Harrison, KB5WZI

475. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC804B65119@www.indianarep.com>
Source record: 178357

Speaking of prior art...

http://x63.deja.com/getdoc.xp?AN=621401392&CONTEXT=970765823.1187119151&hitn
um=1

> What a crock. The proctenna is obviously stolen from
> prior art (namely the "wouff hong"). This Harding D.
> Beezler, PhD., Creator of Proctenna, is just asking for a
> lawsuit by the ARRL or the heirs of Hiram Percy Maxim.
>

476. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DCD172.7C382CCA@eznec.com>
Source record: 178358

Richard Harrison wrote:
>
> Roy wrote:
> "If you actually do the RMS calculation for power when the voltage and
> current are sine waves, you get the RMS value---."
>
> I seem to remember that to get average from rms, multiply by 0.9.
>
> But, power is ExI (when they are in-phase and times cos theta when they
> are not). A positive voltage times a positive current gives a positive
> power, and a negative voltage times a negative current also gives a
> positive power (a minus times a minus is a plus).
>
> A power graphic would look like the output of a full-wave rectifier in
> the simplist case.
>
> Best regards, Richard Harrison, KB5WZI

When the voltage and current waveforms are sinusoidal, the power waveform doesn't look like a full wave rectified wave. It's a sine squared wave. A simple trigonometric identity shows that a sine squared wave has exactly the same shape as a sine wave. It's just twice the frequency, and offset such that the bottom just goes to zero. You can see by inspection that the average value of this wave is exactly one half the peak value.

Doing an RMS calculation on this power wave requires squaring it, taking the average of the squared wave, then taking the square root of the result. The square of the power wave is a sine wave taken to the fourth power, which no longer is sinusoidal. (But it still doesn't look like a full wave rectified wave.)

Roy Lewallen, W7EL

477. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <5gapts82sh1r6hq0oiu80m5qal00q0n524@4ax.com>
Source record: 178359

On 28 Sep 2000 09:19:59 GMT, w1rfi@aol.com (W1RFI) wrote:
>>From: Gary Coffman e4zv@bellsouth.net
>
>>> And, energy in the passband = interference.
>
>>Yeah, but if the spectrum is sufficiently whitened, and sufficiently
>>dispersed, it should merge with the noise floor of the analog spectrum
>>analyzer, and not produce more than a slight degradation of the
>>SNR of conventional narrowband equipment, when operated at any
>>reasonable physical separation.
>
>Let's do the math. Let's assume uniform distibution of energy within the
>spread, a reasonable assumption for a fast hopper or a DS SS transmitter.
>Let's start with a whopping 10 milliwatt SS transmitter and 8 dBi gain antennas
>on both ends. Let's put it on 440 MHz, with a 5 MHz spread. Let's locate it on
>a good hill, 1 kM away from a receiver.

A 1% spread isn't very much. To maximize coding gain, you'd want to spread
the signal as much as possible.

>Here are the results:
>
>RESULTS:
>Frequency = 440 MHz
>Total transmit power = .01 watts
>Transmit spread = 5 MHz
>Receiver bandwidth = 1000 Hz
>Transmit power in 1 Hz = -56.9897 dBm/Hz
>Transmit power in 1000 Hz = -26.9897 dBm

Please note that this is the long term summed power in that bandwidth.
Long term being when the summation time is on the same order as the
length of the pseudonoise code. The instantaneous signal in this bandwidth
is a function of 1/N where N is the number of bits in the PN sequence before
it repeats. We are no longer prohibited from using very long PN codes.

To put this in another form, most of the time there is no interfering signal
at all in that 1 kHz bandwidth. Intermittently, there will be a blip as the PN code
hits this particular bin. In general, a NB receiver will *not* coherently sum these
blips, because it isn't synchronized to the PN sequence being used.

I also wonder a bit why you chose a 1 kHz bandwidth. That's too wide for
the current most common weak signal mode (Morse), and too narrow for
SSB voice. So the numbers really aren't representative (though they can
be scaled).

>Transmit antenna gain = 8 dBi
>Receive antenna gain = 8 dBi
>Distance to receiver = 1 km
>Free-space pathloss = -85.31905 db
>System loss (path loss +/- antenna gains) = -69.31905 dB
>Total loss (path loss +/- antenna gains - spreading loss) = -106.3088 dB
>Specified receive system Noise Figure = 6 dB (includes external noise)
>Calculated receive system sensitivity in 1000 Hz bandwidth = -138 dBm
>Received noise in receiver bandwidth = -96.30875 dBm
>Received noise in receiver bandwidth = S 6
>Receive system noise floor increase in dB = 41.69154 dB

Ok, now realize that a spectrum analyzer's noise floor is typically in the range of -80 dBm to -100 dBm. Resolution bandwidth and sweep speed will determine how much of the signal the spectrum analyzer will capture for display. In other words, it isn't always receiving a given frequency bin. That means the analyzer will see at best a signal 4 dB above its noise floor, and probably will see just a smooth slightly humped response over the spreading bandwidth because of analyzer resolution bandwidth and sweep speed limitations. That's what I claimed, and what I have observed at a reasonable distance from a CDMA source using a Tek 491 spectrum analyzer. (Reasonable in this case was 1/2 mile from a PCS cellsite.)

What a fixed frequency NB receiver will see is intermittent noise spikes, at rate proportional to 1/N. In a limiting FM receiver, that's probably inconsequential. That's what I've observed too. SS signals don't even open the squelch of NBFM receivers. (They do put a buzz on weak NBFM signals, but FM operation is typically done well above the FM quieting threshold.)

Depending on the AGC and noise blanker characteristics of a SSB/CW receiver, and upon the symbol lengths used for the NB signals being received, it may or may not present a problem. Worst case is when the NB symbol lengths are of the same order as PN bits. But the NB symbol lengths commonly employed (IE Morse code signals) are much longer than typical PN bit lengths.

SSB/CW type receivers are very much the minority on VHF/UHF amateur bands, well less than 1% of band usage employs this type of receiver. Nor is there any evidence that's likely to grow by much in the future. Two of our VHF bands already have more than sufficiently large CW exclusive band segments for this sort of usage, so I don't see this as being a big problem.

>> But with a reasonable separation, the energy disappears into the
>>noise floor for any receiving system except one using the same
>>spreading code.
>
>At 10 kM, (admittedly difficult to obtain perfect line of site), the results
>are as follows. How far away do you consider "reasonable separation?"
>
>RESULTS: 0 dBm average UWB transmit power, 100 MHz UWB BW
>Receive antenna = 20 dBi
>
>Frequency = 440 MHz

>Total transmit power = .01 watts
>Transmit spread = 5 MHz
>Receiver bandwidth = 1000 Hz
>Transmit power in 1 Hz = -56.9897 dBm/Hz
>Transmit power in 1000 Hz = -26.9897 dBm
>Transmit antenna gain = 8 dBi
>Receive antenna gain = 8 ; dBi
>Distance to receiver = 10 km
>Free-space pathloss = -105.3191 db
>System loss (path loss +/- antenna gains) = -89.31905 dB
>Total loss (path loss +/- antenna gains - spreading loss) = -126.3088 dB
>Specified receive system Noise Figure = 6 dB (includes external noise)
>Calculated receive system sensitivity in 1000 Hz bandwidth = -138 dBm
>Received noise in receiver bandwidth = -116.3088 dBm
>Received noise in receiver bandwidth = S 2
>Receive system noise floor increase in dB = 21.72057 dB

Even very good spectrum analyzers won't see a signal of this magnitude.

>Don't get me wrong, Gary; I believe firmly that the Amateur Radio Service needs
>to embrace spectrally efficient techniques and do so quickly. Speeched like the
>recent one by Dale Hatfield better be our wakeup call. But making inaccurate
>statements that SS will not interfere with narrowband users is NOT going to
>accomplish that goal; we need to accurately understand the impact in order to
>effect an orderly transition from the present inefficient systems to more
>efficient ones. And, to preseve the diversity of the ARS, we also will need to
>have some separation of some modes; SS and narrowband are generally not
>mutually compatible.

I addressed that above. I don't think that there is any serious problem for
FM operations, which are typically full quieting hard limited signals. SSB
and CW usage is so vanishingly small a proportion of VHF/UHF usage that
I don't think that's a serious issue either. Besides, there are exclusive band
segments already set aside for CW weak signal work on 2 of our bands, so
it is a moot point already there. Similar exclusive segments could be worked
out for the other bands if it becomes necessary, but I doubt that it would.
SS can also be a good weak signal mode. In fact it can be superior against
some weak signal propagation impairments such as auroral flutter and
libration fading. It might actually become the weak signal mode of choice
in the future if it is allowed free rein to develop properly.

Now SS has its own set of issues. I doubt very much that we'll see SS
systems replacing our NBFM repeaters for example. SS receivers don't
survive well in the high RF environments where we place our FM repeaters.
By their nature, SS receiver front ends have to be broad as the proverbial
barn. Coding gain isn't much help against fundamental overload.

Unable to take advantage of narrow cavity filters, it'd take considerably more
robustness in the RF front end of a SS radio to handle the signal levels commonly
encountered on those sites. I don't see much work being done in that direction in
the amateur community. That's too bad, because SS holds out the promise to
better utilize the spectrum currently tied up by FM repeaters which sit idle most

of the time, yet prevent other uses of the frequencies on which they are camped.

I actually see the most promising near term amateur application of SS to be for weak signal operations. That's where their coding gain and robustness against multipath and other forms of dispersive medium really makes them shine.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

478. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <39DCAE9F.AEEB12BF@cybatek.fsnet.co.uk>
Source record: 178360

> So where does the other 99.75w go ??

I find it hard to believe that 99.75w is "Lost" inside the SGC tuner, mine
certainly doesn't perform like this !

I've managed to work across the Atlantic on 80m using short antennas with an
sgc 230 autotuner,
and got a 5/6-9 reports, so it must radiate a fair amount of RF !

Cheers!

MikeT ...

> . Don't know why anyone would even
> try an 8' whip on 75m since only about 1/4w makes it to the antenna
> from a 100w transmitter. Talk about QRP!
> --
> http://www.mindspring.com/~w6rca

479. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39dcd28b.35082674@news.akorn.net>
Source record: 178361

On Wed, 04 Oct 2000 13:08:49 -0700, Bart Rowlett
<BHRowlett@west.raytheon.com> wrote:

>> Despite all that dynamic willywag, my RMS wattmeter stays glued at 100 watts
>> output, regardless of the phase or amplitude of the modulating signal.
>
>Perhaps we are talking about two different transmitter configurations.
>Based on your original post, I assumed you were describing a high
>level plate modulated transmitter whose unmodulated output power was
>100 watts. When 100% modulated by a single sinusoid, the average
>envelope power should increase to 150 watts.

The meter should indicate the same no matter what form of modulator is
used, as long as the signal has the same properties.

>On the other hand, maybe your wattmeter doesn't actually measure
>average RF output power. I seriously doubt it measures RMS power
>either. Most inline RF wattmeters square the rectified, weighted sum
>of the instantaneous voltage and current, and display the result as
>either forward or reverse power. The relative weighting of the
>voltage and current are determined by the characteristic impedance of
>the transmission line the instrument is calibrated for.

I think that is a potential problem, as well as the fact some solid
state low level modulated rigs limit the envelope to the peak power
detected in the ALC system.

My IC 751A is that way.

If you set the carrier for 25 watts and talk, the carrier has a
negative shift during modulation.

I can cure that by adding external bias on the ALC line and using it
to set the carrier level, and then running the power control on the
rig to full power.

When I run a DX100 that has been modified to have clean symmetrical
modulation I see a peak power four times the carrier power on my peak
reading meter. The thing that puzzles me is I see little or no shift
in power at all on my Bird meter, which is supposed to measure average
power. (Unless my memory is bad. I'll have to look again when I gather
up the energy to move that transmitter out of the closet.)

73 Tom

480. Re: here's a 6 meter yagi at good price-a company doing something right

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001005152514.16841.00000378@ng-cc1.aol.com>
Source record: 178362

Hey Al,

You are quite welcome.

I really do like the antenna. Now, if the weather would just cooperate...I put it together 3 days ago...for the last 2 days it has rained like mad here, and we are supposed to get SNOW on Saturday.

73 Doug

481. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: w9nr@aol.com
Message-ID: <20001005154552.11361.00000620@nso-md.aol.com>
Source record: 178363

put a 1 ohm resistor on top of the range

will cure the problem

will be ohm on the range . . .

482. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DCDECA.9FC94B7@eznec.com>
Source record: 178364

Don't know about the end fire array, but Hiram Percy Maxim of ARRL fame didn't invent the Maxim machine gun. That was his father, Sir Hiram Stevens Maxim, who was born in the U.S. but emigrated to England, where he became a naturalized subject and was knighted by Queen Victoria. HP was most known for the invention of the Maxim silencer, originally designed for rifles (and unusable on the pistols of the time) but later adapted to automobile mufflers.

His uncle, Hudson Maxim, was also an inventor who developed a number of advanced explosives used in World War I.

Roy Lewallen, W7EL

Rick Littlefield wrote:
>
> Hiram, as inventor of the machine gun, is also credited with inventing the
> end-fire array.
>
> Rick K1BQT

483. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g1yu404.pminews@ca.news.verio.net>
Source record: 178365
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 5 Oct 2000 11:29:08 -0700, Gary Rotter wrote:

>Phil,
>
>A model ordinance would have a big help in my experience with the City of
>Irvine, CA. My local government agency does not have clue.

The ordianances which I and other VCs have generated are available
from the ARRL Regulatory Information Departmwnt (John Hennessee).
In addition, many of us hand around the Ham-Law reflector.

>I asked the
>planning department what the rules were for amateur radio antennas. They
>insisted that I would be covered by the section of the zoning code that
>refers to "satellite dish antennas". When I asked what the rules were for
>TV antennas I was told that the same section applied. Unfortunately, this
>section of the zoning code makes absolutely no sense in regards to anything
>other than large satellite dish antennas. For example, a conditional use
>permit is required for any antenna which exceeds six feet in any dimension!

More evidence that non-radio people have a hard time
understansing things that the average ham can understand.

Or is it a case that they WANT to make it difficult? I have
run into that with several local governmenmts, inclusing the
city in which I live.

73 de Phil Kane - K2ASP

From a Clearing in the Silicon Forest
Beaverton (Washington County), Oregon

484. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DCDF64.BB05F5EF@eznec.com>
Source record: 178366

That makes sense. RMS is useful when dealing with any randomly distributed quantity, since it equals the standard deviation (as I recall).

Roy Lewallen, W7EL

Bart Rowlett wrote:
>
> Reg Edwards wrote:
> >
> > Roy, quite correct.
> >
> > To refer to RMS watts is meaningless.
> >
> > Only amps and volts have RMS, Average and Peak values. The
> > relationship between these values depends only on the
> > waveshape over a complete cycle - sinewave, square,
> > triangular, etc.
>
> There are a few places where RMS power has application in engineering.
> For example, many types of optical detectors perform a conversion
> (transduction) between optical power and electric current. The
> conversion gain is called the responsivity and is usually expressed in
> amps of detector output current per watt of optical input. Sometimes
> the responsivity is expressed as the quantum efficiency which is output
> electrons per input photon. The two measures are easily interchangeable
> when the optical wavelength is known.
>
> The detector output noise (rms amps / sqrt(Hz)) is often expressed as
> an equivalent input optical noise power. The so called Noise Equivalent
> Power (NEP) is expressed in RMS watts. The measurement of NEP and
> responsivity requires generating a source of optical stimulus whose RMS
> power is known.
>
> bart
> wb6hqk

485. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <rnnpts456064ct06sh91m14ckgrp44kuo4@4ax.com>
Source record: 178367

On Thu, 5 Oct 2000 11:21:27 -0500, "Dennis Hessler"
<spypoint@mindspring.com> wrote:

>My question: how can I keep the bleeping stove from bleeping every
>bleeping time I send RTTY? Thanks in advance.

It just wants a QSL card for a new mode. Send it one.

W7TI

486. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39DCDEB3.DFECEC7@mindspring.com>
Source record: 178368

W9NR wrote:

> put a 1 ohm resistor on top of the range
>
> will cure the problem
>
> will be ohm on the range . . .

Where the beer and the cantaloupe play?

487. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DC334A.5DFFB79F@eznec.com>
Source record: 178397

Jim Kelley wrote:
>
> "William E. Sabin" wrote:
> >
> > Roy Lewallen wrote:
> >
> > > I sometimes see "RMS power" used with respect to audio amplifiers. As
> > > far as I can tell, this is due to ignorance, or perhaps it has some
> > > marketing advantage. But I know of no real use for this value in
> > > everyday electrical or electronic calculations.
> >
> > I found out the answer to this usage of RMS power. The audio folks have
> > co-opted the RMS idea to mean the following: If the signal is a single sine
> > wave, then RMS power is understood to mean the average power output due to
> > that sine wave. It is deceptive to the following extent: An amplifier with a
> > certain "RMS power rating" may go completely flat on peaks that are only a
> > little greater than the RMS rating. Anyway, the use of the term is
> > pervasive.
>
> The way we used to determine RMS power of an audio amplifier was to
> measure the peak sinewave output voltage into the rated load just before
> the onset of clipping, multiply the peak voltage by .707, square that,
> and then divide by the load impedence. By citing the RMS value, one
> would be able to differentiate from those who may have been using peak
> power values in order to make their power figure higher for the sales
> literature.
>
> The idea of trying to adopt a standard way of determining power output
> was to avoid pitfalls similar to those currently enjoyed in the antenna
> market, e.g. 12 dB gain, 3 element Yagis.
>
> 73, Jim AC6XG

The calculation you describe gives the average, not RMS, power, although I don't dispute that it's commonly called "RMS power" in the audio world. (It's also common in the audio world to use speaker cable with alleged 8 ohm characteristic impedance to "match" the speakers.) Calling it RMS power doesn't make it so, though. If you actually do the RMS calculation for power when the voltage and current are sine waves, you get that the RMS value = 0.612 * Vpk^2 / R = (0.738 * V)^2 / R = 1.22 times the average value.

When you're dealing with audio amplifiers, apparently everyone knows that RMS power doesn't really mean RMS power, but average power. But this isn't generally true, so I recommend not using the term "RMS power"

to mean average power in other situations. You certainly won't see the term in engineering texts.

Roy Lewallen, W7EL

488. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DC33E4.DC6DCECE@eznec.com>
Source record: 178398

Bill Aycock wrote:
> . . .
> It appears, from the list of abandoned claims, that what he got aint
> what he thought.

And this is one of several reasons why pending patents don't "cover"
anything or otherwise carry any legal weight. You never know what's
actually going to be patented until, and if, the patent issues.

Roy Lewallen, W7EL

489. MOXON or RAIBEAM ???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "John W. Lawson, Jr." <jlawjr@home.com>
Message-ID: <roYC5.65992$j6.7111716@news1.rdc1.va.home.com>
Source record: 178399

Has anyone built a 20m wire or tubing MOXON ant and if so how does it perform? Any info would be helpful.
Has anyone had any experience w/ 20m RAIBEAM? Again, any info would be helpful.
Thanks for all responses...John.

WB4LFI

490. Re: 75M mobile in a Jeep Cherokee - antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: jefff_b@my-deja.com
Message-ID: <8rhom4rko1@nnrp1.deja.com>
Source record: 178400

J.T.,

Within a week after picking up my new 2001 Jeep Cherokee sport, I put a new Icom 706MKIIG onto the side of the transmission hump, and drilled a big hole on the passenger side rear quarter panel just below the window for a ball mount. I use a hustler 75m resonator (the low power one), and it works just fine in this mounted position, along with one of those big springs off the ball mount. I put the two roof racks back at the rear, and use a short bungee cord to hold a plastic coat-hanger there, with the antenna mast going through it... this keeps the heavy mast/resonator from bending way down at high speeds. I have low branches in my neighborhood, too, but this setup works fine (albiet, noisy when it hits a branch.

I also have a 102" whip that I use for 10m on the ball mount, and it's around 13 feet at the tip, so there's lots of banging branch noise on side streets here in Massachusetts, but no problems anywhere on main roads. This bends at high speeds, too, but no need for the coat-hanger trick with it.

The bottom section of the hustler setup is supposed to resonate at 6m, but I've found that it interacts too much with the side of the vehicle when on the ball mount to be useful. I picked up another 6m antenna with a bottom loaded section, and an adjustable whip, however, that works fine on 6.

The first ball mount I used was a real piece of crap from HRO. I picked up the one that radio shack sells, and it's much more solid.

HRO did have a package of five quick-disconnects, though, that are decent, and I use these to pop whatever antenna I want to work with onto the Jeep, and also to have a quick way of getting the antenna off and out of sight.

As regards the engine noise, it's the fuel pump that gives you the constant high pitch rfi, and, of course, the spark plugs. With the 706, I have nearly complete absence of this rfi in SSB mode when I turn on the dsp noise filter, and the spark plug noise is also eliminated by the noise blanker. If you're going to work AM, however, the fuel pump noise and the spark plug noise will prevent hearing weak signals. Any strong signal on AM (S8 or better), however, will make the engine noise disappear.

If you have trepidations about cutting antenna holes in a vehicle, my experiences have been that it never caused a problem when trading the vehicle in, since a ball mount is not an expensive item to simply leave

on the vehicle when you get rid of it.

All things considered, the suggestion to put your current antenna on the roof will give you good results, although the antenna height may be a problem for you if you're mostly driving on side roads with low branches. Mag mounts also end up scratching up the paint, no matter what precautions you take over the long term. Also, the magnetic mounting, even the big four-bangers, can get whacked when given enough leverage from a really high antenna hitting a heavy branch.

My hustler setup has really worked well, though, and I'm very happy with it. It's versatility in accomodating different antennas with the quick-disconnect is really the best compromise I've found between performance and yet maintaining that "nothing of value in the vehicle at this time" look.

Good luck with your quest, and a big "ATTABOY!" for running such a fine American vehicle!

Jeff B
KA1OGM

In article <stk35e6lahet6b@corp.supernews.com>,
"J.T. Johnston" <jt@central-web.com> wrote:
> I have unsuccessfully tried to run 75M in my Jeep using a Hamstick mounted
> on the trailer hitch. After managing to get it close to resonance (ha, ha!)
> by trimming the whip, I put my trusty MFJ tuner in line and made it match
> the rig. The problem is that nobody can hear me outside of my local area.
> It is nearly impossible to check into our 75M traffic net in the evenings,
> unless I move the rig in the house and hook up to the G5RV.
>
> My question is this: Has anyone had any luck with a similar setup? I
> assume my problem is that the rear of the Jeep is severely distorting my
> radiation pattern, but if I put the antenna on the roof of the Jeep
> (obviously the preferred location), the tip would be over 12' off the
> ground. Though it should stay out of power lines at that height, there are
> several trees in my neighborhood with which it would not get along.
>
> One other thing, my Jeep also puts out a great deal of RFI on most every
> band. Most problematic is the fact that one of the frequencies that is
> strongest in the output frequency of our 2M repeater (147.16). The mobile
> rig is fine, but I have to turn the HT off when I have it in the

Jeep, or
> the squelch will stay open all of the time.
>
> I welcome any helpful advice.
>
> TNX & 73,
> J.T. Johnston, N4ZWV
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

491. Re: 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8rhqag$sl6$1@nnrp1.deja.com>
Source record: 178401

Andy,

An out of the box idea...
Mount the base antenna (2x5/8) on the terrace at an angle and with a
decrative flag hanging from it.... know one will know its an antenna
and @ a 60 degree (0r so) angle it will work just fine!

73
Den W2DEN _._

In article <xHGC5.28736$Cl1.626238@stones>,
andy@equinox22.f9.co.uk wrote:
>
>
> Having recently moved to this house i've had little chance to work
out what
> my neighbours feelings are towards aerials. I have a 2x5/8 2mtrs
(white
> fiberglass) base aerial in the garage that i could bolt to the back
of the
> (terraced) house, i wonder if it's possible to use a mobile aerial on
a
> small bracket for the time being. I'm on fairly high ground and have
so far
> been getting quite good results with just a hand-held with it's little
> 'rubber duck' aerial.
>
> I've noticed that you can get some very nice looking stainless steel
2x5/8
> aerials which ,i hope, would have a very low visual impact. I hav'nt
managed
> to find my radio catalogues yet (i think i packed them !) but i seem
to
> remember reading that some of these areials will work with out a
> ground-plane. Yes,i realise that normally the car acts as the ground
but i'm
> curious to know whether i really have read about these aerials ..
>
> Any ideas ?
>
> Regards
> --
> Andy - G7MJV
> Southampton ,UK
>

>

Sent via Deja.com http://www.deja.com/
Before you buy.

492. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <DYZC5.4440$9o3.59401@news2.rdc1.on.home.com>
Source record: 178402

Proctenna <doc@conduit.net> wrote in message
news:veqnts8in3d3soaolfbk4sjfflhu1jg3dc@4ax.com...
> Gentlemen of the newsgroup:
>
> I am today announcing my patent-pending new invention, the Proctenna.
> This revolutionary device, while amazingly successful, unfortunately
> cannot be described in detail due to it's current pending status.
>
> Briefly, the device is based on a 23" flexible tube, similar to smooth
> electrical flexible conduit, with a special conical tip, which acts as
> an insertion waveguide. The antenna operates on the principle of
> biofeedback, is self tuning, and also self grounding, as long as the
> operator stands barefoot in moist soil. In tests, the device has
> generated much excitement among our users, bringing some, in fact, to
> tears!
>
> I will make additional details available about this thoroughly proven
> and documented device once the US Patent and Trademark Office has
> given it their scholarly and most critical review. The patent
> application was submitted last Tuesday, and they have given me every
> assurance that the patent will be granted by the end of this week.
>
> Stay tuned for some illuminating news over the next few weeks!
>
> Yours truly,
>
> Harding D. Beezler, PhD.
> Creator of Proctenna

Funny!

Barry D.

493. Re: OT: Non-parabolic antenna for TV and satellite

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39DC6D94.CA3AB3F2@hiwaay.net>
Source record: 178403

Pico Tango (?)
Your best bet to buy a good fringe-area antenna is Radio Shack. THey
have several models, graded according to distance. Believe me, you cant
make a better one for several times the $$$.
Hams seem to malign RS, but, really, there is no other near-universal,
"next door availability" source for lots of the goodies we need every
day, but dont seem to find in the junk-box.

Boill-W4BSG

this.aint.it@pluto.wink.net.invalid.ated wrote:
>
> Non-parabolic antenna for TV and satellite reception.
>
> Some day (when my ship comes in) I'll have a twin-set of fully articulated,
> motorized, computer-controlled, tracking, 28' parabolic dishes sitting in my
> back yard (I'll be living on my country estate by then) ready to do some gol
> durn Receiving, make no mistake.
>
> In the mean time, I can find lots of dope on antennas for Radio.
>
> Plus, I can find lots of info on parabolics for Satellite.
>
> What I'm unable to find is non-parabolic antenna info for TV reception.
>
> I spent a bunch of time at W4RNL's web site looking at links and referenced
> web pages, and while there is info about VHF/UHF array antennas (it's the 50's
> all over again) none of the discussion references back to hardware or
> electronic requirements for TV (there was *some* discussion about using an
> array design for satellite reception [Wow !] but again no link back to making
> it all work for the TV band freq.'s, or how to pipe it to hardware.
>
> So, I'm looking for the correct, all-purpose, antenna news group, the
> definitive Web site, *or* The Seven Lost Cities of Gold (which ever seems the
> most practical target) and you guys were as close as I could get.
>
> If you know of a appropriate group or site, I would be very appreciative for
> directions to same.
>
> I would just like to find a cheap way to get reception going, while I study up
> for that do-it-yourself satellite system that's next on the agenda.
>
> I'm in a single story, duplex apartment, about 60 miles from a major,
> metropolitan, broadcast area.
>

> That puts me at the limits for good LOS reception, plus, because of the
> surrounding foothills it's easy to wind up in a broadcast "shadow".
>
> I've been to Wal-Mart, and for $50.- you can get an RCA or Motorola,
> amplified, rabbit ears-and-a-loop, set-top that is good for a claimed 40 some
> Db gain.
>
> It's been a long time since I messed around with antenna's (back in the
> Service) so I don't want to be missing out on some slick, low-cost
> alternative, that works 10 times better, just because of my ignorance.
>
> Your feedback is invited, T.I.A., Pico Tango

494. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001005080816.18101.00000340@ng-fl1.aol.com>
Source record: 178404

>From examining the new patent- it appears that there is a fractal
>antenna patent, but , according to the claims, it is severely limited.
>As an example, unless I am reading it wrong, it only covers antennas
>having conductive material on BOTH sides of a substrate. Any antenna on
>only one surface, or of wire, is not even related.
>
>The additional discussion covers LOTs of things, but, as has been
>pointed out, the claims are all that defines anything. There is some
>discussion in there that highlights the recent failed claims regarding
>the possibility of making a small antenna that beats the fractal
>version. (the failure being of the fractal version), and at least one
>claim concerned with the perimeter of the fractal that is obviously
>false.
>
>It appears, from the list of abandoned claims, that what he got aint
>what he thought.
>
>Bill-W4BSG
>
>Bill
>
>W4JLE wrote:
>>
>> I am somewhat curious as to how you can patent a fractal antenna,
>> particularly when you have stated here in the newsgroup and in your white
>> paper that Yagi's are fractals as well. In fact, have you not stated that
>> any random antenna is a fractal? How did you get around the "prior art"?
>>
>> I
>> "Fractenna" <fractenna@aol.com> wrote in message
>> news:20001002140653.29166.00000379@ng-cg1.aol.com...
>> > >Microstrip fractal patch antenna for multi-band
>> > >communication
>> > >
>> > >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
>> > >
>> > >Defense Electronics Research Lab, Hyderabad, India
>> > >
>> > >Abstract
>> > >
>> > >A novel square microstrip fractal patch antenna in a
>> > >Sierpinski carpet is proposed for three-band operation.
>> > >Measured results indicate that the return loss is better
>> > >than 10 dB and that the gain is greater than 7 dB in

>> > >each band. This antenna is an attractive candidate for
>> > >wireless, satellite and mobile communication
>> > >applications. [Author abstract; 6 Refs; In English]
>> > >
>> > >Index Terms: Microstrip antennas; Fractals; Wireless
>> > >telecommunication systems; Satellite communication
>> > >systems; Mobile telecommunication systems; Microstrip
>> > >fractal patch antennas
>> > >
>> > >
>> > >Electronics Letters
>> > >Volume 36, Issue 14 2000
>> > >Pages 1179-1180
>> > >
>> > >--
>> > >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
>> > >via Mailgate.ORG Server - http://www.Mailgate.ORG
>> > >
>> >
>> > As of tomorrow, said descriptions are covered by patent.
>> >
>> > With best regards,
>> >
>> > Nathan Cohen, Ph.D.
>

Fractal element antennas are patented and patent pending.

My experience with other inventors is that when they write a highly documented and expansive application, and have a finite set of claims for that given patent, there are likely to be many, many other patents to follow which capture other pieces of that description.

If not, then the patent constitutes a publication and thus prior art--which prevents others from obtaining patents on that subject.

As to fractal antennas, there does not exist a non-fractal design that beats the MI2.

I will announce the FRACTAL ANTENNA CHALLENGE results shortly.

Hope this helps.

73,
Chip N1IR

495. Re: OT: Non-parabolic antenna for TV and satellite

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39DC6EF1.31F769EB@hiwaay.net>
Source record: 178405

"Fat-Finger-Syndrome" strikes again!! The Sig should not have an "o".

Bill-W4BSG

Bill Aycock wrote:
>
> Pico Tango (?)
> Your best bet to buy a good fringe-area antenna is Radio Shack. THey
> have several models, graded according to distance. Believe me, you cant
> make a better one for several times the $$$.
> Hams seem to malign RS, but, really, there is no other near-universal,
> "next door availability" source for lots of the goodies we need every
> day, but dont seem to find in the junk-box.
>
> Boill-W4BSG
>
> this.aint.it@pluto.wink.net.invalid.ated wrote:
> >
> > Non-parabolic antenna for TV and satellite reception.
> >
> > Some day (when my ship comes in) I'll have a twin-set of fully articulated,
> > motorized, computer-controlled, tracking, 28' parabolic dishes sitting in my
> > back yard (I'll be living on my country estate by then) ready to do some gol
> > durn Receiving, make no mistake.
> >
> > In the mean time, I can find lots of dope on antennas for Radio.
> >
> > Plus, I can find lots of info on parabolics for Satellite.
> >
> > What I'm unable to find is non-parabolic antenna info for TV reception.
> >
> > I spent a bunch of time at W4RNL's web site looking at links and referenced
> > web pages, and while there is info about VHF/UHF array antennas (it's the 50's
> > all over again) none of the discussion references back to hardware or
> > electronic requirements for TV (there was *some* discussion about using an
> > array design for satellite reception [Wow !] but again no link back to making
> > it all work for the TV band freq.'s, or how to pipe it to hardware.
> >
> > So, I'm looking for the correct, all-purpose, antenna news group, the
> > definitive Web site, *or* The Seven Lost Cities of Gold (which ever seems the
> > most practical target) and you guys were as close as I could get.
> >
> > If you know of a appropriate group or site, I would be very appreciative for
> > directions to same.
> >

> > I would just like to find a cheap way to get reception going, while I study up
> > for that do-it-yourself satellite system that's next on the agenda.
> >
> > I'm in a single story, duplex apartment, about 60 miles from a major,
> > metropolitan, broadcast area.
> >
> > That puts me at the limits for good LOS reception, plus, because of the
> > surrounding foothills it's easy to wind up in a broadcast "shadow".
> >
> > I've been to Wal-Mart, and for $50.- you can get an RCA or Motorola,
> > amplified, rabbit ears-and-a-loop, set-top that is good for a claimed 40 some
> > Db gain.
> >
> > It's been a long time since I messed around with antenna's (back in the
> > Service) so I don't want to be missing out on some slick, low-cost
> > alternative, that works 10 times better, just because of my ignorance.
> >
> > Your feedback is invited, T.I.A., Pico Tango

496. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <IW_C5.18988$tl2.1265318@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178406

Walter Maxwell" <w2du@journey.com> wrote in message
news:bAHC5.4126$mC.261654@monger.newsread.com...
The setup for the problem consists of a lossless transmission line of any length, with a characteristic impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0 of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main transmission line at any place along the line. The stub can be either a l /2 line at frequency f, short-circuited at the far end, or a l /4 line at frequency f, open-circuited at the far end.

Now for questions concerning what occurs after the stub is connected.

1. What is the amount of current now flowing in the load?

1.. 2.0 amp
2.. 1.0 amp
3.. 0.5 amp
4.. 0.0 amp
5.. None of the above
Answer: D - 0.0 amp

2. What is the line voltage at the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
Answer D - 0.0 volts

3. What is the line voltage l /4 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
Answer A - 2.0 volts
4. What is the line voltage l /2 toward the source from the stub point?

1.. 2.0 volts
2.. 1.0 volt
3.. 0.5 volts
4.. 0.0 volts
5.. None of the above
Answer D - 0.0 volts

5. What occurs on the line at the stub point?
1.. Voltage and current are totally transmitted past the stub point and their energies are totally absorbed in the load.
2.. Voltage and current are partially transmitted past the stub point and partially reflected back toward the source.
3.. Voltage and current are totally reflected back toward the source.
D. None of the above

Answer: The answer to question 5 is quite complex. All of the answers to questions 1 through 4 can be determined based on looking at only the steady state conditions as they are in fact, steady state answers. We do not even have to consider the concept of a virtual short circuit to answer these questions, just basic transmission line theory.

To understand what is really happening at the connection point between the stub and the main transmission line a transient analysis of the transmission line system is required. The issue is that no *net* power is flowing past the stub point. I.E, at the stub point, the steady state reflected power in the main line is equal to the steady state forward power in the main line. No net power is being delivered past the stub connection point. If you were to place a wattmeter between the stub point and the antenna, you would measure no forward power and no reflected power. If you were to place a wattmeter in the stub line, you would measure forward power and reflected power. They would be equal.

497. Re: Hygain 18AVT Info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Roger Stierman <r-stierman@ti.com>
Message-ID: <39DC7D67.BFB6FD29@ti.com>
Source record: 178407

The manual I have says 2 kW PEP 40M-10M, 1 kW PEP on 80M.

I converted the manual to a soft copy (PDF), if you want it emailed.
Got it from another good ham on the group!

--
Best Regards,

Roger J. Stierman, WA0VYU

498. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <k7%C5.18991$tl2.1267936@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178408

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:39DB373A.1773@pacbell.net...
> Hi, Steve,
> I believe you are absolutely correct, and the reason
> I believe so is that, in the steady state, contributions from
> waves that have been "cancelled" in one part of a circuit
> still have to be added together to obtain the correct results for
> calculations in another part of a circuit.
> For instance, take the quarter wave transmission line transformer.
> Part of the voltage on the load end of the transformer will be
> contributed by a reflection on the source end. This voltage
> contribution doesn't go away when the steady state is reached,
> even though the voltage wave at the source end has been "cancelled."
> Evidently, in order to understand transmission lines one has to
> be a fanatical believer in the superposition theorem that
> Gary Coffman likes so much. Thank you for your patience in
> explaining this matter. The entire argument has been very
> interesting.
>
> 73,
>
> Tom Donaly KA6RUH
>
Tom:

Thank you for the comments.

Steve

499. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <di%C5.18995$tl2.1268081@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178409

"CAM" <cam2338@bigfoot.com> wrote in message
news:39DBB940.A5D4E92B@bigfoot.com...
>>
> > Do not use the Smith Chart yet, please.
>
> How about the equations that generate the Smith Chart? :-) I'll take a
> look at your puzzle after choir practice.
> --
> http://www.mindspring.com/~w6rca

No Smith Chart or Smith Chart equations. Just voltage and power at the junction point. We'll do the Smith Chart later - that's an easy solution to the problem.

73,
Steve

500. Re: CATV hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <39dc872e$0$35010$44a10c7e@news.net-link.net>
Source record: 178410

CATV 75 ohm hardline works well for me--3 230 foot runs so far and will likely add some more this fall and winter. No transformers. 1 run to a 2m/440 beam, 1 run to a 5 element 6 meter beam, and a run to a Cushcraft X-7 hf triband beam. All antennas have swr/bandwidth to factory specs and a tuner just flattens the line a bit more. Nothing over 2.1:1 You can make connectors from copper pipe fittings, hose clamps and double SO-239 connectors. Commercial hardline to PL-259 or SO-239 are available but expensive. Look hard for them at swaps--they are rare and don't stay out long.

If you want to be a purest--use transformer at each end of the hardline where you hook your coax jumpers, but then you are no longer multi-frequency.
MatJake wrote in message <20001002003424.00291.00000082@ng-mg1.aol.com>...
>Ok I have another question. Since you guys were very helpful in helping me with
>my Helical antenna question, maybe you can help me with this one.
>
>I have some CATV hardline. I remember a few years back articles and people
>selling transformers and the like. I was wondering if any one had any thoughts
>good, bad etc on the use of 75 ohm hardline.
>
>Would this hardline be suitable for a set freq. or can I get away with using it
>on HF
>etc.
>
>.
>
>Thanks and 73
> Matt
>
>
>
>
>

501. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001005095840.25108.00000179@ng-da1.aol.com>
Source record: 178411

Hiram, as inventor of the machine gun, is also credited with inventing the end-fire array.

Rick K1BQT

502. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <39dc8916$0$35012$44a10c7e@news.net-link.net>
Source record: 178412

Yes, but you still need a counterpoise.
Wim ELBERS wrote in message <8rdg25ukm1@news1.skynet.be>...
>Afishing rod (DK9SQ Fiberglass Telescopic Tower) plus a SG230smartuner and
>about 12m wire and there you go on the air!
>ON6TZ Wim
>
>
>

503. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <39dc89c1$0$35020$44a10c7e@news.net-link.net>
Source record: 178413

What do you have for the "ground" or "counterpoise" in your yard, around your house, on your house? Copper sprinkler system? Chain link fence? Can you put out a readial system in the yard? Can you elevate a radial system? Does your antenna need to be "hidden" from CCR police? Inverted L over radials with SGC 230 coupler will give you good multi-band performance and be practically invisible.

littlejohn wrote in message <8rc6gn$1jej$1@news.okay.net>...
>Due to restrictions I am planning to install a multiband HF vertical
>groundplane (3,5 - 28 MHz). I don't expect any problems on the higher
>bands, but I do need some tips concerning a grounding system for 80
Meters..
>I realize a vertical is not the ideal solution, but if you want to get on
>the air, you'll try anything !!!
>
>Thanks in advance,
>
>de DL1HWX -- John
>
>
>

504. Re: ? on Icom IC-T7H

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <39dc8af2$0$35014$44a10c7e@news.net-link.net>
Source record: 178414

You would need to access an autopatch on a local repeater and have the caller input the correct tones to open the squelch on your HT. It is not true "pager" of the sort that is normally carried on the waist and you pay a monthly fee to get "beeped" The page function is purely a tone thing to be used by hams calling hams that do not want to monitor all the chit chat on a repeater or simplex freq. If the repeater you are listening to mutes tones, you can't use the page feature on that repeater. Hope this helps.
K4JDP@webtv.net wrote in message
<9324-39D7A0A7-49@storefull-135.iap.bryant.webtv.net>...
Just purchased this duo-band HT. I would like to use it as a beeper/pager. The manual doesn't give details on how to call from a home phone to the HT to use as a beeper/pager. Does anyone here know how?

Sincerely,
John

505. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39DC8C6D.3C008449@wb6hqk.ampr.org>
Source record: 178415

Reg Edwards wrote:
>
> Roy, quite correct.
>
> To refer to RMS watts is meaningless.
>
> Only amps and volts have RMS, Average and Peak values. The
> relationship between these values depends only on the
> waveshape over a complete cycle - sinewave, square,
> triangular, etc.

There are a few places where RMS power has application in engineering. For example, many types of optical detectors perform a conversion (transduction) between optical power and electric current. The conversion gain is called the responsivity and is usually expressed in amps of detector output current per watt of optical input. Sometimes the responsivity is expressed as the quantum efficiency which is output electrons per input photon. The two measures are easily interchangeable when the optical wavelength is known.

The detector output noise (rms amps / sqrt(Hz)) is often expressed as an equivalent input optical noise power. The so called Noise Equivalent Power (NEP) is expressed in RMS watts. The measurement of NEP and responsivity requires generating a source of optical stimulus whose RMS power is known.

bart
wb6hqk

506. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ri30cenu0@208.207.71.155>
Source record: 178416

Doesn't "patent pending" just insure prior patent rights to the patentee AFTER and only after a pantent is issued - IF and only if it is issued following all the investigation, serving as notice to all that the inquiry is in progress?

Not only that, is there anything that makes it a fraudulant activity of claiming that certain features are "patent pending" when they are not even a part of the claims?

Dick

Roy Lewallen wrote:

> Bill Aycock wrote:
> > . . .
> > It appears, from the list of abandoned claims, that what he got aint
> > what he thought.
>
> And this is one of several reasons why pending patents don't "cover"
> anything or otherwise carry any legal weight. You never know what's
> actually going to be patented until, and if, the patent issues.
>
> Roy Lewallen, W7EL

507. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DC8E8A.97ED5B3F@bigfoot.com>
Source record: 178417

VE9SRB wrote:
> No Smith Chart or Smith Chart equations. Just voltage and power at the
> junction point. We'll do the Smith Chart later - that's an easy solution to
> the problem.

Since the math is messy, let me say how it can be done. Conservation of energy says that there is 38.4615w reflected on the coax. That gives a reflection coefficient on the coax of 0.62 and a reflection coefficient on the twinlead of 0.54. We have an equation where Rho is a function of RL, XL, and Z0. Since the twinlead is one wavelength long, the virtual impedance is the same at the 50/300 junction as at the load. We now have two simultaneous equations and two unknowns, RL and XL, for which we can solve.

Of course, the intersections of those two SWR circles on the Smith Chart are the solutions. There are also probably two negative resistance solutions.

Steve, let me say that I was not trying to slay any of the sacred cows of EM field theory. I give presentations to typical ham clubs where I introduce the concept of matching an antenna system directly to a 50 ohm transmitter by varying the length of the feedline to effect a match without an antenna tuner (transmatch for the OOTC members). In order to convey the concept, I introduce the Smith Chart along with the SWR circle virtual impedance transformation. You can view one of my slides at:

http://people.delphi.com/cecilmoore/scswr2.gif

Would you have me throw that slide out and instead teach EM field theory in the two hour allotted time?
--
http://www.mindspring.com/~w6rca

508. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ri3inenu1@208.207.71.155>
Source record: 178418

Besides all that, wouldn't one be exposing himself to liability in the form of a damages suit, and maybe harassment, for falsely claiming infringement or threatening others with action against their use of material that an alleged patentee claims to have under patent or pending, when it was not a valid or even claimed part of any patent application?

Looks to me like a certain Piddly Hippee Dee who reguarly posts here is operating under the old saw that the best defense is the first offense. Wonder when it'll all blow up in his face.

Dick

Roy Lewallen wrote:

> Bill Aycock wrote:
> > . . .
> > It appears, from the list of abandoned claims, that what he got aint
> > what he thought.
>
> And this is one of several reasons why pending patents don't "cover"
> anything or otherwise carry any legal weight. You never know what's
> actually going to be patented until, and if, the patent issues.
>
> Roy Lewallen, W7EL

509. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:07:35 UTC
From: rwclark@seanet.com
Message-ID: <39e6c584.439664113@news.seanet.com>
Source record: 178386

On Wed, 4 Oct 2000 18:16:18 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Rick, K1BQT wrote:
>"Shouldn`t this be a cut-and-dried issue after 75 years?"
>
>Yes, and it is. The FCC specifies a measured common point impedance, and
>the reading of an r-f ammeter at this point, as how the power output of
>the a-m broadcast station shall be determined. The rules and test
>questions specify that a current increase in the r-f common point
>reading of 22.5% indicates 100% modulation.
>
>A separate modulation monitor is required to improve monitoring. There
>is a carrier level set meter which calibrates the monitor and also
>indicates non-linear modulation as the carrier level set meter will
>dodge on non-linear peaks. The range of the percent modulation meter
>starts at zero and thus gives a much better indication of modulation
>than a current meter which only increases by 22.5%. The meter action is
>much faster than that of a thermal r-f ammeter.
>Also, the modulation monitor is usually equipped with an alarm for peaks
>exceeding 100%. Usually this is a flashing lamp and sometimes this is
>augmented with an audible alarm. What`s more, the modulation monitor
>doesnt have to even be located on the station site. It can be almost
>anywhere the station can be received well.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Your comments are quite true. I've seen a number of these instruments
cross my bench for calibration. Common manufacturers include Marconi
and Cushman (maybe Bruel&Kjaer, if memory serves - not even sure of
the spelling for that matter).

73's
Richard Clark, KB7QHC

510. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:29:58 UTC
From: ccom2@socket.net
Message-ID: <39dbcb32.10631187@news.socket.net>
Source record: 178387

Texas Towers at
http://www.texastowers.com

John Harper <ae5x@qsl.net> wrote:

>Good morning all,
>
>After years of reading about home-made Yagis, verticals, quads,
>etc that use aluminum tubing, I finally decided to build
>something (2 el vert for 80m) myself. A lot of articles in QST
>and various books call for using 12' sections of aluminum with
>diameters ranging from 1-1/4" to 1/2" that will "telescope" into
>each other in order to achieve the desired length. I went to
>Home Depot then Loews and then a local hardware store and not
>only do they not have it, they don't have any idea where I can
>get my hands on even a 10' length of aluminum. Who sells this
>stuff?! Seems to be as scarce as hen's teeth around here.
>
>Thanks & 73,
>
>John Harper, AE5X
>HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
>Outdoor QRP http://www.qsl.net/ae5x

511. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 00:37:18 UTC
From: k1bqt@aol.com
Message-ID: <20001004203718.18197.00000277@ng-fl1.aol.com>
Source record: 178388

This is proving more educational than I suspected!

Rick K1BQT

512. DENVER--4 element 20 meter beam FS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 02:31:31 UTC
From: "RoyaltyFreePhotos.com" <rfimages@yahoo.com>
Message-ID: <39DBE837.7EE763AC@yahoo.com>
Source record: 178389

I have a 4 element, full size 20 meter bean for sale.

It's a Telex (Hy-gain) 204BA-S. 8.2 dB gain. The bean is build like a tank so it will withstand very high winds. If you want to put out a killer signal on 20 meters, this is what you need. Instrudtion manual included.

The beam is on the ground and ready for you to pick up.

The price is $175. It is in great shape.

The beam is located in the Denver Area.

73,
Bill
rfimages@yahoo.com

513. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 02:55:49 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <V4SC5.2808$np1.369096@newshog.newsread.com>
Source record: 178390

Don't forget that you want "seamless" tubing and not rolled.

It is difficult to find and quite often expensive.
For a mast I looked at some 2 1/2 inch OD tubing with 3/16ths wall X 24 feet long that was around $80, while the seamless version was $249.

1 1/2 inch seamless with 3/16ths wall was $157 and 2 inch with 1/4 inch wall was $157.50

Now, this is a lot heavier than the stuff used in antennas.
Most Aluminum used in antenna booms will have 0.058 wall and be slip fit with only about .004 clearance. Definitely no burrs, sand, or dents allowed.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"John Harper" <ae5x@qsl.net> wrote in message
news:39DB63BF.5BE8D590@qsl.net...
> Good morning all,
>
> After years of reading about home-made Yagis, verticals, quads,
> etc that use aluminum tubing, I finally decided to build
> something (2 el vert for 80m) myself. A lot of articles in QST
> and various books call for using 12' sections of aluminum with
> diameters ranging from 1-1/4" to 1/2" that will "telescope" into
> each other in order to achieve the desired length. I went to
> Home Depot then Loews and then a local hardware store and not
> only do they not have it, they don't have any idea where I can
> get my hands on even a 10' length of aluminum. Who sells this
> stuff?! Seems to be as scarce as hen's teeth around here.
>
> Thanks & 73,
>
> John Harper, AE5X
> HW-9, OHR-100A/20, NC40A, SST/30, SST/40, DSW/20
> Outdoor QRP http://www.qsl.net/ae5x

514. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 02:58:47 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <H7SC5.2809$np1.369168@newshog.newsread.com>
Source record: 178391

And one more thought...You probably want to use T-6 6061 alloy for strength
and hardness.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"John Harper" <ae5x@qsl.net> wrote in message
news:39DB63BF.5BE8D590@qsl.net...
> Good morning all,
>
> After years of reading about home-made Yagis, verticals, quads,
> etc that use aluminum tubing, I finally decided to build
> something (2 el vert for 80m) myself. A lot of articles in QST
> and various books call for using 12' sections of aluminum with
> diameters ranging from 1-1/4" to 1/2" that will "telescope" into

515. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 03:49:32 UTC
From: dputnick@alumni.caltech.edu
Message-ID: <8rgtoc$qut@gap.cco.caltech.edu>
Source record: 178392
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <39DB7ECA.536C1AFB@inreach.com>,
William F. Hagen <whagen@inreach.com> wrote:
>if both the house and the senate passed it unamimously, why not just
>override the veto and tell the governor to shove it.

Normally, they could. Unfortunately the legislature recessed at the
end of August until the next term.
--
Don Putnick
dputnick@alumni.caltech.edu

516. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 03:55:21 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g1x7td1.pminews@ca.news.verio.net>
Source record: 178393
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 04 Oct 2000 12:02:34 -0700, William F. Hagen wrote:

>if both the house and the senate passed it unamimously, why not just
>override the veto and tell the governor to shove it.

Good question.

73 de Phil Kane - K2ASP
ARRL Volunteer Counsel

517. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 04:38:34 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <eBTC5.2813$np1.371700@newshog.newsread.com>
Source record: 178394

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"MatJake" <matjake@aol.com> wrote in message
news:20001004143114.05326.00000229@ng-fc1.aol.com...
> John,
>
> What I have done is gone to a metal supply place. Look in your yellow
pages
> under
> Aluminum tubes
> Metal Supply
> Tubing
> You can also order from Texas Towers but the freight will probably kill
you.

As long as the package is not oversize the freight shouldn't be too bad.

I just received two reels of Times Wire LMR 400 from Texas Towers. A thousand foot spool weighs 80#. and the whole thing was less than $40 as I recall.

Most of the antennas I've put together only use 6' lengths.
Remember that you can splint the stuff.

2" OD 0.058 wall is just right for 1.938 to slip in with 0.004 clearance
So two 6' sections can make a very strong 12' section. Some use as much as 2 feet of overlap, but you could easily get by with half that. Then ensert a 6' length of 1.938 in the end of that for 18 feet and so on.

It might cost a bit more in shipping, but using 8 foot sections which I believe can be shipped UPS would allow for much taller masts/verticals.

Years back Dentron made a 40 meter 1/4 wave vertical, but out of smaller diameter sections. I don't recall that they told us to use guys, but a few strategically placed nylon ropes did wonders.

The design was extremely simple with the base being a piece about 18 inches long with each end bent over to form a shallow C shape. There were holes drilled int he end and PVC pipe slipped over the aluminum tubing for insulators.

Yes there were shallow ribs stamped into the mount, but it was still simple and worked very well.

Roger

>
> If you go to a metal supply place tell them what you want to do and they
will
> be more the glad to assist you at least the ones around here were helpful.
>
>
> Hope this helps,
> Matt

518. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 05:11:16 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39DC0D74.F6220007@hiwaay.net>
Source record: 178395

From examining the new patent- it appears that there is a fractal antenna patent, but , according to the claims, it is severely limited. As an example, unless I am reading it wrong, it only covers antennas having conductive material on BOTH sides of a substrate. Any antenna on only one surface, or of wire, is not even related.

The additional discussion covers LOTs of things, but, as has been pointed out, the claims are all that defines anything. There is some discussion in there that highlights the recent failed claims regarding the possibility of making a small antenna that beats the fractal version. (the failure being of the fractal version), and at least one claim concerned with the perimeter of the fractal that is obviously false.

It appears, from the list of abandoned claims, that what he got aint what he thought.

Bill-W4BSG

Bill

W4JLE wrote:
>
> I am somewhat curious as to how you can patent a fractal antenna,
> particularly when you have stated here in the newsgroup and in your white
> paper that Yagi's are fractals as well. In fact, have you not stated that
> any random antenna is a fractal? How did you get around the "prior art"?
>
> I
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001002140653.29166.00000379@ng-cg1.aol.com...
> > >Microstrip fractal patch antenna for multi-band
> > >communication
> > >
> > >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
> > >
> > >Defense Electronics Research Lab, Hyderabad, India
> > >
> > >Abstract
> > >
> > >A novel square microstrip fractal patch antenna in a
> > >Sierpinski carpet is proposed for three-band operation.
> > >Measured results indicate that the return loss is better
> > >than 10 dB and that the gain is greater than 7 dB in
> > >each band. This antenna is an attractive candidate for
> > >wireless, satellite and mobile communication

> > >applications. [Author abstract; 6 Refs; In English]
> > >
> > >Index Terms: Microstrip antennas; Fractals; Wireless
> > >telecommunication systems; Satellite communication
> > >systems; Mobile telecommunication systems; Microstrip
> > >fractal patch antennas
> > >
> > >
> > >Electronics Letters
> > >Volume 36, Issue 14 2000
> > >Pages 1179-1180
> > >
> > >--
> > >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
> > >via Mailgate.ORG Server - http://www.Mailgate.ORG
> > >
> >
> > As of tomorrow, said descriptions are covered by patent.
> >
> > With best regards,
> >
> > Nathan Cohen, Ph.D.

519. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-05 05:39:40 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DC141C.AFC33D29@bigfoot.com>
Source record: 178396

Richard Clark wrote:
> Does the IEEE dictionary have an entry for "knows?"

Who nose what's real and what's snot?
--
http://www.mindspring.com/~w6rca

520. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001006042455.16579.00000577@ng-cr1.aol.com>
Source record: 178169

>As all antennas are fractal (per your proclamation) the winning antenna has
>to be a fractal. Now let's see if you have enough integrity to admit that
>Steve's designs beat the M12.
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001005080816.18101.00000340@ng-fl1.aol.com...
>As to fractal antennas, there does not exist a non-fractal design that beats
>> the MI2.
>>
>> I will announce the FRACTAL ANTENNA CHALLENGE results shortly.
>>
>> Hope this helps.
>>
>> 73,
>> Chip N1IR
>>
>

1)

Please publicly quote where I have said:" all antennas are fractal". This is a
prevarication from you;
2) No one named "Steve" submitted an entry.

73
Chip N1IR

521. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DD8EAF.3869D7B8@eznec.com>
Source record: 178170

ehsjr@bellatlantic.net wrote:
>
> Congratulations! We've all been trying to get more range out
> of our antennas - you've done it!
> Sorry - couldn't resist.
> Seriously - first check the obvious. Make sure you have a good
> ground to the frame of the range. That's a safety issue - and might
> have some bearing on the RFI. As to ferrite chokes - you'll have
> one hell of a time attempting to choke the supply cord to the range.
> You're going to need to go inside the range to use ferrites, and you
> don't want them on the heavy wiring.

I wouldn't recommend putting ferrites inside the range unless you know exactly what you're doing. It's vitally important that no significant common-mode current should flow in the winding. Otherwise, the core will present an impedance to that current, and severe overheating of the core could result. This could cause a fire or violent shattering of the core. (I honestly don't know how much impedance you'd get from a typical core at 60 Hz, but at the currents involved in a stove, it wouldn't take much to cause a serious hazard.) When putting cores on a normal power cord, the potential problem is easily avoided by simply passing both conductors through the core(s) together. Inside the stove, the conductors are separated, and you'd have to make sure that any current-carrying conductor going through the core(s) is accompanied by one which always carries an equal and opposite current.

Roy Lewallen, W7EL

522. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rk7si$p7$1@plutonium.btinternet.com>
Source record: 178171

- - and the moral is : "Don't confuse radiation resistance
with feedpoint impedance."

Reg

523. Re: Would you like to recieve $50,000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Unknown_User <UserID@invalid.domain.com>
Message-ID: <39DDA4E4.B2E69C25@invalid.domain.com>
Source record: 178172

X-Trace: news1.ucsd.edu 970798176 21812 132.239.1.1 (6 Oct 2000 02:09:36 GMT)
X-Complaints-To:usenet@news1.ucsd.edu

Now if eveyone in the group were to forward a copy to his ISP...
mailto:usenet@news1.ucsd.edu

daniel@abc.COM wrote:

> --=200010051956=
> Content-Type: text/plain;charset=US-ASCII
>
> Well, I finally did it. I signed up for the 50K Club! You can too.
> It's only $10 in PayPal money, so I said "What the heck!"
>
> This is brand new, and all you need to do is sign up 10 people who sign up 10 people, etc. If you can do that then you should have $50,000 in your PayPal account before it's all over.Yes,I said FIFTY THOUSAND DOLLARS!
>
> Start now, and whatever you earn is put directly into your PayPal account by your downline. Nobody receives money ahead of you. Someone joins, and five minutes later it's in your account! It's unreal!! Fill your checkbook!! No more building downlines for someone else. What you earn you get! You are thinking maybe you have seen a program like this one before?? You haven't!! There hasn't been one like this before. What makes this Club different is that it works!
>
> Guaranteed!!You start getting paid with your first sign-up. Plus, every sign-up and every payment is verified so no one can cheat or short-change the system! YOU WILL GET
> PAID! How much money you make is up to you! Need $10,000 in the next 10 days?
>
> You can have it if you get going immediately! You must take a look at this and get started NOW! Take control TODAY!
>
> This is brand new, so join RIGHT AWAY. You don't want your friends, neighbors or family to join under someone else, do you?
>
> If you don't already have a PayPal account, you will need one. You can apply for one and not only is it FREE to set up, they even PAY YOU $5.00 for opening a new account. I'll send you the necessary info!
>
> Quote: "Even if you are on the right track, you will get run over if you just sit there" [Will Rogers]
>
> Here's what you get the instant you are confirmed:
>
> Advertisement Submission Software. (Fully Functional)

> Ad Blaster Software. (Fully Functional)
> Search Engine, Directories List, FFA Blaster Software. (Fully Functional) eMail Merge Software. (Fully Functional)
> Newsgroups Blaster Access.
> Downloadable Ezines.
> Full Subscribe, Send, and Unsubscribe opt-in list.
> (1 million + subscribers!)
> No-Store Email Address Availability.
> Off-Line one of a kind Newspaper Ad Submission Software Availability.
> Personal Information Manager complete with Calendar, To-Do List, Email Portal,Contact List, Etc.
> Daily News, Weather, Sports, Entertainment Horoscope PortalDomain Name Registration.
> Articles For Success.
> Full Customer Support.
>
> Too get the full details, just respond with a blank email to:
> davidad@usa.net with the subject line 50kclub
>
> or click below
> mailto:davidad@usa.net?subject=50KClub!
>
> This is a one time email. If you would like to be removed please send an email to
>
> mailto:davidad@usa.net?subject=remove
>
> --=200010051956=--

524. Re: Please explain

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Unknown_User <UserID@invalid.domain.com>
Message-ID: <39DDA5AC.E91CE1BB@invalid.domain.com>
Source record: 178173
Cross-posted to: rec.pyrotechnics,rec.radio.amateur.antenna

Why not let this clown's ISP in on this GREAT DEAL? Forward to:
mailto:dns-admin@QWESTIP.NET

Domain Name: QWEST.NET

Administrative Contact, Technical Contact, Zone Contact, Billing Contact:
Qwest Communications (QC271-ORG) dns-admin@QWESTIP.NET
Qwest Communications
4250 North Fairfax Drive
Arlington, VA 22203
USA
703-363-0220

lhbjgz@SECONDRING.COM wrote:

> Get in now THEY are going to make it BIGG!!
>
> I will share my referals with you if you email and ask!!
> Of course you must send me the names of 5 people you signed up ;)
>
> http://www.alladvantage.com/go.asp?refid=BNO052
>
> SREYNOLDS@SECONDRING.COM
> nkzrqlvoznkp

525. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DD95A7.5A0EC2A5@dvol.com>
Source record: 178174
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Phil Kane wrote:

> On Wed, 04 Oct 2000 12:02:34 -0700, William F. Hagen wrote:
>
> >if both the house and the senate passed it unamimously, why not just
> >override the veto and tell the governor to shove it.
>
> Good question.

>
Glitch in the balance of powers theory.
>

> 73 de Phil Kane - K2ASP
> ARRL Volunteer Counsel

>
w3rv

526. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DDA422.FD1EA2BC@dvol.com>
Source record: 178175

Bill Ogden wrote:

> I am interested in putting up a 66' vertical from aluminum tubing. I assume
> it would need to be guyed at three levels. The top guys would be part of a
> "diamond" 20 meter loop antenna. Would some of you with aluminum working
> experience comment on the practicality of this?

>
66 foot verticals are not easy under any conditions but I would definitely start with a lower end made from the 4" irrigation tubing and work down to smaller sections going up from there. There would be some machining of adapters involved between sizes of tubing which could get tricky unless you have access to a machine shop.
>

> What size tubing would I need? HOW DO I RAISE IT? Raising it would seem to
> be a key issue.

>
It would be a real pain in the butt. I've done it using trees and neighboring towers as a gin poles. A standalone true vertical antenna wouldn't be as much of a pain because the top ten feet or so could be a CB whip which weighs next to nothing but can't support anything, either.
>

> I would place the base on a 6x6 wood post (for insulation).
> If the thing can be made to work, I would want to add a coil and whip (with
> a relay) at the top for 160m operation.

>
You're actually talking about a tower, not a vertical antenna. If I was in your position I wouldn't even think about getting tangled up in a homebrewed tubing tower. I'd go right to the Rohn catalog and get self five sections of 25G with one being a base insulator section and maybe homebrew the top 16 feet from 6061 aluminum pipe.
>
http://www.rohnnet.com/CommPro/Towers/25g/25G.htm
>
Click on "Acessories" for the ceramic insulator section. You'd have to be very careful about not putting side loads on that section both during erection and wrt to wind loading else you break the ceramic insulators.
>
Wood is one of the worst of all RF insulators, virtually useless when supporting voltage-fed antennas.
>
There would be some money involved but in the end you'd have a much easier time

putting it up and have a much better and more reliable, longer-lasting structure. Might be that the money would turn out to be even-up, too.
>

> Bill Ogden
> W2WO

>
Brian Kelly w3rv

527. Re: Help with tuner, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DDCB93.1B38847C@bigfoot.com>
Source record: 178176

Reg Edwards wrote:
> - - and the moral is : "Don't confuse radiation resistance
> with feedpoint impedance."

Now be fair, Reg. I said only 1/4w makes it to the antenna and
I consider the radiation resistance to *be* the antenna, you
know, the part that radiates? I'm pretty sure I didn't say
only 1/4w makes it to the feedpoint impedance.
--
http://www.mindspring.com/~w6rca

528. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <8rkiqh$sv5$1@agate.berkeley.edu>
Source record: 178177

Vincent Charron <charv@ottawa.com> wrote:
> Is the RG-213 more effecient than the RG8/U and if so how significant?
> I'm looking for very lo loss coax, apx 60 feet for VHF use.

Yes, RG-213/U is lower loss than RG-58/U, by a couple dB (for your 60').

However, since you want low loss for VHF, you might consider 9913/FX. It costs a bit more, as you might guess, but for your 60ft, it won't cost too terribly much.

Here are the loss characteristics of the above cables at 150 MHz...

dB/100ft

RG-58/U 6.2
RG-213/U 2.8
9913/FX 1.6

I've bought a couple of different cables (9913 for VHF, RG8 for HF) from a place called Cable-Xperts, and I've been real happy with them. They have fine customer service, too, if you want to just call them up and talk with them about what would work best for you. That's what I did, and I was pleased that they were willing to chat about my installation and give me a couple of different good choices, rather than telling me that I *needed* one particular thing. (See http://www.cablexperts.com/ or 800-828-3340)

best regards,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

529. Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: KI0MB <brnsmth@mo-net.com>
Message-ID: <strkjtcmi0du5b@corp.supernews.com>
Source record: 178178

I have put up a 40M Vertical and I am having trouble with it. It is a 1/4 wave with radials. It is cut to frequency as are the radials, but the SWR is about 2:1 and showing 75 Ohms at that level.

I am trying to figure out how to lower the SWR and impedance. Add more radials should raise the impedance, how do I lower it? Build a matching section of 75ohm coax? What is the best way in terms of efficiency.

73/KI0MB
Brian

530. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rklnh$96i$0@208.207.71.140>
Source record: 178179

ehsjr@bellatlantic.net wrote:

> Congratulations! We've all been trying to get more range out
> of our antennas - you've done it!
> Sorry - couldn't resist.
> Seriously - first check the obvious. Make sure you have a good
> ground to the frame of the range. That's a safety issue - and might
> have some bearing on the RFI. As to ferrite chokes - you'll have
> one hell of a time attempting to choke the supply cord to the range.
> You're going to need to go inside the range to use ferrites, and you
> don't want them on the heavy wiring.

Right.....it would seem to be sufficient to place them on all leads to
and from the range's control unit. This is the kind of thing that is
always iffy until you find what DOES work. It would seem to be simpler
to just move the antenna away from the house if that's feasable
That would also lessen other potential RFI problems.
Dick

531. Re: 2mtr mobile antenna on house..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: glc1173@aol.com
Message-ID: <20001006095727.15855.00000450@ng-fd1.aol.com>
Source record: 178180
Body handling: HTML body converted to readable text

Jeffrey wrote:
>I have a mobile antenna in my attic (wood) >and its on top of a safe. It
>works great. You can use a cookie sheet >also if you want.
>With 50 watts, I hit all of the repeaters for >many miles, full quieting.
>Put away the big antenna and use the >mobile. Neighbor friendly. Want to
>keep
>them on your side so when you put up the >big HF tower that's the first fight,
>not the second.

Using indoor antennas also has other major benefits - like no storm damage.
Matt,
N4GSV
~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, nationwide weather
Al Gore - in his own words
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

532. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <8rkmvv$i5p7f$1@ID-52642.news.cis.dfn.de>
Source record: 178181

Hi Brian,

Is it ground mounted? If it is, adding radials should LOWER (not raise) the impedance. If the 1/4 vertical really is tuned to resonance and then ground radials are added, you shoud see a feedpoint impedance of 37.5 ohms. You will probably need at least 16 radials to get anywhere close to the 37.5 ohm level. If you really are seeing 75 ohms on a ground mounted vertical, I would suspect one of two things:

1. The vertical is severely mistuned (it really isn't tuned to the point in the 40m band where you are measuring 75 ohms.)

2. You have incredible ground losses due to very poor soil conductivity and few radials.

What are you using to "measure" the 75 ohm impedance level and where are you making the measurement (at the shack or at the antenna itself?).

A properly constructed, fed and tuned ground mounted vertical with radials will show an input vswr of 50/37.5 or 1.33 to 1. If you really do see 50 ohms for a 1:1 vswr and the antenna is tuned to resonance, then the other 12.5 ohms is GROUND LOSS, which is NOT a good thing. So even though you see a perfect match, your antenna efficiency is suffering. It is as if you have placed a 12.5 ohm resistor dummy load in series with your antenna. It looks great, but it is NOT what you want. What you really want is a 1.33 : 1 vswr...now...you're not likely to get it to that level with 16 radials (laying on the surface or buried just below the surface), but you will reduce your ground losses dramatically with the 16 radials. The goal is NOT low vswr, the goal is a feedpoing impedance of 37.5 ohms. The closer you get to it, the more efficient your antenna system. The further away you are (including the magic 50 ohm value), the POORER your efficiency is. A perfect ground would show 37.5 ohms and an SWR of 1.33 to 1.

Additionally, when you have lots of ground loss, the antenna appears to be VERY BROADBANDED, i.e., the swr stays low over a very wide portion of the 40m band...for example you might see your swr stay at 1.5 to 1 for 3 or 400 khz (your stated measurement of 75 ohms = 75/50 , VSWR = 1.5 : 1)...because most of the impedance of your antenna system is just a resistor (30 or 40 ohms of ground loss). I'm still a bit skeptical of the 75 ohm value...I don't know if you can get that much ground loss, even with nothing more than a single ground rod for a ground. My bet is the antenna is not tuned properly. You need an antenna analyzer to do it right. Borrow one if you don't have one.

The radials for the ground mounted vertical need not be tuned, nor does it (practically) matter whether they are made of insulated or bare wire. It

doesn't matter much what size wire you use, either, as long as you have 8 or 16. They can be any length, however, it is suggested that they be at least 1/4 wave long (again, not critical). If you can't get radials that are 1/4 wave or longer, then put in more shorter ones. For example, 32 radials of random lengths, none as long as a 1/4 wave, will outperform 4 radials that are 1/4 wave or longer.

There is NO SUBSTITUTE for radials in a ground mounted vertical antenna, period. 16 would be my minimum, 32 would be my maximum. 120 may be the theoretical ideal, but the improvement you will see once you get to 32 1/4 wave radials is probably marginal at best.

If, on the other hand you are using elevated radials, they must be tuned or you can get all sorts of wild impedance readings. If the antenna is close to ground for hf (10 or 15' or so), then more than four elevated radials would be a good idea, but you can get away with 4...but they must be tuned to a 1/4 wave resonance.

Hope this helps. 73

--
hasan schiers, N0AN
schiers@netins.net

KI0MB <brnsmth@mo-net.com> wrote in message
news:strkjtcmi0du5b@corp.supernews.com...
> I have put up a 40M Vertical and I am having trouble with it. It is a 1/4
> wave with radials. It is cut to frequency as are the radials, but the SWR
> is about 2:1 and showing 75 Ohms at that level.
>
> I am trying to figure out how to lower the SWR and impedance. Add more
> radials should raise the impedance, how do I lower it? Build a matching
> section of 75ohm coax? What is the best way in terms of efficiency.
>
> 73/KI0MB
> Brian
>
>

533. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39DDDECF.B42D652B@tpi.net>
Source record: 178182

Vince,
Get some Time LMR 400, great low loss cable for VHF/UHF
Best wishes from ray, w6fya

Vincent Charron wrote:

> Is the RG-213 more effecient than the RG8/U and if so how significant?
> I'm looking for very lo loss coax, apx 60 feet for VHF use.
>
> Vince
> VA3GX

534. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rknjdhtv0@208.207.71.140>
Source record: 178183

Roy Lewallen wrote:

> ehsjr@bellatlantic.net wrote:
> >
> > Congratulations! We've all been trying to get more range out
> > of our antennas - you've done it!
> > Sorry - couldn't resist.
> > Seriously - first check the obvious. Make sure you have a good
> > ground to the frame of the range. That's a safety issue - and might
> > have some bearing on the RFI. As to ferrite chokes - you'll have
> > one hell of a time attempting to choke the supply cord to the range.
> > You're going to need to go inside the range to use ferrites, and you
> > don't want them on the heavy wiring.
>
> I wouldn't recommend putting ferrites inside the range unless you know
> exactly what you're doing. It's vitally important that no significant
> common-mode current should flow in the winding. Otherwise, the core will
> present an impedance to that current, and severe overheating of the core
> could result. This could cause a fire or violent shattering of the core.
> (I honestly don't know how much impedance you'd get from a typical core
> at 60 Hz, but at the currents involved in a stove, it wouldn't take much
> to cause a serious hazard.) When putting cores on a normal power cord,
> the potential problem is easily avoided by simply passing both
> conductors through the core(s) together. Inside the stove, the
> conductors are separated, and you'd have to make sure that any
> current-carrying conductor going through the core(s) is accompanied by
> one which always carries an equal and opposite current.

If that was my RFI problem, at my house I believe I would first check to see if the supply wiring was accessable at the range, and if so, decouple it by choking the three conductor supply cable before it separates into individual wires, by using several ferrite rods, bundling them lengthwise around the supply cable with nylon wireties and tape. I'd use enough rods to completely surround the cable. Of course you need to be able to find the ferrite rods. I wouldn't imagine that any available ferrite could provide enough reactance at 60 Hz to cause a problem on a single wire, but of course I don't know that for sure either. Good point. If it was mine I'd probably try it to see how it warmed up.
In my (work) experience, one has to try different solutions until you find one that works. I've had such problems that were easy to cure and others that proved intractable.
One of the more puzzling was a public safety radio transmitter where a commercial FM broadcast station was built and put on the air less than a mile away. The FM station audio was somehow being demodulated in a public safety station speech amplifier and was being retransmitted. The cure was

really simple - I just wound a dozen turns of the microphone cable around a ferrite rod, before it entered the speech amp. It was only happening on one of two identical, side-by-side console operating positions, identical installations sitting side by side, identical speech amps etc. I still don't know how the audio speech amp was demodulating that 100mhz FM signal so clearly, I suspect it was taking place inside an IC in the speech amp.Why one and not the other? Never did answer that question.

Dick

535. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <RyID5.16340$s76.1129696@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178184

Walt:

I know you can at least read this.

Several people have e-mailed me indicating that they cannot even read the posts.

Could you try to post as plain text rather than HTML.

We should try to do this before we go any further.

Steve

536. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <974-39DDDE4F-27@storefull-114.iap.bryant.webtv.net>
Source record: 178185

Will, AA4NC wrote:
"Should I leave it unterminated to make it bidirectional, or terminate it to improve the performance to the northeast?"

A termination won`t improve performance in any direction. It only eliminates performance in the direction of the wire away from the terminating resistor. Terminating a Beverage antenna does not make it hear or talk any better in any direction. It only eliminates interference from or to the direction opposite the desired direction.

I lived 4 years in Portugal and regularly listened to WCBS in New York with my Beverage antenna. I used no termination. I listened after midnight local time in Portugal to New York`s evening news. Most of the Europeans had signed-off, so I didn`t have to worry about my back side.

The U.S. Army recommends the Beverage antenna as a transmitting antenna, saying it is the equivalent of a 1/4-wave vertical antenna over poor soil. The army likes the idea that an unobtrusive wire can be strung through bushes and trees and that it isn`t immediately seen by an enemy. Naysayers in this newsgroup say that tis performance isn`t the way the antenna models and that it isn`t the way it works.

Last night our ham club had a program on antennas. The ham presenting the program said his first antenna as a novice was a 2000 foot long wire strung through trees and bushes at an average height of 25 feet.(The army recommends high beverages.) Our ham worked 60 countries and made 1600 contacts with his Beverage antenna.

Best Regards, Richard Harrison, KB5WZI

537. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <bzjD5.4670$mC.297845@monger.newsread.com>
Source record: 178186

Hello group, I've been told that many of you cannot read my posts because I'm using HTML. I didn't realize I was using HTML--I know better than that. I composed my posts in Word, saving in rtf to maintain the columnar data intact. I sent the mail to myself through my Florida ISP and it returned here in Michigan intact, so I presumed it was ok. I've now discovered that rtf generates HTML I'm sorry it gave you trouble, so if you'll please stay with me I'll try to recompose my posts in a readable manner for the columnar data, and resend.

Thanks for your patience, because there is a very important issue here that needs to be resolved for everyone's satisfaction.

73 to all,

Walt, W2DU

538. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39DDEF0A.A15AC372@wb6hqk.ampr.org>
Source record: 178187

Roy Lewallen wrote:
>
>
> I wouldn't recommend putting ferrites inside the range unless you know
> exactly what you're doing. It's vitally important that no significant
> common-mode current should flow in the winding. Otherwise, the core will
> present an impedance to that current, and severe overheating of the core
> could result. This could cause a fire or violent shattering of the core.
> (I honestly don't know how much impedance you'd get from a typical core
> at 60 Hz, but at the currents involved in a stove, it wouldn't take much
> to cause a serious hazard.)

Good points Roy. Let's take a closer look....

Assume 20 amps rms current at 60 Hz through a string of one or more Micrometals FT-50-75 cores. The cores have an initial permeability of 5000, an effective volume of 0.401 cm^3 and an effective magnetic path length of 3.02 cm.

The magnetizing force for a single pass is (cgs units to be consistent with the Micrometals catalog) H = 0.4 * pi * sqrt(2) * 20 / 3.02 = 11.8 Oersteds which will defiantly saturate most any ferrite material. In the MK system, 20*sqrt(2) (amps) / 0.03 (meter) = 943 (amps/meter).

Looking at the BH curve for type 75 ferrite material, the magnetic flux density at 11.8 Oe is about 3500 Gauss. In MKS, 3500 Gauss = 0.35 Wb/m^2.

The magnetic energy stored per unit volume of the core is B * H /2 = 0.35 (Wb/m^2) * 943 (amp/m) / 2 = 165 (J/m^3). In MKS, the effective volume of the core = 0.401 (cm^3) / 10^6 (cm^3/m^3) = 0.401*10^-6 (m^3). Therefore the total magnetic energy stored = 165 (J/m^3) * 0.401*10^-6 (m^3) = 66.2 * 10^-6 (J).

If we make a worse than worst case assumption that none of the magnetic energy stored in the core is returned to the 60 Hz circuit but is dissipated, then the power dissipated in the core = 66.2*10-6 (J) * 120 (Hz) = 7.8 mW which certainly would not create a thermal problem.

Note the above analysis is for a single turn. The core is already saturated with a single turn but the stored energy will increase proportional to both the current and the number of turns.

My concern would be that the core, which will may be carrying significant RF and 60 Hz current, will be switching in and out of saturation and will effectively AM modulate the RF at a 120 Hz rate and create a possible source of intermodulation distortion, especially a

concern when receiving.

bart
wb6hqk

539. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <4WjD5.4677$mC.298178@monger.newsread.com>
Source record: 178188

Hello group, the following is a resent of my first post on thread. I converted to plain text and the columnar data appears to be ok here and hope it is with those receiving it. Again, apologize for sending in the wrong format, when I thought it was ok after testing it. I'll also resend my second post after I fix the problems in it.

From reading recent posts on this news group, it is evident that serious misconceptions still prevail concerning virtual open and short circuits on transmission lines, and whether total re-reflection of power can occur in impedance matching operations. My position is that both of these concepts are valid, and are the basis for the statements appearing in my book 'Reflections' concerning impedance matching.

Some posters on the NG deny that these concepts are valid, and therefore condemn Reflections for propagating incorrect information. An article has been published so stating.

So I propose a simple transmission-line problem, with five questions for the group's consideration to stimulate thinking that could ultimately reverse the position of the naysayers. I'm confident that everyone in the group will answer the questions correctly. However, if they answer the questions correctly, it will prove they consider the concepts of virtual short circuits and total re-reflection valid. The naysayers who answer correctly must merely rethink the semantics of the problem.

The setup for the problem consists of a lossless transmission line of any length, with a characteristic impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0 of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main transmission line at any place along the line. The stub can be either a ?/2 line at frequency f, short-circuited at the far end, or a ?/4 line at frequency f, open-circuited at the far end.

Now for questions concerning what occurs after the stub is connected.

1. What is the amount of current now flowing in the load?
A. 2.0 amp
B. 1.0 amp
C. 0.5 amp
D. 0.0 amp
E. None of the above

2. What is the line voltage at the stub point?
A. 2.0 volts

B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

3. What is the line voltage ?/4 toward the source from the stub point?
A. 2.0 volts
B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

4. What is the line voltage ?/2 toward the source from the stub point?
A. 2.0 volts
B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

5. What occurs on the line at the stub point?
A. Voltage and current are totally transmitted past the stub point and their energies are totally absorbed in the load.
B. Voltage and current are partially transmitted past the stub point and partially reflected back toward the source.
C. Voltage and current are totally reflected back toward the source.
D. None of the above

540. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39ddf07c.214975458@news.azstarnet.com>
Source record: 178189

On Fri, 6 Oct 2000 00:10:41 -0700, "Bill Ogden" <wogden@attglobal.net> wrote:

>I am interested in putting up a 66' vertical from aluminum tubing. I assume
>it would need to be guyed at three levels. The top guys would be part of a
>"diamond" 20 meter loop antenna. Would some of you with aluminum working
>experience comment on the practicality of this?
>
>What size tubing would I need? HOW DO I RAISE IT? Raising it would seem to
>be a key issue. I would place the base on a 6x6 wood post (for insulation).
>If the thing can be made to work, I would want to add a coil and whip (with
>a relay) at the top for 160m operation.

Take a look at:

http://www.karlquist.com/Irrigation/irrigation.html

73,

Wes N7WS
>
>Bill Ogden
>W2WO
>
>

541. Correction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39DDF639.F03D0D69@wb6hqk.ampr.org>
Source record: 178190

In the previous post I made an error in the calculation of the energy
stored in the ferrite toroid core.

Bart Rowlett wrote:

> Good points Roy. Let's take a closer look....
>
> Assume 20 amps rms current at 60 Hz through a string of one or more
> Micrometals FT-50-75 cores. The cores have an initial permeability of
> 5000, an effective volume of 0.401 cm^3 and an effective magnetic path
> length of 3.02 cm.
>
> The magnetizing force for a single pass is (cgs units to be consistent
> with the Micrometals catalog) H = 0.4 * pi * sqrt(2) * 20 / 3.02 = 11.8
> Oersteds which will defiantly saturate most any ferrite material. In
> the MK system, 20*sqrt(2) (amps) / 0.03 (meter) = 943 (amps/meter).
>
> Looking at the BH curve for type 75 ferrite material, the magnetic flux
> density at 11.8 Oe is about 3500 Gauss. In MKS, 3500 Gauss = 0.35
> Wb/m^2.
>
> The magnetic energy stored per unit volume of the core is B * H /2 =
> 0.35 (Wb/m^2) * 943 (amp/m) / 2 = 165 (J/m^3). In MKS, the effective
> volume of the core = 0.401 (cm^3) / 10^6 (cm^3/m^3) = 0.401*10^-6 (m^3).
> Therefore the total magnetic energy stored = 165 (J/m^3) * 0.401*10^-6
> (m^3) = 66.2 * 10^-6 (J).

Actually, the magnetic energy stored per unit volume is the intregral of
B(H)*dH evaluated from H=0 to H=Hmax. In the case of a linear magnetic
characteristic where B(H) is proportional to H, the intregral is simply
1/2 * Bmax * Hmax. In the limiting case where the core saturates with
very little excitation, the value of the intregral can approach Bmax *
Hmax, a factor of two greater than my original analysis. The actual
value can be determined by graphically integrating the BH curve and will
be somewhere between the two limiting values.

> If we make a worse than worst case assumption that none of the magnetic
> energy stored in the core is returned to the 60 Hz circuit but is
> dissipated, then the power dissipated in the core = 66.2*10-6 (J) * 120
> (Hz) = 7.8 mW which certainly would not create a thermal problem.

Actually the power dissipated could be as much as 2 * 7.8 mW = 15.6 mW,
still not cause for concern.

bart
wb6hqk

542. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8rkv60spo1@iac5.navix.net>
Source record: 178191

You have entered a no troll zone, you may expect no response to ideas
expressed in the troll.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001006042455.16579.00000577@ng-cr1.aol.com...
> >As all antennas are fractal (per your proclamation) the winning antenna
has
> >to be a fractal. Now let's see if you have enough integrity to admit that
> >Steve's designs beat the M12.
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001005080816.18101.00000340@ng-fl1.aol.com...
> >As to fractal antennas, there does not exist a non-fractal design that
beats
> >> the MI2.
> >>
> >> I will announce the FRACTAL ANTENNA CHALLENGE results shortly.
> >>
> >> Hope this helps.
> >>
> >> 73,
> >> Chip N1IR
> >>
> >>
>
>
> 1)
>
> Please publicly quote where I have said:" all antennas are fractal". This
is a
> prevarication from you;
> 2) No one named "Steve" submitted an entry.
>
> 73
> Chip N1IR

543. Re: My Bleeping Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: M1nn0w <1c3d0g@att.net>
Message-ID: <UhnD5.136$GA1.1203@bgtnsc04-news.ops.worldnet.att.net>
Source record: 178192

ROFLMPO!!!!!!!!!!!!!!! (Rolling on the floor laughing my Proctenna
off!!!!!!!!!!!)

W9NR wrote in message <20001005154552.11361.00000620@nso-md.aol.com>...
>put a 1 ohm resistor on top of the range
>
>will cure the problem
>
>will be ohm on the range . . .

544. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <D7ID5.4701$mC.299174@monger.newsread.com>
Source record: 178193

Hello group, I believe the following will come though correctly. I hope I haven't missed any portion that needed fixing. This is the material I sent in my second post. But since then I have received word from Steve that this material is different than that in re-reflection concerning impedance matching. This is not true, as I explain in detail at the end of this post.

OK Class, it's time to review the answers to the five-question quiz posed in my previous post. Steve
answered them all correctly, and I'm sure all except those who are new to transmission line theory did
also. So, for those less acquainted with the theory I'll explain the answers. For convenience the setup is
repeated here:

The setup for the problem consists of a lossless transmission line of any length, with a characteristic
impedance Z0 =1.0, terminated in a purely resistive load, R = Z0, and fed with continuous voltage V = 1.0
of frequency f. All energy available from the source is absorbed by the load. Thus, the initial current
flowing in the load is 1.0 amp. We now connect a lossless transmission-line stub in shunt with the main
transmission line at any place along the line. The stub can be either a half-wave line at frequency f, short-
circuited at the far end, or a quarter-wave line at frequency f, open-circuited at the far end.

1. What is the amount of current now flowing in the load?
A. 2.0 amp
B. 1.0 amp
C. 0.5 amp
D. 0.0 amp
E. None of the above

Answer: D, 0.0 amp

2. What is the line voltage at the stub point?
A. 2.0 volts
B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

Answer: D, 0.0 volts

3. What is the line voltage a quarter-wave toward the source from the stub point?
A. 2.0 volts
B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

Answer: A, 2.0 volts

4. What is the line voltage a half-wave toward the source from the stub point?
A. 2.0 volts
B. 1.0 volt
C. 0.5 volts
D. 0.0 volts
E. None of the above

Answer: D, 0.0 volts

5. What occurs on the line at the stub point?
A. Voltage and current are totally transmitted past the stub point and their energies are totally
absorbed in the load.
B. Voltage and current are partially transmitted past the stub point and partially reflected back toward
the source.
C. Voltage and current are totally reflected back toward the source.
D. None of the above

Answer: C. Voltage and current are totally reflected back toward the source.

The answers above occur because either of the two stubs establishes a short circuit on the line at the stub
point. However, Steve said it's not necessary to consider the concept of a virtual short circuit, just basic
transmission-line theory. As we proceed we'll see that whether the concept of a virtual short circuit is
considered or not, the virtual short circuit is there, and it won't go away by simply not considering it.

Let's first define the virtual short circuit. The virtual short circuit (and the virtual open circuit as well)
results from interference between two harmonically related electromagnetic waves. When their voltage
amplitudes are equal and 180 degrees out of phase, and their current amplitudes are equal and in phase,
the result is zero impedance at the point where the interference occurs. The effect of the virtual short
circuit on the source wave at the stub point in the example is the same as if a hardware-type short circuit
were placed at the stub point.

Before proceeding further let's examine how the wave interference at the input of the quarter-wave open-circuit stub
establishes the (virtual) short circuit at the stub point on the line. I quote from my QEX article appearing
in the Apr/May 1998 issue:

"Let us first consider the quarter-wave open-circuit stub. On arrival at the input of the stub, the source voltage and
current are in phase, at which point we assign a reference phase of 0°. On arriving rearward at the input,
the voltage and current waves reflected from the open-circuit termination of the stub have traveled 180°
relative to those arriving at the input, 90° in traveling from the input to the open-circuit termination, and
another 90° in returning to the input. However, keep in mind that, on reflection from an open circuit,
angle of the voltage reflection coefficient experiences no change, while the angle for current changes
180°. Thus, on return to the input, the angle of voltage waves reflected from the open-circuit termination is
now 180°; a complete reversal in phase relative to the source. Consequently, the reflected voltage
appearing at the input of the stub is of the opposite polarity to that arriving from the source. Continuing,
with the 180-angle change in current on reflection at the open-circuit termination, plus the 180° travel on
the stub line, on return to the input, the angle for the reflected current is 0°, in phase with the source
current. So we have two equal voltages of opposite polarity at the input, the source voltage and the stub
voltage, with their currents in phase. The result? Maximum current flow--zero impedance-a virtual short
circuit. A perfect DC analogy is two batteries connected in series, plus to minus, and plus to minus-short
circuit-maximum current."

With the (virtual) short circuit established at the stub point on the line we can now explain the answers to
the five quiz questions.

Question 1. The load current is zero because the virtual short at the stub point prevented any current from
flowing past the stub point.

Question 2. The voltage on the line at the stub point is zero because voltage must be zero where the
impedance is zero. However, the current at the stub point is 2.0 volts because of the total reflection at the
short circuit, as is well known in transmission-line theory. The action of the electric and magnetic field
components in the electromagnetic waves during reflection are explained in detail in Reflections.

Question 3. The line voltage a quarter-wave toward the source from the stub point is 2.0 volts. As the current doubles on total reflection at a short circuit the voltage goes to zero. At a point quarter-wave from the short toward the source the current goes to zero and the voltage is twice the value of the source wave. Typical standing-wave procedure when the reflection is total.

Question 4. The line voltage a half-wave toward the source from the stub point is zero, because impedance, voltage, and current repeat on the line at every half-wave interval. Here we are repeating the conditions appearing at the stub point a half-wave away.

Question 5. The answer here is that voltage and current are totally reflected back toward the source, because the virtual short circuit at the stub point prevents any energy to pass. Following the law of conservation of energy, energy cannot be destroyed or made to disappear as if by magic. It has to go somewhere, and the only place it has to go is back up the line toward the source. Contrary to statements made by some of the posters, when waves cancel due to interference the energy in those waves is comprised of real voltage and current, and therefore the energy does not disappear as a result of the cancellation. Consequently, when two waves of equal amplitude and opposite phase mutually cancel, the first result is destructive interference, which forms the virtual short circuit. This is followed by constructive interference, during which the respective voltages and currents of the original waves combine in phase to form the re-reflected waves, emanating from total re-reflection at the virtual short circuit. The changing phase relationships that occur on re-reflection that cause the re-reflected voltage and current waves to emanate from the reflection in phase with the voltage and current waves from the source is explained in detail in Reflections. There are no 'phantom' waves unless an ethereal 'medium' scanning a crystal ball is involved.

However, since this is a resend of the original, I have since received a msg from Steve saying that this treatment of a quarter-wave stub is different than the wave cancellation procedure I discuss in the impedance-matching mode. Steve and I have battled over this issue for weeks and weeks, but contrary to Steve's position, the two are the same. Wave cancellation is wave cancellation, no matter whether the phase relationships are 180 degrees, or some other angle. The resultants of the angles is the crux.

Steve insists that on wave cancellation both the voltage and current waves go to zero. This is not true, because the voltages and currents in reflected

waves are real, not reactive, and therefore the voltages and currents contain energy. If the voltage and current both went to zero simultaneously there would be no energy, but that energy cannot just disappear, it must go somewhere, and indeed it is re-reflected into the forward direction. The process of the wave interference begins with destructive interference, establishing the short cicuit, then constructive interference follows, establishing the redirection of the energy in the forward direction. This procedure is identical to that of a hardware-type short circuit, except that the short circuit established by wave-interference is a one-way short---transparent to the incoming source wave.

An example appears in my QEX article for Mar/Apr 1998, which discusses matching a 150-ohm resistor to 50 ohms. Here the reflection point is an open circuit, established by the following reflection coefficient angles. The load mismatch yields voltage and current angles of -60 and +120 degrees, respectively. The stub mismatch, which cancels the load mismatch reflections, has the voltage and current reflection angles of +60 and -120 degrees respectively. The angle of the voltage resultant is zero degrees and the angle of the current resultant is 180 degrees, thus establishing an open circuit. The energies in both sets of reflected waves are real, and cannot disappear. They are redirected in the forward direction during the constructive interference following the destructive interference that established the virtual open circuit. There is no fundamental difference in this procedure that established the open circuit than that in the open-circuit quarter-wave line that establishes a virtual short circuit at its terminals.

The crucial point to remember concerning reflection and re-reflection is that the energies in the voltages and currents in the reflected waves cannot disappear, and for this reason the voltage and current in the reflected waves cannot both be zero simultaneously on cancellation, only one or the other at a time. Reference to transmission-line theory books concerning reflection of electromagnetic waves will verify these statements.

In addition, I have had experience as an RF engineer in RF laboratories for more than 50 years, 31 years at RCA Laboratories' Antenna Lab, and 20 years in my own RF lab. During this time, I've made thousands of hands-on RF measurements on many different transmission-line circuits, including that of the example in my QEX article. These measurements corroborate the concept I discussed there, including the angles of the respective reflection coefficient angles I presented above.

Walt, W2DU

545. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <1265-39DE0621-28@storefull-115.iap.bryant.webtv.net>
Source record: 178194

Walt, W2DU wrote:
"The stub can be either a 1/2 (WL) line at frequency f, short-circuited at the far end, or a 1/4 (WL) line at frequency f, open-circuited at the far end." (Either makes a virtual short.)

The 1/2-wave line repeats an impedance. The 1/4-wave line inverts an impedance. The non-believers should try to explain radar antenna switching as accomplished with gas tubes and tuned line sections. Virtual opens and shorts are the bases of this switching.

Best regards, Richard Harrison, KB5WZI

546. Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DE09C8.790BD392@west.raytheon.com>
Source record: 178195

I guess I really shouldn't post until I'm fully awake....

Bart Rowlett wrote:
>
In the previous two posts I oversimplified the calculation of the
energy stored in a nonlinear ferrite toroid core. Both calculations
over estimate the stored energy. I don't have the material
characteristic curves presently available but will dig them up and
post a correct calculation if anyone asks.

bart
wb6hqk

547. Re: Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39DE0F7E.3265FB97@eznec.com>
Source record: 178196

Bart, thanks very much for doing the calculation. I'm so used to using low frequency ferrite cores at HF, where they're very lossy and present an essentially resistive impedance, that I failed to realize that the loss is probably negligible at 60 Hz. I'm sure your calculations are close enough. So I concur that it's probably not dangerous to use at least cores with a single turn on single 60 Hz lines, but that it might have undesirable RF effects.

If I were attacking that problem, I'd probably work on choking the DC supply and other lines coming into the electronics board which is being affected. Because it probably doesn't have to respond quickly to external stimulii, fairly heavy bypassing would also be possible and helpful.

Roy Lewallen, W7EL

Bart Rowlett wrote:
>
> I guess I really shouldn't post until I'm fully awake....
>
> Bart Rowlett wrote:
> >
> In the previous two posts I oversimplified the calculation of the
> energy stored in a nonlinear ferrite toroid core. Both calculations
> _over_ estimate the stored energy. I don't have the material
> characteristic curves presently available but will dig them up and
> post a correct calculation if anyone asks.
>
> bart
> wb6hqk

548. Re: Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DE0E4E.1DFE454B@oio.net>
Source record: 178197

N9YLN wrote:
>
> Hello all!
> We live on the 3rd floor of an apartment building. What would be the best way
> to ground a 170 foot random wire we have up on the roof? Also what is the best
> grounding source for the radios in our shack? We were told that the screw on an
> outlet would work but we were also told that using the radiator would be
> better. Which is? Would eother put RF into the building? Also, to run the wire
> for either it would have to go under carpetting where people would walk. Would
> this be a problem? Any help will be greatly appreciated. Please email me direct
> with any info.
> 73,
> Renee, N9YLN@aol.com

Renee,
You're going to have problems getting an RF ground, there's
just no way around that being on the 3rd floor, with a random
wire antenna. Maybe your best bet would to use a counterpoise
tuned for each band of use. Doing that, it's 'best' to spread
them out away from each other, or changing them when switching
bands.
The screw, or third wire ground on an outlet 'should' be a
good electrical ground. An RF ground? Probably not so good.
The same for a radiator. Both, since they become part of your
antenna system, will introduce RF into the building. It may
not be objectionable, but then again, the odds are in favor of
it being a nightmare.
When you're not on the ground floor, a balanced antenna of
some kind is much easier to 'handle'. You may still find that
you have an RF problem, but it isn't as likely as with the
random wire.
Good luck...
'Doc

549. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: M5WJF <mickey@mouse.com>
Message-ID: <39de0f0a@news.server.worldonline.co.uk>
Source record: 178198

"Vincent Charron" <charv@ottawa.com> wrote in message
news:051020002108204679%charv@ottawa.com...
> Is the RG-213 more effecient than the RG8/U and if so how significant?
> I'm looking for very lo loss coax, apx 60 feet for VHF use.
>
> Vince
> VA3GX

Losses for R-H100

Frequency Loss per 10m of cable
28MHz 0.20dB
50MHz 0.25dB
100MHz 0.35dB
400MHz 0.82dB

Losses for RG-213

28MHz 0.36dB
50MHz 0.45dB
100MHz 0.67dB
400MHz 1.47dB

Losses for Mini RG-8

28MHz 0.69dB
50MHz 0.86dB
100MHz 1.28dB
400MHz 2.82dB

Losses for RG-58CU

28MHz 0.78dB
50MHz 0.97dB
100MHz 1.40dB
400MHz 3.00dB

It would seem that RG-213 is almost twice as efficient as RG-8.

Currently I have mainly 15 to 20 metre runs of RG-213, which is a reasonable trade off of cost per metre over loss, but if money were no object, or your shack is some distance from the antenna, then R-H100 would be your best bet.

The only downside to the physical routing R-H100/RG-213 cable is its lack of flexibility in comparison to RG-8 or RG-58CU, but you get used to things like that.

Before you buy, do check out the other cabling specifications mentioned in this thread.

de M5WJF

550. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8rl4n3knq1@nnrp1.deja.com>
Source record: 178199

I haven't waded through all the other posts in this thread;
perhaps someone has already suggested this: put your 100W
carrier into a dummy load and measure the temperature rise
after it's reached thermal equilibrium. Now modulate it
(100% with a sinewave) and re-measure the rise. You should
see that the power dissipation in the load really has
increased. As others have mentioned, if you measure the
RMS output voltage and current, you'll see an increase in
each under modulation. Typical ham SWR and power meters
do not measure the RMS values.

(re: "RMS power" in audio amplifiers. I've always taken
that to simply be a contraction/simplification to mean
the (average) power under simple sinewave excitation.
You'll find such simplifications in a great many different
fields, and indeed in every-day language useage. For
example, "need" is not something felt by inanimate objects,
but we'd commonly say something like, "My car needs gas."
And others wouldn't question what we really meant: "I
need to put gas in my car so I can drive it a bit further.")

Cheers,
Tom

In article <20001004164402.04390.00000239@ng-mf1.aol.com>,
k1bqt@aol.com (Rick Littlefield) wrote:
> >However, a peak reading RMS meter will indicate a PEP value four
times the RMS
> average value while the current and voltage in the output device
appear
> stable.<
>
> Right--and thanks for that destinction. But, I still can find the
extra 50
> watts.
>
> For a 100-watt AM signal, aren't we talking about a dynamic mixing
process that
> yields output from 0 watts PEP to 400 watts PEP while exhibiting a
true average
> output power of 100 watts?
>
> Further, isn't the requirement for 50 watts of baseband audio only
needed when
> the method of mixing involves the use of a modulation transformer in

the
> process we call "high level" modulation?
>
> Consequently, isn't a 100-W AM transmitter a 100-Watt AM transmitter
regardless
> of how we make it happen?
>
> Rick K1BQT
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

551. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DE145C.748@wt.net>
Source record: 178200

M5WJF wrote:
>
> "Vincent Charron" <charv@ottawa.com> wrote in message
> news:05102000210820467 9%charv@ottawa.com...
> > Is the RG-213 more effecient than the RG8/U and if so how significant?
> > I'm looking for very lo loss coax, apx 60 feet for VHF use.
> >
> > Vince
> > VA3GX
>
> Losses for R-H100
>
> Frequency Loss per 10m of cable
> 28MHz 0.20dB
> 50MHz 0.25dB
> 100MHz 0.35dB
> 400MHz 0.82dB
>
> Losses for RG-213
>
> 28MHz 0.36dB
> 50MHz 0.45dB
> 100MHz 0.67dB
> 400MHz 1.47dB
>
> Losses for Mini RG-8
>
> 28MHz 0.69dB
> 50MHz 0.86dB
> 100MHz 1.28dB
> 400MHz 2.82dB
>
> Losses for RG-58CU
>
> 28MHz 0.78dB
> 50MHz 0.97dB
> 100MHz 1.40dB
> 400MHz 3.00dB
>
> It would seem that RG-213 is almost twice as efficient as RG-8.
>
> Currently I have mainly 15 to 20 metre runs of RG-213, which is a reasonable
> trade off of cost per metre over loss, but if money were no object, or your
> shack is some distance from the antenna, then R-H100 would be your best bet.

>
> The only downside to the physical routing R-H100/RG-213 cable is its lack of
> flexibility in comparison to RG-8 or RG-58CU, but you get used to things
> like that.
>
> Before you buy, do check out the other cabling specifications mentioned in
> this thread.
>
> de M5WJF

I think you are confusing the mini-rg-8 with the regular rg-8. Mini 8 is
not near as good as rg-8. "quite a bit smaller" . RG-8 and 213 have the
same loss. They are the same size. They look and act the same, the only
difference is the mil spec shield and the better jacket with the 213. MK
--
http://web.wt.net/~nm5k

552. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001006141111.16603.00000587@ng-cr1.aol.com>
Source record: 178201

>As to fractal antennas, there does not exist a non-fractal design that beats the MI2.<

Finally got a look at Steve's files and read the commentary regarding alternative geometries to the MI2. The first thing I noted was Steve's decision to make the two high-current portions of the loop straight and optimally separated. Good move!

In the case of loop #3, significantly more wire was needed to resonate the loop, but--ironically--the resultant resistive losses appear to have worked in Steve's favor. He obtained a higher feedpoint impedance (41.4 ohms) and improved bandwidth (2.14%), while paying no appreciable penalty in gain.

Now, here's a puzzler. Why was there no gain penalty?? If Steve's #3 loop showed gain equal to the MI2 while simultaneously exhibiting significantly higher wire losses, doesn't that prove the MI2 shape is LESS effective as a radiator than a quad using straight and optimally separated conductors in the highest-current segments of the antenna?

Same signal strength, twice the bandwidth, and connected directly to your 50-ohm rig without matching loss. Go figure?

By way of history, two-dimensional loading schemes for the quad loop are nothing new. Andy Pfeiffer, K1KLO, built a linear-loaded 12-meter quad around 10 years ago. Not long after, Paul Carr, N4PC,
authored the "Squad", a 17-meter linear-loaded quad with 10-meter dimensions in the early 90's for CQ.

Prior to building the two-element version, Paul built an experimental single quad loop yielding a near 50-ohm feedpoint and modeling less than 1-dB down from full size. Paul used a diamond-quad shape fed at its base and loaded by four-wire meander lines extending inward from each of the two horizontal corners. He claimed +5 dBd gain (calculated) for his two-element "Squad".

Rick K1BQT

553. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DE1836.2E20@wt.net>
Source record: 178202

Richard Harrison wrote:

>
> Last night our ham club had a program on antennas. The ham presenting
> the program said his first antenna as a novice was a 2000 foot long wire
> strung through trees and bushes at an average height of 25 feet.(The
> army recommends high beverages.) Our ham worked 60 countries and made
> 1600 contacts with his Beverage antenna.
>
> Best Regards, Richard Harrison, KB5WZI

I remember that antenna he had. I've known Kevin for 30 years. You should have seen the arcs he could draw off that thing in bad weather. 2-3 inches or more. But I always considered that antenna a long wire more than a beverage. Sure, about the same thing wire wise, but I don't think his acted quite like the normal beverage used for low band receiving. If I remember right he used it the most on 15m, but other bands also. He seemed to get a fair bit of gain on 15m lengthwise with the wire. MK

--
http://web.wt.net/~nm5k

554. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g20jog2.pminews@ca.news.verio.net>
Source record: 178203
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 05 Oct 2000 22:25:13 -0700, William F. Hagen wrote:

>It means that now-one understands the issue, it is really neither a
>local or a state issue, but a federal issue, and one that the fcc has no
>guts to tackle.

The bill covers LOCAL zoning and planning decisions/codes, and
in its operable parts is a 100% duplication of the FCC's PRB-1
wording. The only thing that it and its counterparts in other
states do thst PRB-1 does not do is to set a minimum antenna
structure (tower) hight under which the planning/zoning folks
must grant the permit as a matter of right.

The main reason for having such a statute on state-law books
is that zoning/planning folks get their hackles up when folks
like me hit them between the eyes with PRB-1 -- "we don't care
what the $%^%^ Feds are trying to tell us to do" -- whereas
citing state law requirements is more easily acccepted because
(a) the local municipality is a subdivision of the state, not of
the Federal government and (b) they are used to using state law
standards and requirements in their daily business.

Another benefit is to have uniform requirements amongst the
various communities of the state. Much as those of us who are
Fed-ists would like to see this nationwide, it isn't going
to happen.

73 de Phil Kane - K2ASP

555. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g20jyw3.pminews@ca.news.verio.net>
Source record: 178204
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Fri, 06 Oct 2000 10:04:42 GMT, Brian Kelly wrote:

>> >if both the house and the senate passed it unamimously, why not just
>> >override the veto and tell the governor to shove it.
>>
>> Good question.
>
>>
>Glitch in the balance of powers theory.

As Jim Maxwell, the ARRL Pacific Division Director pointed out,
there is no political gain to be had in having a Democratic
Senate and Democratic Assembly override a Dsmocratic governor's
veto, and anyhow the Legislature has adjourned until next January.

73 de Phil Kane - K2ASP

556. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001006144253.09612.00001556@ng-ch1.aol.com>
Source record: 178205

>>As to fractal antennas, there does not exist a non-fractal design that beats
>the MI2.<
>

Sure seems to be the case.

>Finally got a look at Steve's files and read the commentary regarding
>alternative geometries to the MI2. The first thing I noted was Steve's
>decision
>to make the two high-current portions of the loop straight and optimally
>separated. Good move!
>
>In the case of loop #3, significantly more wire was needed to resonate
>the loop, but--ironically--the resultant resistive losses appear to have
>worked
>in Steve's favor. He obtained a higher feedpoint impedance (41.4 ohms) and
>improved bandwidth (2.14%), while paying no appreciable penalty in gain.
>

What were his ohmic losses?

>Now, here's a puzzler. Why was there no gain penalty??

Because the ohmic losses were low I bet. Even I know that.

If Steve's #3 loop
>showed gain equal to the MI2 while simultaneously exhibiting significantly
>higher wire losses, doesn't that prove the MI2 shape is LESS effective as a
>radiator than a quad using straight and optimally separated conductors in the
>highest-current segments of the antenna?
Do you know what MI2 means? There are lotsa MI2 shapes. This statement of your
is wrong.

>
>Same signal strength, twice the bandwidth, and connected directly to your
>50-ohm rig without matching loss. Go figure?

I have an MI2 here with an impedance of 52 ohms with j1.0 according to the MFJ
thingie.

>
>By way of history, two-dimensional loading schemes for the quad loop are
>nothing new.

I hope not!

Andy Pfeiffer, K1KLO, built a linear-loaded 12-meter quad
>around

>10 years ago.

Too big. Bad match. See Chip's patents. If this quad was so good then Chip wouldn't have used it as an incentive to show people something better.

Not long after, Paul Carr, N4PC,
>authored the "Squad", a 17-meter linear-loaded quad with 10-meter dimensions
>in
>the early 90's for CQ.

Too big.

>
>Prior to building the two-element version, Paul built an experimental single
>quad loop yielding a near 50-ohm feedpoint and modeling less than 1-dB down
>from full size.

Chip matches things to 50 ohms all the time. Big deal. Waszat gotta do with Chip's FRACTAL ANTENNA CHALLENGE? Wasn't Paul Carr the guy you Comm Quat folks paid to write junk science articles?

Paul used a diamond-quad shape fed at its base and loaded by
>four-wire meander lines extending inward from each of the two horizontal
>corners. He claimed +5 dBd gain (calculated) for his two-element "Squad".

Wicked cool!

You still haven't been able to show Chip's statement is wrong. Why? Because he's right.

>
>Rick K1BQT
>

73
Phil
de N1ZKT

557. Re: Please explain

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: dustyut@citlink.net
Message-ID: <39de1e44.1607257@news.citlink.net>
Source record: 178206
Cross-posted to: rec.pyrotechnics,rec.radio.amateur.antenna

They now call themselves "Qwest", I see. Typical. US West has always
been a bit shady since the feds broke up Ma Bell, and now to try to
shake the bad reputation they're changing the company name. Won't
work. Shit will still smell like shit, even if you call it roses.
Carl

On Fri, 06 Oct 2000 10:12:53 GMT, Unknown_User
<UserID@invalid.domain.com> wrote:

>Why not let this clown's ISP in on this GREAT DEAL? Forward to:
>mailto:dns-admin@QWESTIP.NET
>
> Domain Name: QWEST.NET
>
> Administrative Contact, Technical Contact, Zone Contact, Billing Contact:
> Qwest Communications (QC271-ORG) dns-admin@QWESTIP.NET
> Qwest Communications
> 4250 North Fairfax Drive
> Arlington, VA 22203
> USA
> 703-363-0220
>
>
>
>lhbjgz@SECONDRING.COM wrote:
>
>> Get in now THEY are going to make it BIGG!!
>>
>> I will share my referals with you if you email and ask!!
>> Of course you must send me the names of 5 people you signed up ;)
>>
>> http://www.alladvantage.com/go.asp?refid=BNO052
>>
>> SREYNOLDS@SECONDRING.COM
>> nkzrqlvoznkp
>

558. Banner Exchange for HAM's

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Cil <c.hubertse@chello.nl>
Message-ID: <MdpD5.674606$Kw2.5955718@flipper>
Source record: 178207

```
Banner Exchange for HAM-Radio websites
Free sign-up, high ratio 5:4 and 1000 credits free
Your banner is always display on HAM-Radio websites.

http://come.to/pa1rbz
```

559. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DE24B1.C256CC74@mwci.net>
Source record: 178208

Walter Maxwell wrote:

> 5. What occurs on the line at the stub point?
> A. Voltage and current are totally transmitted past the stub point and
> their energies are totally
> absorbed in the load.
> B. Voltage and current are partially transmitted past the stub point and
> partially reflected back toward
> the source.
> C. Voltage and current are totally reflected back toward the source.
> D. None of the above
>
> Answer: C. Voltage and current are totally reflected back toward the source.

In the steady state the stub presents a zero impedance at the junction, just as the Smith chart and the transmission line equations predict. It is a cancellation of forward and return waves on the stub. This zero impedance is just like any other zero impedance. It creates a backward wave and a standing wave on the main line, just like any other short circuit. The difference is that the *actual physical* short circuit does not actually occur *across* the main line right at the stub point-of-connection. That is why it is a "virtual" short circuit.

So what is the point of this obvious and simple exercise? Are we supposed to extrapolate that into something more cosmic?

Also, I am not a "student" in anyone's "class" and don't want to be patronized in that manner.

Bill W0IYH

560. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DE2496.2844@wt.net>
Source record: 178209

KI0MB wrote:
>
> I have put up a 40M Vertical and I am having trouble with it. It is a 1/4
> wave with radials. It is cut to frequency as are the radials, but the SWR
> is about 2:1 and showing 75 Ohms at that level.
>
> I am trying to figure out how to lower the SWR and impedance. Add more
> radials should raise the impedance, how do I lower it? Build a matching
> section of 75ohm coax? What is the best way in terms of efficiency.
>
> 73/KI0MB
> Brian

Hasan already covered about everything, but I'm also wondering about the 75 ohm feed. I bet it's really the other way, and about 25-35 ohms, unless something really weird. Myself, I've never had to use a matching device on any 1/4 vertical for 40m.It was close enough for gov work, but I've seen a few 1/4 wl ground planes that use a hairpin to get a good match. But those usually for higher bands, cb, etc. With the elevated 40m gp I ran, I adjusted the match by tweaking the radial lengths. Much easier than lowering the antenna to adjust the radiator. With the ground mount I adjusted the radiator. You could use a small coil at the base to match much like a mobile type setup.Usually, the most drastic thing you will notice adding more radials is a reduction of bandwidth. And that can be used as a good indicator of saturation of you are really hard core. Once you get to the point that adding more radials does not decrease bandwidth, you have enough for all practical purposes. But this can take many for a ground mount. Don't give up on it . It'll be great for 40 dx. Also you could probably add a cap at the base and run as an appx 3/8 wave on 30m. Would work well. The cap would tune out the reactance. MK
--
http://web.wt.net/~nm5k

561. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001006152656.04159.00000519@ng-bg1.aol.com>
Source record: 178210

KB5WZI wrote:
>
>A termination won`t improve performance in any direction. It only
>eliminates performance in the direction of the wire away from the
>terminating resistor. Terminating a Beverage antenna does not make it
>hear or talk any better in any direction. It only eliminates
>interference from or to the direction opposite the desired direction.

Not exactly true. By "eliminating performance" away from terminating resistor it improves significantly F/B ratio, eliminating much of noise from that direction, therefore improving signal to noise ratio, therefore allowing to hear more weak signals from the direction towards the terminating resistor. If you phase two or three beverages in either broadside or staggered fashion you further improve the pattern (F/B and S/N), and be able to hear weaker signals. So it depends what are you after, one antenna for both directions or super ear for one direction.

Yuri, K3BU

562. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39DE27AF.9EDD7283@uci.edu>
Source record: 178211
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Phil Kane wrote:
> Another benefit is to have uniform requirements amongst the
> various communities of the state.

Maybe someone should point that out to the Governor. He seems to
be unaware of this aspect of matters of the state of California.

73 de AC6XG

563. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <9rnD5.4725$mC.300581@monger.newsread.com>
Source record: 178212

OK Bill, I'm sorry you feel 'patronized', so I guess my attempt at humor on this NG is not appreciated, so I'll desist hereafter. This was my second ill-fated attempt at humor, sorry.

The point of this simple exercise Bill, is that some people in this thread say it ain't so, that a virtual short circuit cannot exist. They say for this reason the basis for my explantion of impedance matching using reflection mechanics is invalid, therefore my position in Reflections is wrong. I am again attempting to defend my credibility.

Your explanation of the difference between a physical short and a virtual short is evidence that you agree that a virtual short is factual, and not simply a figment of my imagination, contrary to the aforementioned people in this thread.

Walt, W2DU

564. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <1266-39DE2709-29@storefull-115.iap.bryant.webtv.net>
Source record: 178213

Mark, NM5K wrote:
"If I remember right, he used it (the 2000-ft. wire) mostly on 15 m, but other bands also.

25 feet above ground is respectable at 15 meters. Mark is probably right on the money about distant contacts. Novices also inhabit 40 and 80 meters, but Kevin wasn`t specific as to the breakdown of his contacts between bands.

Best regards, Richard Harrison, KB5WZI

565. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <39DE2EBB.3ABA17D2@aztek-eng.com>
Source record: 178214

Walt,

Please don't stop. I enjoyed the exercise very much. I did not feel
patronized at all. Considering some of the stuff posted to this
newsgroup, your exercise was welcomed in my opinion.

Larry Benko, W0QE

Walter Maxwell wrote:
>
> OK Bill, I'm sorry you feel 'patronized', so I guess my attempt at humor on
> this NG is not appreciated, so I'll desist hereafter. This was my second
> ill-fated attempt at humor, sorry.
>
> The point of this simple exercise Bill, is that some people in this thread
> say it ain't so, that a virtual short circuit cannot exist. They say for
> this reason the basis for my explantion of impedance matching using
> reflection mechanics is invalid, therefore my position in Reflections is
> wrong. I am again attempting to defend my credibility.
>
> Your explanation of the difference between a physical short and a virtual
> short is evidence that you agree that a virtual short is factual, and not
> simply a figment of my imagination, contrary to the aforementioned people in
> this thread.
>
> Walt, W2DU

566. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <0aoD5.4733$mC.301407@monger.newsread.com>
Source record: 178215

Thank you, Richard H.

Walt

567. FS Cushcraft 424B 432Mhz ant NEW

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: teaberry44@aol.com
Message-ID: <20001006162800.16741.00000545@ng-cc1.aol.com>
Source record: 178216

More information at ebay auction #459755230 or
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=459755230

Thanks - Tom KZ3X

568. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <6noD5.4735$mC.301595@monger.newsread.com>
Source record: 178217

Thanks Larry, I appreciate your support also.

Walt

569. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <8rlfhe$3r8$1@agate.berkeley.edu>
Source record: 178218

David Snyder Hale <david@isi9.mtwilson.edu> wrote:

> Vincent Charron <charv@ottawa.com> wrote:
>> Is the RG-213 more effecient than the RG8/U and if so how significant?
>> I'm looking for very lo loss coax, apx 60 feet for VHF use.

> Yes, RG-213/U is lower loss than RG-58/U, by a couple dB (for your 60').

Ooops! I mis-read your post... saw RG58 when you said RG8. Sorry. (End
of a 17 hour shift for me.)

> Here are the loss characteristics of the above cables at 150 MHz...

> dB/100ft
> --------
> RG-58/U 6.2
> RG-213/U 2.8
> 9913/FX 1.6

Add to this list:
RG-8/U 2.3

So, at VHF, the two cables you asked about are nearly the same from a loss
per unit length point of view, with 213 have just a little more loss.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

570. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: M5WJF <mickey@mouse.com>
Message-ID: <39de4385@news.server.worldonline.co.uk>
Source record: 178269

"Mark Keith" <nm5k@wt.net> wrote in message news:39DE145C.748@wt.net...
> M5WJF wrote:
> >
> > "Vincent Charron" <charv@ottawa.com> wrote in message
> > news:05102000210820467 9%charv@ottawa.com...
> > > Is the RG-213 more effecient than the RG8/U and if so how significant?
> > > I'm looking for very lo loss coax, apx 60 feet for VHF use.
> > >
> > > Vince
> > > VA3GX
> >
> > Losses for R-H100
> >
> > Frequency Loss per 10m of cable
> > 28MHz 0.20dB
> > 50MHz 0.25dB
> > 100MHz 0.35dB
> > 400MHz 0.82dB
> >
> > Losses for RG-213
> >
> > 28MHz 0.36dB
> > 50MHz 0.45dB
> > 100MHz 0.67dB
> > 400MHz 1.47dB
> >
> > Losses for Mini RG-8
> >
> > 28MHz 0.69dB
> > 50MHz 0.86dB
> > 100MHz 1.28dB
> > 400MHz 2.82dB
> >
> > Losses for RG-58CU
> >
> > 28MHz 0.78dB
> > 50MHz 0.97dB
> > 100MHz 1.40dB
> > 400MHz 3.00dB
> >
> > It would seem that RG-213 is almost twice as efficient as RG-8.
> >
> > Currently I have mainly 15 to 20 metre runs of RG-213, which is a
reasonable

> > trade off of cost per metre over loss, but if money were no object, or
your
> > shack is some distance from the antenna, then R-H100 would be your best
bet.
> >
> > The only downside to the physical routing R-H100/RG-213 cable is its
lack of
> > flexibility in comparison to RG-8 or RG-58CU, but you get used to things
> > like that.
> >
> > Before you buy, do check out the other cabling specifications mentioned
in
> > this thread.
> >
> > de M5WJF
>
> I think you are confusing the mini-rg-8 with the regular rg-8. Mini 8 is
> not near as good as rg-8. "quite a bit smaller" . RG-8 and 213 have the
> same loss. They are the same size. They look and act the same, the only
> difference is the mil spec shield and the better jacket with the 213. MK
> --
> http://web.wt.net/~nm5k

Maybe you've just answered your own question.

de M5WJF

571. Inv-V or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8rlfmi$1ncg$1@news.gate.net>
Source record: 178270

In addition to my tribander, I'd like to put up an omnidirectional antenna for 40 and 20 meters, so I can hear what's going on behind me rather than turning the beam. Given the choice between an inverted vee or a vertical, which would be the least prone to RFI?

I could probably only get the apex of a Vee up to about 25 feet and that would be by hanging it from an arm off the aluminum crankup tower.

Otherwise, I could mount a vertical to a metal pole on the side of my shed about 50 feet from the radio room to get it up in the air a bit. I'm surrounded by trees (not very big ones) here in Florida and figure it would be good to get the vertical up in the air? If I went with a multiband vertical I suppose I'd have to put in several ground radials, but I've heard mixed reviews on the "groundless" verticals, anyone got one of these and are you happy with it?

Any advice is good advice,

David, K4ZZR

572. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DE45D8.8AB28D7B@mwci.net>
Source record: 178271

Walter Maxwell wrote:

> OK Bill, I'm sorry you feel 'patronized',

I don't just "feel" patronized, Walter, and I do not object to humor.Notice also that I do not refer to you as "Maxwell" in my posts or in my Letters to the Editor. To me you are "Walter" or "Mister Maxwell". And that's the way it should be.

> The point of this simple exercise Bill, is that some people in this thread
> say it ain't so, that a virtual short circuit cannot exist. They say for
> this reason the basis for my explantion of impedance matching using
> reflection mechanics is invalid, therefore my position in Reflections is
> wrong. I am again attempting to defend my credibility.

I don't know anyone who says that a virtual short can't exist. Everyone knows that it can.

> Your explanation of the difference between a physical short and a virtual
> short is evidence that you agree that a virtual short is factual, and not
> simply a figment of my imagination, contrary to the aforementioned people in
> this thread.

My agreement with you regarding this particular example should not be construed as a blanket endorsement of all of your ideas regarding wave mechanics and conjugate match. I just simply cannot go along. The factuality of this example should not be extrapolated beyond itself.

Bill W0IYH

573. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001006175243.03800.00000455@ng-cd1.aol.com>
Source record: 178272

>Do you know what MI2 means?<

Second-iteration Minkowski Island, off the top of my head and without bothering to look it up. Even bent up a couple of them awhile back.

>There are lotsa MI2 shapes.<

I'm familiar with one MI2 shape.

>This statement of your is wrong.<

Are you referring to my puzzler? Perhaps someone will jump in and straighten me out. I'm having a little problem with AYEM modulation at the moment, too, but I'm making progress.

>I have an MI2 here with an impedance of 52 ohms with j1.0 according to the MFJ thingie.<

Have we seen that one? I hope you're not holding out on us.

>Wasn't Paul Carr the guy you Comm Quat folks paid to write junk science articles?<

That would be Joe Carr, a somewhat more widely-known and internationally famous professional writer who also gives excellent seminars to industrial and government procurement specialists on how to spot bullshit artists and flim-flam in the technological marketplace. Not to take anything away from Paul, of course, who's built some nifty antennas, writes well, teaches electronic theory, and is a great guy with an active interest in QRP.

>You still haven't been able to show Chip's statement is wrong.<

Well, no big thing. But, if you see him, please let him know I'll try to give it some more thought!

Rick K1BQT

574. Re: Inv-V or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001006180406.03800.00000457@ng-cd1.aol.com>
Source record: 178273

Hi David--

I think I'd use a vertical for a spotter antenna. If nothing else, it has lower angle for picking up DX. Also, it will be cross-polarized with your horzontal transmitting antenna and less apt to bring dangerously high RF levels into the shack.
"Groundless" verticals are okay on the higher bands as long as you get them up in the air. Keep it as far from your transmitting antennas as you can.

Rick K1BQT

575. Sinclair 217X modification to 220 mhz ?????????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: mdusso98@hotmail.com
Message-ID: <8rlke1$13h$1@nnrp1.deja.com>
Source record: 178274

Just woundered if anyone has ever modify a Sinclair antenna model 217X
covering 138 mhz to 174 mhz to operate on the 220 mhz portion.
Would apreciate any info if anyone has even done this.

Reply to mdusso98@hotmail.com.

Sent via Deja.com http://www.deja.com/
Before you buy.

576. Re: Inv-V or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8rll1fdec1@news.gate.net>
Source record: 178275

Hi Rick,

I'm not going to use the vertical (or Vee) only as a receiving antenna, I'll be using it for transmitting too.

> Hi David--
>
> I think I'd use a vertical for a spotter antenna. If nothing else, it has
> lower angle for picking up DX. Also, it will be cross-polarized with your
> horzontal transmitting antenna and less apt to bring dangerously high RF
levels
> into the shack.
> "Groundless" verticals are okay on the higher bands as long as you get
them up
> in the air. Keep it as far from your transmitting antennas as you can.
>
> Rick K1BQT

577. 2m,6m,70cms Beam.Recommendations Please.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: dolan morrison <dolan.morrison@ntlworld.com>
Message-ID: <4%sD5.18502$L12.372952@news2-win.server.ntlworld.com>
Source record: 178276

Any help on selecting a tribander beam for above frequencies with single
feed and not
too large.Thank you.
GM0LZE.

578. Re: MOXON or RAIBEAM ???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DE4E3B.404DA982@dvol.com>
Source record: 178277

"John W. Lawson, Jr." wrote:

> Has anyone built a 20m wire or tubing MOXON ant and if so how does it
> perform? Any info would be helpful.

>
The mother lode of info on Moxons is in http://www.cebik.com/
>
Others in this area have built 'em and they work. Not as well as 4el.
Yagis but they definitely work.
>

> Has anyone had any experience w/ 20m RAIBEAM?

>
Personally I'd be highly suspicious of the very short booms and you could
hombrew an equivalent for 1/3 the cost of a Raibeam.
>

> Again, any info would be
> helpful.
> Thanks for all responses...John.
>
> WB4LFI

>
w3rv

579. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DE5483.1E76AAD5@dvol.com>
Source record: 178278

Wes Stewart wrote:

>
> Take a look at:
>
> http://www.karlquist.com/Irrigation/irrigation.html
>
> 73,
>
> Wes N7WS
> >

>
The whole thing is definitely SLICK! Great location, too.
>
The basic tower/mast/vertical raising technique has been in use around here for decades and is known as "Gerry's Trick", named after Gerry Mathis w3bes/w3gm, one of the premiere contesters of all time. He had huge antenna farms and used the tiltover gin pole method for raising 100-180 foot heavy towers loaded with huge Yagis.
>
Mr. Ogden oughta have gotten some thinking fodder out of this subthread!
>
w3rv

580. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <39de6c5d_2@news1.prserv.net>
Source record: 178279

Thank you both for the comments. Based on the comments my conclusion is that a 60+ vertical is not just a length of light-weight aluminum (as I had hoped). For anyone else thinking along the same lines, the site http://www.karlquist.com/Irrigation/irrigation.html is very interesting.

I will probably stick with my original plan of a 40' tower (probably the aluminum variety) with a lightweight mast on top of it. I was looking for alternatives partly to avoid (or to try to avoid) a need for building permits, etc, etc. A tower is sufficiently permanent that it probably needs a building permit.

Bill Ogden
W2WO

581. Re: HF MOBILE: Some success with noise reduction in '99 F-150

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <vunstssl9qpejsrijm86qa325lp3dnfrk2@4ax.com>
Source record: 178280
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Tue, 03 Oct 2000 05:31:27 GMT, "Edward Dowdy" <elIhatespamdowdy@home.com> wrote:
>By the time I sell it. Resale value won't be a problem. I didn't buy it to
>sell it.

Amen to that. My "new" truck is an 87 model, just well broken in with 193,000
miles. It replaced a 74 model. By the time I'm finished with a truck, only the
scrapyard would be interested.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

582. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DE788F.BABC0DF2@bigfoot.com>
Source record: 178281

KI0MB wrote:
>
> I have put up a 40M Vertical and I am having trouble with it. It is a 1/4
> wave with radials. It is cut to frequency as are the radials, but the SWR
> is about 2:1 and showing 75 Ohms at that level.

What is probably happening is that your resonant feedpoint resistance is
around 35 ohms and is being transformed to 75 ohms by the feedline.

Run a plot of SWR every 50kHz from 7.0 to 7.3 and tell us what the
results are.
--
http://www.mindspring.com/~w6rca

583. Re: Please explain

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: bobby <news@bobby.net>
Message-ID: <8rm0t2$426a$1@newssvr05-en0.news.prodigy.com>
Source record: 178282
Cross-posted to: rec.pyrotechnics,rec.radio.amateur.antenna

Dear CLK,
Qwest bought US West. But thanks for playing the game.

CLK wrote in message <39de1e44.1607257@news.citlink.net>...
>They now call themselves "Qwest", I see. Typical. US West has always
>been a bit shady since the feds broke up Ma Bell, and now to try to
>shake the bad reputation they're changing the company name. Won't
>work. Shit will still smell like shit, even if you call it roses.
>Carl
>
>
>On Fri, 06 Oct 2000 10:12:53 GMT, Unknown_User
><UserID@invalid.domain.com> wrote:
>
>>Why not let this clown's ISP in on this GREAT DEAL? Forward to:
>>mailto:dns-admin@QWESTIP.NET
>>
>> Domain Name: QWEST.NET
>>
>> Administrative Contact, Technical Contact, Zone Contact, Billing
Contact:
>> Qwest Communications (QC271-ORG) dns-admin@QWESTIP.NET
>> Qwest Communications
>> 4250 North Fairfax Drive
>> Arlington, VA 22203
>> USA
>> 703-363-0220
>>
>>
>>
>>lhbjgz@SECONDRING.COM wrote:
>>
>>> Get in now THEY are going to make it BIGG!!
>>>
>>> I will share my referals with you if you email and ask!!
>>> Of course you must send me the names of 5 people you signed up ;)
>>>
>>> http://www.alladvantage.com/go.asp?refid=BNO052
>>>
>>> SREYNOLDS@SECONDRING.COM
>>> nkzrqlvoznkp
>>
>

584. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DE8C52.69D@wt.net>
Source record: 178283

Richard Harrison wrote:
>
> Mark, NM5K wrote:
> "If I remember right, he used it (the 2000-ft. wire) mostly on 15 m, but
> other bands also.
>
> 25 feet above ground is respectable at 15 meters. Mark is probably right
> on the money about distant contacts. Novices also inhabit 40 and 80
> meters, but Kevin wasn`t specific as to the breakdown of his contacts
> between bands.
>
> Best regards, Richard Harrison, KB5WZI

Yep, I remember using it on 80 and 40 also, but don't remember it being much different than any other dipole for those bands. IE: wasn't really a dx killer. But on 15 it seemed to do pretty well. He used to hear alot of africa , eu, etc on that thing that I had trouble hearing on the low 40 meter dipole I had. He made it from real thin wire. I remember one time going over there to help him repair it after a storm. It ran across a large field. We got our tickets at the same time at the old HARC on lozier street. He got his one week, and I got mine the next week. In those 7 days, the calls went from his wd5bqz to my wd5cjl. They were really churning em out in those days. "1977". Those were the big CB craze days and lots drifted into ham radio around that time. I got into ham radio in 1971 and learned the code, etc, but kinda drifted out and didn't get legal until 6 years later. MK
--
http://web.wt.net/~nm5k

585. Re: ChipShooter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: WIZARD-DRAGON_@webtv.net
Message-ID: <19899-39DE92DB-2@storefull-101.private.bryant.webtv.net>
Source record: 178284

funny... no i didnt sign up on any groups just asking for help .. thanks anyways i`ll try some place else.

586. Re: Radio

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: WIZARD-DRAGON_@webtv.net
Message-ID: <19896-39DE91E1-68@storefull-101.private.bryant.webtv.net>
Source record: 178285

got a radio and antenna etc....just asking 4 help...thanks anyways i`ll try some place else.

587. Re: kelly

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 00:00:00 UTC
From: WIZARD-DRAGON_@webtv.net
Message-ID: <19896-39DE9330-69@storefull-101.private.bryant.webtv.net>
Source record: 178286

thanks kelly for the info.

588. Re: Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-06 17:28:56 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <sZnD5.1985$la6.55280@news1.onlynews.com>
Source record: 178287

> I guess I really shouldn't post until I'm fully awake....
>
> Bart Rowlett wrote:
> >
> In the previous two posts I oversimplified the calculation of the
> energy stored in a nonlinear ferrite toroid core. Both calculations
> _over_ estimate the stored energy. I don't have the material
> characteristic curves presently available but will dig them up and
> post a correct calculation if anyone asks.

I ask!

W4ZCB

589. Re: Indian antenna research

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001007095043.25139.00000774@ng-da1.aol.com>
Source record: 178219

>I am somewhat curious as to how you can patent a fractal antenna,
>particularly when you have stated here in the newsgroup and in your white
>paper that Yagi's are fractals as well. In fact, have you not stated that
>any random antenna is a fractal? How did you get around the "prior art"?
>
>I
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001002140653.29166.00000379@ng-cg1.aol.com...
>> >Microstrip fractal patch antenna for multi-band
>> >communication
>> >
>> >Hara Prasad, R.V.; Purushottam, Y.; Misra, V.C.; Ashok,N.
>> >
>> >Defense Electronics Research Lab, Hyderabad, India
>> >
>> >Abstract
>> >
>> >A novel square microstrip fractal patch antenna in a
>> >Sierpinski carpet is proposed for three-band operation.
>> >Measured results indicate that the return loss is better
>> >than 10 dB and that the gain is greater than 7 dB in
>> >each band. This antenna is an attractive candidate for
>> >wireless, satellite and mobile communication
>> >applications. [Author abstract; 6 Refs; In English]
>> >
>> >Index Terms: Microstrip antennas; Fractals; Wireless
>> >telecommunication systems; Satellite communication
>> >systems; Mobile telecommunication systems; Microstrip
>> >fractal patch antennas
>> >
>> >
>> >Electronics Letters
>> >Volume 36, Issue 14 2000
>> >Pages 1179-1180
>> >
>> >--
>> >Posted from mtiwmhc23.worldnet.att.net [204.127.131.48]
>> >via Mailgate.ORG Server - http://www.Mailgate.ORG
>> >
>>
>> As of tomorrow, said descriptions are covered by patent.
>>
>> With best regards,
>>

>> Nathan Cohen, Ph.D.
>

I am somewhat curious as to what higher authority allows you to provide misinformation and misquoting? What reason do you have to presume that I have not taken into account "prior art"?

NC

590. Re: GAP antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39df20d9.1246433@news.mcn.org>
Source record: 178220

You may wish to check this article out....

http://www.bencher.com/pdfs/00363ZZV.pdf

That should answer many of your question and also explain why they
prefer that you don't ground nor add radials to the antenna.

73, Danny
K6MHE

On Thu, 5 Oct 2000 22:06:56 -0700, Hayden P Ferdig <pete4www@juno.com>
wrote:

>I have a question. I just bought a GAP TITAN DX antenna and I called GAP
>asking how to ground the antenna. He told me not to ground the antenna at
>all. He also told me not to put a lightning arrestor in the feedline, and
>that I should not ground my transceiver and power supply. The guy I was
>taking is the man who actually designed the TITAN DX himself. He said
>that down in Florida (where there is LOTS of lightning) that those who
>grounded their TITAN DX received many lightning strikes because by
>grounding the antenna, you are actually raising "ground" to the top of
>the antenna, and this is attractive to lightning. He said that by not
>grounding the antenna, the lightning will not be attracted to the antenna
>as much. The NEXT day I talked to someone else who has installed 4 GAP
>titans before and he told me the EXACT opposite. This other guy told me
>to ground my antenna, my rig, my power supply, and to use a lightning
>arrestor. Could someone else with experience please tell me what you
>think about this situation because I don't know WHO or WHAT to believe
>now !!! Thanks,
>
>-Hayden
>KD7KLQ
>(Finally got my license, yaaaaahhh!!!!!)
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

591. Re: Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8rna3i$n0u$0@208.207.71.153>
Source record: 178221

ehsjr@bellatlantic.net wrote:
>
> Roy Lewallen wrote:
>
> > If I were attacking that problem, I'd probably work on choking the DC
> > supply and other lines coming into the electronics board which is being
> > affected. Because it probably doesn't have to respond quickly to
> > external stimulii, fairly heavy bypassing would also be possible and
> > helpful.
> >
>
> Exactly. He has to go inside the range. As was shown, the ferrites
> on the heavy wiring are not a safety hazard. BUT - he has to know
> what he is doing to apply them. You can't choke the power cord
> with Radio Shack clamp on chokes, as was recommended prior
> to my first post. It is too big.

That was the reason for suggesting placing one on each AC lead-they
aren't too big. Some ranges don't use a large cable, but are hardwired
with #10 Romex. Each conductor can be separated and made availabe for
individual choking.

The problem of course is on the control board. Isolating it by choking
its power input and control output leads MAY solve the problem, then it
may not, depending on the magnitude of the interfering signal which is
almost certain to be coming into the range via the AC power leads. It
might be necessary to head off the RFI farther away from the control
board than to choke at the board itself. The RFI could still radiate
into the control board. There are too many variables to be sure of a
cure without personally investigating the range.

Some such prolems are easy to cure, others nearly or in fact impossible
with any available practical method.

Dick

It is also of doubtful benefit. He can't
> get "regular" (ie not the clamp on kind) toroids on the power
> cord without dissassembling the cord from the range. Much
> smaller chokes can be applied to the low voltage DC supply lines
> and the signal lines, where they are likely to do more good. Your
> comment about safety earlier referred to the heavy wires, which
> I told him to avoid.
>
> >
> > Roy Lewallen, W7EL

> >
> > Bart Rowlett wrote:
> > >
> > > I guess I really shouldn't post until I'm fully awake....
> > >
> > > Bart Rowlett wrote:
> > > >
> > > In the previous two posts I oversimplified the calculation of the
> > > energy stored in a nonlinear ferrite toroid core. Both calculations
> > > _over_ estimate the stored energy. I don't have the material
> > > characteristic curves presently available but will dig them up and
> > > post a correct calculation if anyone asks.
> > >
> > > bart
> > > wb6hqk

592. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF2B1B.18D35E27@bigfoot.com>
Source record: 178222

Brian Kelly wrote:
>
> CAM wrote:
>
> > KI0MB wrote:
> > >
> > > I have put up a 40M Vertical and I am having trouble with it. It is a 1/4
> > > wave with radials. It is cut to frequency as are the radials, but the SWR
> > > is about 2:1 and showing 75 Ohms at that level.
> >
> > What is probably happening is that your resonant feedpoint resistance is
> > around 35 ohms and is being transformed to 75 ohms by the feedline.
> >
> > Run a plot of SWR every 50kHz from 7.0 to 7.3 and tell us what the
> > results are.
>
> There is something inherently evil about a 2:1 swr?

Who said a 2:1 SWR was evil? I'm just trying to understand why an antenna
that is supposed to have a feedpoint impedance below 50 ohms is "showing"
an impedance of 75 ohms.
--
http://www.mindspring.com/~w6rca

593. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8rnf7l$ab5$1@nnrp1.deja.com>
Source record: 178223

Rick,
Wow! This is the best GA design that I have seen to date, can we adapt the design a bit and not use plastic trashcans but metal instead, this will provide a great foundation for a low band CFA.

BTW a stellar authority in the field informed me that small lot hams do tend to suffer from many problems and one of them can be a small schmecky. I wonder if this deficiency explains the attitude in sharing intellectual property with fellow hams.
--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity extector?

In article <20001005231717.05091.00000493@ng-fy1.aol.com>, k1bqt@aol.com (Rick Littlefield) wrote:
> RTS announces 10-Meter Flexible Flyer Antenna
>
> We've heard a lot about GA (Genetic Al Gore Rhythm) antennas. However, as the
> namesake implies, these designs tend to be both quirky in appearance and
> inhospitably rigid in their patterns.
>
> My Walkman has a GA antenna of sorts--a headphone cable which also is used to
> pick up the signal. While sitting in the doctor's office waiting for my son
> this afternoon, I attempted to listen to a weak public radio station amid a
> crush of computer and other electrical noises in the building. Marginal
> reception caused me to occupy most of my wait by continually adjusting and
> re-shaping the headphone cable to a variety of forms in order to obtain the
> best signal quality.
>
> That's when it hit me! In today's busy world, only the chronically
> under-employed would have time to do GA runs, then lope outside to re-bend the

> antenna to compensate for every new call zone, propagation change, or
gust of
> QSB that blows by. What REAL hams need are instant flexibility and
fast
> response. Inspiration!
>
> On the way home, we stopped at the local hardware store and for a tad
> under $35, obtained parts for the world's first 10-meter Flexible
Flyer
> antenna. And, this sucker works! What's more, unlike some of the
> certificate-collectors around here, I'll tell you how to build your
own in six
> easy steps with no strings attached. Here's what you do:
>
> 1. Get two large plastic trash cans.
> 2. Discard the lids and flip one on top of the other to form a
chamber.
> 3. Take a tube of Liquid Nails and glue 'em together.
> 4. Drill a small hole in one end.
> 5. Insert about 8-1/2 feet of plumber's snake inside.
> 6. Connect coax, hook it up, and crank the snake for maximum signal.
>
> Sooner or later, that sucker's gonna flop into just the right shape,
and you'll
> be in DX alley. If the band changes, no problem--just give it
another crank!
>
> I know it's brilliant, but why would I withhold it? I figure anyone
who'd get
> their schmecky out of joint over sharing intellectual property with
their
> fellow hams must live on a very small lot!
>
> Enjoy!
>
> Rick K1BQT
>

Sent via Deja.com http://www.deja.com/
Before you buy.

594. Re: Relay replaces Trap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rnenpbkh1@uranium.btinternet.com>
Source record: 178224

For RF purposes consider the pair of wires to be one wire.

Wind the twin antenna wires, both together, a lot of turns round a ferrite rod to make a choke. A suitable ferrite material is as used for MF receiving antennas. The ferrite is not magnetized because the DC is in 'balanced-mode' and cancels out. One side of the DC supply can be grounded at the cold end of the choke if you wish.

If necessary, to isolate the DC from the tuner or transmitter, feed RF power into the hot end of the choke via a capacitor which need be capable only of carrying the RF current. Also connect a 0.01 uF capacitor between the two wires at the hot end.

At the relay end of the pair of wires, as a safety precaution, connect a 0.01 uF decoupling capacitor across the relay operating coil.

The foregoing applies to an end-fed antenna using one relay. For a centre-fed dipole and two relays (which I havn't tried) another choke would be needed at the feedpoint unless the balanced feeder was constructed from 2 times 2 = 4 wires. But on contemplating such a construction one might be tempted to revert to a pair of good, old fashioned antenna traps. ;o)
--
Reg, G4FGQ

Gary wrote
> Hi Reg,
> You didn't mention how you operate the relay from the shack, assume you run
> relay DC current thru rf chokes to 2 speaker conductors. Novel idea, may give
> it a try.
> 73 Gary N4AST

595. Re: Where to find heavy wall clear tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DF3E7C.5FAB4CF7@oio.net>
Source record: 178225

Ed/N3WJA wrote:
>
> I have given up on trying to find the motorcycle fork cover suggested to
> cover the coil on my screwdriver antenna. I have contacted 6 motorcycle
> shops and no one has ever heard of the maker or model, Daystar model 69.
> While at a hamfest last week I walked around the parking lot and saw that
> just about every screwdriver antenna there had heavy wall clear plastic
> tubing with a flat, evidently machined, top under the stinger mount. It
> looks like mine would require 2.25 ID and I would like to acquire enough to
> build three covers. I need one for my DK3Z, one for my N9JMX Allbander and
> one for a spare. Top piece is about 3/8 inch thick and machined to fit the
> 2.25 ID tubing. The cover for the Allbander is approx. 2 foot long, not sure
> on the DK3Z at this point
> Where can you find the tubing and top piece?

Ed,
It's a tube that candy comes in. Watch Wal-Mart,
Handy-Stops or(?) around the holiday seasons, or when
ever...
'Doc
PS - Or find a commercial company that makes packaging
containers.

596. Re: Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39DF4072.90E21F37@wb6hqk.ampr.org>
Source record: 178226

Here's a brief derivation of the energy stored in a linear or nonlinear inductor comprised of one or more perfectly conducting turns around a toriod core. Flux outside of the core may contribute significantly to the stored energy once the core material is saturated, but is not considered here. Eddy current losses are ignored but the method can be used to calculate hysteresis losses if the integration is performed over an entire excitation cycle.

Variables:

N = number of turns
A = cross sectional area of core (m^2).
l = effective magnetic path length = pi * mean diameter of magnetic core (m)
i = current through inductor (A)
v = voltage across terminals of inductor (V)
H = magnetic field intensity (A/m)
B = magnetic flux density (Wb/m^2) = (volt-seconds/m^2)
t = time (sec)
P = power input to inductor = dW/dt (J/sec)
W = energy stored in inductor (J)

d = differential operator. e.g. dB/dt is the time rate of change of B

The voltage drop across the inductor is: v = N * A * dB/dt

The power input to the inductor: P = v * i = N * A * i * dB/dt

For the toroidal magnetic circuit: H = N * i / l

Substituting N * i = H * l :

P = H * l * A * dB/dt

The total energy is : W = integral(P * dt) = A * l * integral(H * dB)

The classic BH material characteristic curve gives B as a function of H. The slope of the BH curve is, by definition, dB/dH and leads to the observation that the value of the above integral is the area between the B axis (H=0) and the relevant portion of the BH curve.

Eyeballing the BH curve for type 75 (J) ferrite material, I estimate the value of the integral from H=0 to H = 11.8 Oe (from the previous post) to be approximately 1000 Gauss - Oersteds which in MKS is 7.96 (J/m^3) as compared to 165 (J/m^3) in my earlier analysis which incorrectly assumed a constant permeability of Bmax/Hmax.

It might be worth noting that the same calculation done for a typical powdered iron material would result in much greater stored energy then in the case of the ferrite analyzed above. Additionally, powdered iron is capable of maintaining it's initially lower permeability at much greater magnetic field intensities and may do a better job of decoupling conducted EMI in cases similar to the one being discussed.

bart
wb6hqk

597. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <OZED5.5040$mC.315606@monger.newsread.com>
Source record: 178227

William E. Sabin <sabinw@mwci.net> wrote in message
news:39DEC611.D00889AD@mwci.net...
>
>
> VE9SRB wrote:
>
> > It is very important to understand that the effective line
> > impedance in a transmission line is not a physical mechanism for wave
> > transmission or wave reflection. Wave reflections will only occur at
> > physical impedance discontinuities in the transmission line.
>
> Exactly and precisely correct.
>
> Bill W0IYH
>

Bill, I can't believe you mean that no reflection can occur at the stub point in my example where the quarter-wave open circuit stub is in shunt with the line. Are you saying no reflection can occur there unless a physical short circuit is placed there? Are you then also saying that no reflections can occur as a result of wave interference? I can't believe you mean that.

Walt, W2DU

598. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DF43C9.92110EE8@mwci.net>
Source record: 178228

CAM wrote:

> VE9SRB wrote:
> > A refection of the forward traveling waves does not
> > occur as a result of this forward wave cancellation.
>
> But it resembles a reflection. You said voltages go to zero at a virtual
> short. The voltages in those two forward traveling waves have cancelled
> each other out, i.e. gone to zero at the Z0-match point. The two powers
> associated with the cancelled energy waves have gone to zero at the
> Z0-match.

A way to see this problem is the following:

Imagine a line that is several wavelengths long. The far end is terminated in a short circuit. This is a "hardware short circuit".

If we look along the length of the line, we see a zero impedance at each halfwave point *toward* the generator. Each one is due to a phase cancellation of a forward wave and a reflected wave.

Each of these zero impedance points is a "virtual" short circuit.

Each virtual short circuit is created by the *single hardware* short circuit.

A forward wave from the generator is not reflected by each and every virtual short circuit. Only the *hardware* short circuit actually produces the actual reflections and therefore *all* of the virtual short circuits.

How can we prove this? A logic trick will do it. Suppose that the first virtual short is in fact a perfect reflection point. Then all of the forward wave will be reflected from that point and *nothing* will, by definition, arrive at the far end.

The conumdrum is that if all of the wave is actually reflected at the virtual short, and therefore no wave reaches the far end, then the virtual short cannot even exist. In other words the virtual short *owes its existence* to the hardware short at the far end and to the forward wave that is reflected from that hardware short circuit.

The mental difficulty is the following: If we look at a section of line to the generator side of a virtual short we see a standing wave pattern that is *identical* to what it would be if the virtual short were in fact an actual hardware short across the line at that same point. In other words the line to the left of the virtual short is identical to that due to a real short.

This is a seductive idea that encourages the belief that the virtual short is in fact a point of reflection. But a little thought shows that it is all *smoke and mirrors* in the truest sense. A mind game that looks OK but is in fact, nonsense. The thing that is bothersome is that some good folks are obsessed with this cockamany idea.

The way to get out of this difficulty is to realize that the virtual short *must* have a reflection from the real short, and cannot itself be an actual source of reflection.

This is exactly the same situation as in Walter's example, where the virtual short is due to the stub and it is due *only* to a phase cancellation of forward and reflected waves within the stub, which is a shorted 1/2 wave or an open 1/4 wave. In both cases the far end of the stub is a perfect *hardware reflector*.

Bill W0IYH

599. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DF45AF.FFF31BAF@mwci.net>
Source record: 178229

Walter Maxwell wrote:

> William E. Sabin <sabinw@mwci.net> wrote in message
> news:39DEC611.D00889AD@mwci.net...
> >
> >
> > VE9SRB wrote:
> >
> > > It is very important to understand that the effective line
> > > impedance in a transmission line is not a physical mechanism for wave
> > > transmission or wave reflection. Wave reflections will only occur at
> > > physical impedance discontinuities in the transmission line.
> >
> > Exactly and precisely correct.
> >
> > Bill W0IYH
> >
>
> Bill, I can't believe you mean that no reflection can occur at the stub
> point in my example where the quarter-wave open circuit stub is in shunt
> with the line. Are you saying no reflection can occur there unless a
> physical short circuit is placed there? Are you then also saying that no
> reflections can occur as a result of wave interference? I can't believe you
> mean that.

Sir, that is exactly what I mean, plain and simple, exactly as you have stated it. Please see my response to Cecil.

Bill W0IYH

600. Re: Where to find heavy wall clear tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF2F85.8ED8C877@dvol.com>
Source record: 178230

Ed/N3WJA wrote:

>
> . . It looks like mine would require 2.25 ID and I would like to acquire
> enough to
> build three covers. I need one for my DK3Z, one for my N9JMX Allbander and
> one for a spare. Top piece is about 3/8 inch thick and machined to fit the
> 2.25 ID tubing. The cover for the Allbander is approx. 2 foot long, not sure
> on the DK3Z at this point
> Where can you find the tubing and top piece?

>
McMaster-Carr sells a wide variety of raw materials in small quantities.
>
http://www.mcmaster.com
>
You'll have to make dimensioned part drawings and take the machining up with a
neighborhood industrial machine shop or the vo-tech. The kids are always looking
for things to work on.
>
w3rv

601. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF332B.D6E5EBEE@dvol.com>
Source record: 178231

CAM wrote:

> Who said a 2:1 SWR was evil? I'm just trying to understand why an antenna
> that is supposed to have a feedpoint impedance below 50 ohms is "showing"
> an impedance of 75 ohms.
> --

>
It was made by B&W, he has the resistor in the circuit.
>
The guy is looking for a fix he doesn't need.
>
b.

602. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <ZKFD5.5044$mC.316350@monger.newsread.com>
Source record: 178232

Steve Best wrote:

> In the example presented by Walter, a 1/4 WL open circuit stub was
connected
> in parallel with a transmission line terminated in ZO. At this connection
> point (junction), the effective line impedance is a short circuit. In
this
> context, I would not disagree with calling this a "virtual short circuit".
> Again, this is not a situation where an impedance match is created.

Steve, you need a refresher course on the principles of wave interference to see what happens to the energy in the waves at the interference point. You will discover that a virtual short circuit is a virtual short circuit (or an open circuit) and is established wherever the wave interference occurs, including, but not limited to the terminals of an open-circuited quarter-wave stub.

> What is physically happening at this junction point is quite complex and
> cannot be fully appreciated by looking at only the steady state
conditions.

Steve insists that the evolution to the steady state from the initial state is important. However, the evolution to the steady state is already well known. I is not necessary to evolve something that is univsersally known.

> > Steve insists that on wave cancellation both the voltage and current
waves
> > go to zero. This is not true, because the voltages and currents in
> reflected
> > waves are real, not reactive, and therefore the voltages and currents
> > contain energy. If the voltage and current both went to zero
> simultaneously
> > there would be no energy, but that energy cannot just disappear, it must
> go
> > somewhere, and indeed it is re-reflected into the forward direction.
> >
>
> When two waves are traveling in the same direction in a transmission line,
> if the total voltage of the wave traveling in that direction goes to 0,
then
> the total current traveling in that direction must go to 0 as well.

Not so. Steve is forgetting that we are discussing conditions at a totally reflecting discontinuity. It is a fundamental fact that when a wave arrives at a total discontinuity, either the voltage or the current goes to zero while the other does not. The voltage goes to zero and the current doubles

at a short circuit, and the current goes to zero while the voltage doubles on arriving at an open circuit.

A
> traveling wave cannot have 0 voltage with some current nor can it have 0
> current with some voltage. Voltage and current in a traveling wave cannot
> exist independently of each other. Note that we are not discussing the
> situation where total voltage in the transmission line goes to 0 - IE.
> Vforward + Vrearward = 0.
>
> In the particular case of impedance matching, a situation occurs where two
> (multiple) waves traveling in the rearward direction combine to a net
> rearward traveling wave of 0 voltage and 0 current.

This statement is totally untrue. When two such rearward traveling waves are in motion toward effecting an impedance match their respective phases are always complementary on arrival at the matching point. At this point the resultant phase angles of the respective voltages and currents in the waves are either zero for voltage and double for current, or vice versa. The voltage and current can never go to zero simultaneously without violating the law of conservation of energy, because there is energy in those waves that cannot just disappear. Remember, we're talking about virtual open or short circuits here, total discontinuities that Steve refuses to appreciate.

>This is a wave
> cancellation process that causes all energy flow in the rearward direction
> to cease. The individual wave energy still exists but no net or total
> energy flow is occurring. This is very similar to mulipath fading where
> multiple waves combine at the single point in space to a net wave of 0
> energy. You cannot measure a total signal yet the energy associated with
> each component still exists.

This concept is pure hogwash. If energy exists it can be measured--if none is measured it doesn't exist. If multiple waves exist in space and the net energy in the wave is zero in one direction, it is greater in another direction. This is the principle of obtaining gain in directional antennas.

>The law of conservation of energy is not violated by the process of wave
> cancellation. Total energy dissipation is equal to total energy
delivered -
> 0.

There is no energy dissipation in reflection from a lossless discontinuity, the above statement is untrue.;
>
>
> >
> > An example appears in my QEX article for Mar/Apr 1998, which discusses
> > matching a 150-ohm resistor to 50 ohms.
> >
>
> Walter, it would be interesting to discuss the specifics of the example in

> detail. If you post them, I would be pleased to discuss them in detail.

Steve, we have already discussed this item ad nauseam during the past several weeks with no agreement, so I see no need to discuss it further, because there is no way I'm going to agree with your position. I suggest you review the action of electromagnetic waves on arrival at a medium that causes total reflection to determine the correct relationship between the voltage and current at the reflection point. You will discover that both voltage and current cannot go to zero simultaneously, and the the energy in the waves cannot disappear during the wave cancellation.

> > The crucial point to remember concerning reflection and re-reflection is
> > that the energies in the voltages and currents in the reflected waves
> cannot
> > disappear, and for this reason the voltage and current in the reflected
> > waves cannot both be zero simultaneously on cancellation, only one or
the
> > other at a time. Reference to transmission-line theory books concerning
> > reflection of electromagnetic waves will verify these statements.
> >
>
> It is physically impossible for a traveling wave to have current while
> having 0 voltage. It is also physically impossible for a traveling wave
to
> have voltage while having 0 current. No text reference would state this
to
> be possible.

Steve, we are discussing waves incident on a total discontinuity, not while traveling along an unobstructed line.

> 73,
> Steve VE9SRB
>
>
>
>

603. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF4DC4.704DD1EA@bigfoot.com>
Source record: 178233

"William E. Sabin" wrote:
> The way to get out of this difficulty is to realize that the virtual short
> *must* have a reflection from the real short, and cannot itself be an actual
> source of reflection.

This is all well and good and can be proven by TV ghosting. But your response
didn't address what happens at a Z0-match. Can we add modulation to a signal
to "see" what happens at a Z0-match? I suspect we will indeed see a re-reflection
of ghosts on a TV screen.
--
http://www.mindspring.com/~w6rca

604. NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <sEHfOap4wudSdUxQ6wo+EolxtNQm@4ax.com>
Source record: 178234

Hi All,

It has been a quagmire with the Matching threads and Virtual Short threads. And the lung volume on some of these with initial postings running 200+ lines? I get the impression of the speaker wanting to explain the theory of wave mechanics in one breath. And trying to get in, edgewise? Which side issue? This shotgun style shatters any simple approach.

I don't need a fractal generator when my news reader, Agent, can show me a random tree construction (we're stuck in a fractal folks!). So in the grand tradition of the internet I present my own Opus.

During my tenure in Metrology, the standard text on the subjects Conjugate Match and Z0 Match were formalized. Insofar as your access to the NBS standard methods, these definitions may be found in "Microwave Theory and Applications," Stephen F. Adam; or they may be found in Hewlett-Packard's Application Note 56, or they may be found in the original works by R. W. Beatty published in IEEE Transactions in the early 60's.

The following terms are those understood by Metrologists at NBS and Primary/Secondary Standards Labs:

Substitution Loss:
A general term referring to the change in power absorbed by a load when first one waveguide junction (these words are used in the broadest sense) and then another (such as an attenuator) is used to connect a source to the load.

Transducer Loss:
What the substitution loss becomes when the first waveguide junction is a perfect transducer and initially the maximum available power is delivered to the load.

Insertion Loss:
What the substitution loss becomes when the first waveguide junction is a perfect (lossless and phase-shift-less) connector, so that in general there is some initial mismatch loss.

Attenuation:
What any of the above losses become when the source and load both have Z0 impedance. Under these conditions, what is measured on an attenuator is a property of the attenuator alone, so that this is the ideal system in which to make measurements.

Residual Attenuation:
The minimum attenuations of a variable attenuator. What is measured when a variable attenuator is set to it minimum position and inserted into an ideal system.

Incremental Attenuation:
The change in attenuation between minimum setting and any other setting on a variable attenuator. Residual Attenuation and Incremental Attenuation together make up Attenuation.

Conjugate Match:
The condition for maximum power absorption by a load, in which the impedance seen looking toward the load at a point in a transmission line is the complex conjugate of that seen looking toward the source.

Conjugate Mismatch:
The condition in the situation above in which the load impedance is not the conjugate of the source impedance.

Conjugate Mismatch Loss:
The loss resulting from conjugate mismatch.

Z0 Match:
The condition in which the impedance seen looking into a transmission line is equal to the characteristic impedance of the line.

Z0 Mismatch:
The condition in which the impedance seen looking into a transmission line is not equal to the transmission line characteristic impedance Z0. In general, conjugate match is a case of Z0 mismatch.

Z0 Mismatch Loss:
The loss resulting from a Z0 mismatch.

Conjugate Available Power:
Maximum available power.

Z0 Available Power:
The power a source will deliver to a Z0 load.

73's
Richard Clark, KB7QHC

605. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <avID5.21133$tl2.1404125@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178235

"Walter Maxwell" <w2du@journey.com> wrote in message
news:OZED5.5040$mC.315606@monger.newsread.com...
>
> William E. Sabin <sabinw@mwci.net> wrote in message
> news:39DEC611.D00889AD@mwci.net...
> > >
> > >
> > > VE9SRB wrote:
> > >
> > > > It is very important to understand that the effective line
> > > > impedance in a transmission line is not a physical mechanism for wave
> > > > transmission or wave reflection. Wave reflections will only occur at
> > > > physical impedance discontinuities in the transmission line.
> > >
> > > Exactly and precisely correct.
> > >
> > > Bill W0IYH
> > >
> >
> > Bill, I can't believe you mean that no reflection can occur at the stub
> > point in my example where the quarter-wave open circuit stub is in shunt
> > with the line. Are you saying no reflection can occur there unless a
> > physical short circuit is placed there? Are you then also saying that no
> > reflections can occur as a result of wave interference? I can't believe
you
> > mean that.
> >
> > Walt, W2DU
> >
> >

Walter:

The *only* point of physical wave reflections in the example that you
presented is at the open circuit terminating the 1/4 WL stub.

Steve

606. Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Gary Boyer <gboyer@computech-online.net>
Message-ID: <ZnID5.19810$Sr.9860@newsfeed.slurp.net>
Source record: 178236

I had to sell my tower and beams to pay off the divorce attorney. I need a temporary antenna to get back on the hf bands. I have never used a long wire....is there a particular lenght that is best....how do you hook it up to your coax connector on the back of the hf rig etc.....I might try to purchase a used vertical antenna....funds are limited ....please advise....Thanks..Gary...K8BY

607. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <9DID5.21140$tl2.1404241@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178237

"Walter Maxwell" <w2du@journey.com> wrote in message
news:ZKFD5.5044$mC.316350@monger.newsread.com...
.
>
> Steve, you need a refresher course on the principles of wave interference
to
> see what happens to the energy in the waves at the interference point.
>

Why do you make statements like this? Why can't we disagree and stick to
the technical points? I disagree with some of your arguments but I would
never tell you to go take a refresher course. This is unnecessarily
insulting.

> >
> > Walter, it would be interesting to discuss the specifics of the example
in
> > detail. If you post them, I would be pleased to discuss them in detail.
>
> Steve, we have already discussed this item ad nauseam during the past
> several weeks with no agreement, so I see no need to discuss it further,
> because there is no way I'm going to agree with your position. I suggest
you
> review the action of electromagnetic waves on arrival at a medium that
> causes total reflection to determine the correct relationship between the
> voltage and current at the reflection point. You will discover that both
> voltage and current cannot go to zero simultaneously, and the the energy
in
> the waves cannot disappear during the wave cancellation.
> >

If you are correct and I am wrong, then you should be willing to discuss the
details of an example on this NG. So far in this thread your arguments
against me have been "I'm right and Steve is wrong". Let's pick a specific
example, define all conditions and then discuss the steady state power flow,
reflections and the conservation of energy. Pick a situation where an
impedance match occurs through a 1/4 WL transformer or a shunt stub. What
do you have to lose?

Steve

608. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39df55cf.306465007@news.azstarnet.com>
Source record: 178238

On Sat, 07 Oct 2000 03:03:28 GMT, MC 10kW Jesus <qsl27@hotmail.com> wrote:

>Vince,
>
>RG numbering is very dead. There are simply no firm standards for these
>RG numbers and, hence, no guarantee that the RG213 you have will be the
>same as another brand.

There are firm standards that can be viewed at:

http://www.dscc.dla.mil/Programs/MilSpec/ListDocs.asp?BasicDoc=MIL-C-17

and downloading the desired document. In many cases, the specifications are inactive for new design, however, manufacturers who comply with these standards all deliver products that walk, talk, and look the same.

Of course the operative word is "comply." Radio Shack does not comply, nor do most suppliers to the ham radio market. There are two reasons for this: 1) cost, 2) most hams don't know the difference.

Personally I try to use Andrew Heliax wherever possible and "real" RG-213 for flex pigtails. Flea markets are a good source of Heliax and I will buy short 'unusable' pieces that have connectors, just for the connectors.

>That said, the best value for the money right now are the Times
>Microwave LMR series. These are 100% shielded, semi-rigid and proven
>cables. Sure, you will need to source different connectors, but 3rd
>party ones are now available for the common LMR240,400 & 600 sizes. The
>exception is LMR195 which will take all the regular RG58 connectors.
>Another consideration is a hard-line style of cable - but this will be
>much more expensive.

Speaking of TImes Microwave, they don't feel that RG numbering is dead, in fact try:

http://www.timesmicrowave.com/products/military/TL14/TL14.htm

and you can download page 30 and find RG-213 at the bottom of the page.

Wes Stewart N7WS

>
>MC
>
>
>Vincent Charron wrote:
>>
>> Is the RG-213 more effecient than the RG8/U and if so how significant?

>> I'm looking for very lo loss coax, apx 60 feet for VHF use.
>>
>> Vince
>> VA3GX

609. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <KUID5.21152$tl2.1405284@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178239

"VE9SRB" <srbest@worldnet.att.net> wrote in message
news:avID5.21133$tl2.1404125@bgtnsc07-news.ops.worldnet.att.net...
>
> Walter:
>
> The *only* point of physical wave reflections in the example that you
> presented is at the open circuit terminating the 1/4 WL stub.
>
> Steve
>
>

I realized that I did not write what I wanted to say. The above statement
should have read as follows:

The *only* point of *total* physical wave reflection in the example that you
presented is at the open circuit terminating the 1/4 WL stub.

There are partial wave reflections and re-reflections occurring at the
impedance junction where the stub is connected.

Steve

610. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39DF5D6E.D95D5F5@west.raytheon.com>
Source record: 178240

Walter Maxwell wrote:
>
> William E. Sabin <sabinw@mwci.net> wrote in message
> news:39DEC611.D00889AD@mwci.net...
> >
> > VE9SRB wrote:
> > > It is very important to understand that the effective line
> > > impedance in a transmission line is not a physical mechanism for wave
> > > transmission or wave reflection. Wave reflections will only occur at
> > > physical impedance discontinuities in the transmission line.
> >
> > Exactly and precisely correct.
> >
> > Bill W0IYH
> >
> Bill, I can't believe you mean that no reflection can occur at the stub
> point in my example where the quarter-wave open circuit stub is in shunt
> with the line.

> Are you saying no reflection can occur there unless a
> physical short circuit is placed there?

Wave reflection only occurs at impedance discontinuities resulting
from changes in the physical characteristics of the transmission line
'seen' by the traveling wave. Opens and shorts are examples of such
discontinuities as are changes in Zo, or the insertion of shunt or
series impedances.

Interference fringes themselves do not cause reflections unless the
media is nonlinear in which case it is still the change in
transmission line characteristic impedance which causes reflection.

> Are you then also saying that no
> reflections can occur as a result of wave interference?

Absolutely correct.

bart
wb6hqk

611. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DF5E57.6370@wt.net>
Source record: 178241

Gary Boyer wrote:
>
> I had to sell my tower and beams to pay off the divorce attorney. I need a
> temporary antenna to get back on the hf bands. I have never used a long
> wire....is there a particular lenght that is best....how do you hook it up
> to your coax connector on the back of the hf rig etc.....I might try to
> purchase a used vertical antenna....funds are limited ....please
> advise....Thanks..Gary...K8BY

Why not just use a dipole? You will need a tuner to use a longwire. MK
--
http://web.wt.net/~nm5k

612. Adjust swr on beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8rnmer$1a8s$1@news.gate.net>
Source record: 178242

The SWR on my Hy-Gain Th5Mk2 antenna is a bit high in the area of the 20mtr band where I operate the most. It's center resonant (1:1) frequency is 14.230 and it scoots up to about 3:1 at the high end of the band. It's under 2:1 all the way down into the CW portion but I don't operate down there so I'd like to move the center freq up about 60khz. In other words I want under 2:1 swr from 14.350 to 14.175.

I don't have a noise bridge or swr analyzer so it's going to be a "best guess" adjustment. So, folks, please give me some advice. Would you suggest shortening all of the radials about an inch? This is a dual driven beam, so would I shorten the ends of each element the same amount (an inch)? Would I also shorten the reflector and director? Since this is a trap tribander I would assume shortening the outer ends of each element really wouldn't affect 10 or 15mtrs, would it?

Thanks in advance for your suggestions,

David,K4ZZR

613. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39DF60E9.664244D1@oio.net>
Source record: 178243

Gary Boyer wrote:
>
> I had to sell my tower and beams to pay off the divorce attorney. I need a
> temporary antenna to get back on the hf bands. I have never used a long
> wire....is there a particular lenght that is best....how do you hook it up
> to your coax connector on the back of the hf rig etc.....I might try to
> purchase a used vertical antenna....funds are limited ....please
> advise....Thanks..Gary...K8BY

Gary,
I've never had any luck with a long wire antenna, so I'd
recommend using a dipole. But, there are plenty of people
who do use, and like a long wire (or random wire) antenna.
Your going to need a good ground system for the 'other half'
of your long wire antenna, and probably a tuner of some kind,
if you plan to use it on more than one band. For a long wire
the 'best' length is as long as possible, and as high as possible.
You just have to work with the room that you have.
Good luck...
'Doc

614. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39df5f08.308826101@news.azstarnet.com>
Source record: 178244

Hi Richard,

>During my tenure in Metrology, the standard text on the subjects Conjugate Match and Z0
>Match were formalized. Insofar as your access to the NBS standard methods, these
>definitions may be found in "Microwave Theory and Applications," Stephen F. Adam; or they
>may be found in Hewlett-Packard's Application Note 56, or they may be found in the
>original works by R. W. Beatty published in IEEE Transactions in the early 60's.

That brings back memories. Back in '83, I took a short course from Steve Adam.
Of course his book was the text and I got him to inscribe my copy. Sure glad my
employer paid for it all tho <g>.

73,

Wes

615. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF63D4.FA860904@bigfoot.com>
Source record: 178245

Bart Rowlett wrote:
> Interference fringes themselves do not cause reflections unless the
> media is nonlinear in which case it is still the change in
> transmission line characteristic impedance which causes reflection.

Bart, given the following, what would be the power in the first ghost
relative to the original signal assuming lossless T-lines?

300 ohm 300 ohm
TV generator---300 ohm line--+--1/2WL 51.5 ohm coax--+--TV receiver
--
TNX & 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

616. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF6777.E3C1ED51@bigfoot.com>
Source record: 178246

VE9SRB wrote:
> Let's pick a specific
> example, define all conditions and then discuss the steady state power flow,
> reflections and the conservation of energy.

I think I have one involving TV signals and lossless feedlines.

300 ohm 300 ohm
TV generator---300 ohm line---+---1/2WL 51.5 ohm coax---+--TV Receiver

Notice the simularities to my previous example with the Z0s simply
reversed. P+ = Pg + P- and P- = 1/2P+ So the power reaching the
TV receiver is the same as the reflected power and half the power
associated with a particular video object is accepted by the TV
receiver and half is rejected in reflected power. If all the reflected
power is re-reflected at the Z0-match, the power in the object's first
ghost will be 1/2 of the power in the object's original signal. If
there is only 50% re-reflection at the Z0-match that power will instead
be 1/4 the power level of the original object. It should be easy to prove
and measure one way or another.
--
http://www.mindspring.com/~w6rca

617. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF6845.FD55899F@bigfoot.com>
Source record: 178247

Brian Kelly wrote:
>
> CAM wrote:
> > Who said a 2:1 SWR was evil? I'm just trying to understand why an antenna
> > that is supposed to have a feedpoint impedance below 50 ohms is "showing"
> > an impedance of 75 ohms.
> >
> It was made by B&W, he has the resistor in the circuit.
> The guy is looking for a fix he doesn't need.

How do you know it was made by B&W and has a resistor?
--
http://www.mindspring.com/~w6rca

618. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF68F1.ABBFA63@bigfoot.com>
Source record: 178248

Gary Boyer wrote:
> I had to sell my tower and beams to pay off the divorce attorney. I need a
> temporary antenna to get back on the hf bands. I have never used a long
> wire....is there a particular lenght that is best....how do you hook it up
> to your coax connector on the back of the hf rig etc.....I might try to
> purchase a used vertical antenna....funds are limited ....please
> advise....Thanks..Gary...K8BY

Take a look at the All-HF-Band-Dipole on my web page. ~$20
--
http://www.mindspring.com/~w6rca

619. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF5CC2.2147A5FC@dvol.com>
Source record: 178249

Gary Boyer wrote:

> I had to sell my tower and beams to pay off the divorce attorney. I need a
> temporary antenna to get back on the hf bands. I have never used a long
> wire....is there a particular lenght that is best....how do you hook it up
> to your coax connector on the back of the hf rig etc.....I might try to
> purchase a used vertical antenna....funds are limited ....please
> advise....Thanks..Gary...K8BY

>
The beauty of a random wire antenna is that it doesn't have to be any specific
length. The only things that matter are as high and long as possible and it'll
operate on any MF/HF freq., one wire = all nine MF/HF ham bands.
>
You'll need a tuner like the MFJ 969 or 941E to get the wire feedpoint
impedance converted to 50 ohms and you should also string a counterpoise wire
on or near the ground which can also be of random length. I've done several of
these over the years, ya can't beat the bang for the buck.
>
w3rv

620. St. Louis Vertical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CJ <cjr@visi.com>
Message-ID: <39DF7571.1B31DCE9@visi.com>
Source record: 178250

Hi -

I hope that there won't be any problem about asking an antenna question here. Lately, I have begun to wonder.

I've been looking at the St. Louis Vertical for a low profile, easily hidden antenna to use on a tiny lot in a mobile home park. The original design used TV twinlead radials. Apparently there is a newer radial design using flat TV rotator cable radials, but I can't seem to find a description of them. Can anyone help me?

Thanks and 73, CJ K0CJ

621. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <ibID5.5068$mC.318349@monger.newsread.com>
Source record: 178251

William E. Sabin <sabinw@mwci.net> wrote in message
A way to see this problem is the following:
>
> Imagine a line that is several wavelengths long. The far end is terminated
> in a short circuit. This is a "hardware short circuit".
>
> If we look along the length of the line, we see a zero impedance at each
> halfwave point *toward* the generator. Each one is due to a phase
> cancellation of a forward wave and a reflected wave.
>
> Each of these zero impedance points is a "virtual" short circuit.
>
> Each virtual short circuit is created by the *single hardware* short
> circuit.
>
> A forward wave from the generator is not reflected by each and every
virtual
> short circuit. Only the *hardware* short circuit actually produces the
> actual reflections and therefore *all* of the virtual short circuits.
>
> How can we prove this? A logic trick will do it. Suppose that the first
> virtual short is in fact a perfect reflection point. Then all of the
> forward wave will be reflected from that point and *nothing* will, by
> definition, arrive at the far end.
>
> The conumdrum is that if all of the wave is actually reflected at the
> virtual short, and therefore no wave reaches the far end, then the virtual
> short cannot even exist. In other words the virtual short *owes its
> existence* to the hardware short at the far end and to the forward wave
that
> is reflected from that hardware short circuit.
>
> The mental difficulty is the following: If we look at a section of line to
> the generator side of a virtual short we see a standing wave pattern that
is
> *identical* to what it would be if the virtual short were in fact an
actual
> hardware short across the line at that same point. In other words the line
> to the left of the virtual short is identical to that due to a real short.
>
> This is a seductive idea that encourages the belief that the virtual short
> is in fact a point of reflection. But a little thought shows that it is
all
> *smoke and mirrors* in the truest sense. A mind game that looks OK but is

in
> fact, nonsense. The thing that is bothersome is that some good folks are
> obsessed with this cockamany idea.
>
> The way to get out of this difficulty is to realize that the virtual short
> *must* have a reflection from the real short, and cannot itself be an
actual
> source of reflection.
>
> This is exactly the same situation as in Walter's example, where the
virtual
> short is due to the stub and it is due *only* to a phase cancellation of
> forward and reflected waves within the stub, which is a shorted 1/2 wave
or
> an open 1/4 wave. In both cases the far end of the stub is a perfect
> *hardware reflector*.
>
> Bill W0IYH
>
Fine Bill, but this concept doesn't negate the example in my Mar/Apr 1998 QEX article, where the hardware short is a 150-ohm resistive load on a 50-ohm line, with the partial transmission and partial reflection with reflection coefficient of 0.5. In this example the reflection coefficients of voltage and current from the load mismatch are amplitude 0.5 at angles -60 and + 120 respectively, while the coefficients of the stub mismatch are 0.5 at angles +60 and -120 respectively. The resultant voltage angle is 0 degrees and the resultant current angle is 180 degrees, establishing a virtual open circuit that re-reflects the energy contained in the two sets of reflected waves. Since the partial short provided by the 150-ohm terminating load determines the amplitude and angles of the inerfering reflected waves with resultants that establish the open circuit, would not this satisfy the requirement that a virtual open or short requires a hard short for its origination?

Walt W2DU

622. domain name www.newsgroups.vg is again available...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CaroleMangin@hotmail.COM
Message-ID: <200010071947.e97JliL16952@mailbox3.ucsd.edu>
Source record: 178252

www.newsgroups.vg on speednames at 17h40 this 08/10/00

Just have a look at :
http://www.speednames.com/search.asp?assoid=2660

@+
Carole...

623. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <JXID5.5075$mC.318973@monger.newsread.com>
Source record: 178253

Richard Clark <rwclark@rwclark.seanet.com> wrote in message
news:sEHfOap4wudSdUxQ6wo+EolxtNQm@4ax.com...
> Hi All,
> So in the grand tradition of the internet
> I present my own Opus.
>
> During my tenure in Metrology, the standard text on the subjects Conjugate
Match and Z0
> Match were formalized. Insofar as your access to the NBS standard
methods, these
> definitions may be found in "Microwave Theory and Applications," Stephen
F. Adam; or they
> may be found in Hewlett-Packard's Application Note 56,

Richard, this application note is Ref # 120 in my Reflections, from which I based my statements in my early QST series in the 1970's, and in the book.

>or they may be found in the
> original works by R. W. Beatty published in IEEE Transactions in the early
>60's.

My Ref #121 in Reflections is: "R.W.Beatty, "Intrinsic Attenuation,: IEEE Transactions on Microwave Theory and Techniques, V ol MTT-11, no. 3, May 1963, p 179.

These data have been the basis for all my screeching and yelling from the beginning, even before the controversy began. According to Beatty's "Intrinsic Attenuation", there is a conjugate match whenever all of the available power from the source or network is being delivered to its load. I've been told by the various 'experts' that this is not true. I just can't seem to win.

Walt, W2DU

624. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <Z1JD5.5077$mC.319066@monger.newsread.com>
Source record: 178254

Richard, I forgot to mention that Beatty's definitions are included ver
batim in the second edition of Reflections in the Chapter on Matching.

Walt, W2DU

625. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DF87EE.735430C2@mwci.net>
Source record: 178255

Walter Maxwell wrote:

> William E. Sabin <sabinw@mwci.net> wrote in message
> A way to see this problem is the following:
> >
> > Imagine a line that is several wavelengths long. The far end is terminated
> > in a short circuit. This is a "hardware short circuit".
> >
> > If we look along the length of the line, we see a zero impedance at each
> > halfwave point *toward* the generator. Each one is due to a phase
> > cancellation of a forward wave and a reflected wave.
> >
> > Each of these zero impedance points is a "virtual" short circuit.
> >
> > Each virtual short circuit is created by the *single hardware* short
> > circuit.
> >
> > A forward wave from the generator is not reflected by each and every
> virtual
> > short circuit. Only the *hardware* short circuit actually produces the
> > actual reflections and therefore *all* of the virtual short circuits.
> >
> > How can we prove this? A logic trick will do it. Suppose that the first
> > virtual short is in fact a perfect reflection point. Then all of the
> > forward wave will be reflected from that point and *nothing* will, by
> > definition, arrive at the far end.
> >
> > The conumdrum is that if all of the wave is actually reflected at the
> > virtual short, and therefore no wave reaches the far end, then the virtual
> > short cannot even exist. In other words the virtual short *owes its
> > existence* to the hardware short at the far end and to the forward wave
> that
> > is reflected from that hardware short circuit.
> >
> > The mental difficulty is the following: If we look at a section of line to
> > the generator side of a virtual short we see a standing wave pattern that
> is
> > *identical* to what it would be if the virtual short were in fact an
> actual
> > hardware short across the line at that same point. In other words the line
> > to the left of the virtual short is identical to that due to a real short.
> >
> > This is a seductive idea that encourages the belief that the virtual short
> > is in fact a point of reflection. But a little thought shows that it is

> all
> > *smoke and mirrors* in the truest sense. A mind game that looks OK but is
> in
> > fact, nonsense. The thing that is bothersome is that some good folks are
> > obsessed with this cockamany idea.
> >
> > The way to get out of this difficulty is to realize that the virtual short
> > *must* have a reflection from the real short, and cannot itself be an
> actual
> > source of reflection.
> >
> > This is exactly the same situation as in Walter's example, where the
> virtual
> > short is due to the stub and it is due *only* to a phase cancellation of
> > forward and reflected waves within the stub, which is a shorted 1/2 wave
> or
> > an open 1/4 wave. In both cases the far end of the stub is a perfect
> > *hardware reflector*.
> >
> > Bill W0IYH
> >
> Fine Bill, but this concept doesn't negate the example in my Mar/Apr 1998
> QEX article,

Walter, I am not going to get involved in trying to refute or resolve every mind-twisting argument that has ever been made about wave mechanics.

My input that is at the top of this article is absolutely the bottom line for me. The basic principles that are involved are as crystal clear for me as anything I have ever seen in my entire life.

I just can't believe that this goes on and on and on, year after year after year. I keep asking myself "what is the real game, the real agenda, the real payoff for this ridiculous haggling over this ridiculous subject?"

This topic has a life of its own that is never, I mean never, going to be *permitted* to go away. If anything *should* go away, this is it.

Bill W0IYH

626. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001007163509.16848.00000483@ng-cc1.aol.com>
Source record: 178256

Hi George--

I remember those days--Jim Hartley, W1DIS modified his Johnson Desktop for "ultra-modulation". The wattmeter (and my S-meter) would indicate upward modulation, but the signal didn't splatter because the negative peaks never quite reached cut off. I believe Jim used a Panadapter rather than a meter to monitor his waveform.

I want to re-run some tests with my solid-state AM rigs to re-evaluate what happens at 100% modulation. As I recall, when I tuned the PA and driver of these rigs for minimum power output fluctuation under full modulation, this correlated very closely with achieving a 2:1 carrier-to-peak voltage ratio when viewing the envelope on the scope. The presence of upward or downward modulation correlated with either negative peak clipping or a carrier-to-peak ratio of less than 2:1 on modulation peaks.

Rick K1BQT

627. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <uIXfOc095mFaxttgkLgmERhQc4Nn@4ax.com>
Source record: 178257

On Sat, 07 Oct 2000 17:20:41 GMT, "Walter Maxwell" <w2du@journey.com> wrote:

>
>Richard Clark <rwclark@rwclark.seanet.com> wrote in message
>news:sEHfOap4wudSdUxQ6wo+EolxtNQm@4ax.com...
>> Hi All,
>> So in the grand tradition of the internet
>> I present my own Opus.
>>
>> During my tenure in Metrology, the standard text on the subjects Conjugate
>Match and Z0
>> Match were formalized. Insofar as your access to the NBS standard
>methods, these
>> definitions may be found in "Microwave Theory and Applications," Stephen
>F. Adam; or they
>> may be found in Hewlett-Packard's Application Note 56,
>
>Richard, this application note is Ref # 120 in my Reflections, from which I
>based my statements in my early QST series in the 1970's, and in the book.
>
>>or they may be found in the
>> original works by R. W. Beatty published in IEEE Transactions in the early
>>60's.
>
>My Ref #121 in Reflections is: "R.W.Beatty, "Intrinsic Attenuation,: IEEE
>Transactions on Microwave Theory and Techniques, V ol MTT-11, no. 3, May
>1963, p 179.
>
>These data have been the basis for all my screeching and yelling from the
>beginning, even before the controversy began. According to Beatty's
>"Intrinsic Attenuation", there is a conjugate match whenever all of the
>available power from the source or network is being delivered to its load.
>I've been told by the various 'experts' that this is not true. I just can't
>seem to win.
>
>Walt, W2DU
>

Hi Walt,

From the references already cited:
"BASIS OF ANALYSIS
To analyze a particular case of mismatch an appropriate basis of calculation must
be chosen. If the power actually delivered to the load is to be compared with maximum
available from the source, this is on a conjugate basis. If comparison is made with the

power the source will deliver to a Z0 load, this is on a Z0 basis. These are two of a number of possibilities."

Through every discussion to date, I have seen both basis of calculation being intermingled by many correspondents here.

What Basis of calculation do you use, Walt?

Exclusively, or a varying Basis with respect to the scenario? Steve, you can chime in too. Have you guys got your Basis crossed?

73's
Richard Clark, KB7QHC

628. Re: magnet mount for rubber duck

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Cris Hanna <crishanna@mindspring.com>
Message-ID: <W3MD5.115873$Qx4.3553224@news1.rdc1.il.home.com>
Source record: 178258

typically cell phones antennas do not use bnc connectors
"etagg" <etagg@twcny.rr.com> wrote in message
news:WFFD5.38497$355.5881016@typhoon.nyroc.rr.com...
> cell phone magnetic mounts
> "Cris Hanna" <crishanna@mindspring.com> wrote in message
> news:5TwD5.112980$Qx4.3474113@news1.rdc1.il.home.com...
> > Looking for mag mount which has the bnc connector on the mount to attach
a
> > rubber duck with bnc on it.
> >
> > I know I have seen these but can't find now
> >
> > Thanks
> >
> >
>
>

629. Re: GAP antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39DF8DDB.9D1@wt.net>
Source record: 178259

Hayden P Ferdig wrote:
>
> I have a question. I just bought a GAP TITAN DX antenna and I called GAP
> asking how to ground the antenna. He told me not to ground the antenna at
> all. He also told me not to put a lightning arrestor in the feedline, and
> that I should not ground my transceiver and power supply. The guy I was
> taking is the man who actually designed the TITAN DX himself. He said
> that down in Florida (where there is LOTS of lightning) that those who
> grounded their TITAN DX received many lightning strikes because by
> grounding the antenna, you are actually raising "ground" to the top of
> the antenna, and this is attractive to lightning. He said that by not
> grounding the antenna, the lightning will not be attracted to the antenna
> as much. The NEXT day I talked to someone else who has installed 4 GAP
> titans before and he told me the EXACT opposite. This other guy told me
> to ground my antenna, my rig, my power supply, and to use a lightning
> arrestor. Could someone else with experience please tell me what you
> think about this situation because I don't know WHO or WHAT to believe
> now !!! Thanks,

Hummm, thats a definate contrast of opinions thats for sure. For my 2
cents worth, I think not grounding the antenna a bad idea from a
lightning standpoint. And I don't really think it matters a whole heck
of a lot whether it's grounded or not as far as chances of being hit.
How well the antenna streams will have more of an effect. Face it, the
antenna will act as a lightning rod no matter if grounded or not. It's
much better to make an easy path to ground for the eventual strike
rather than let the lightning decide where it wants to go. If the
antenna is rugged enough and you have a good low resistance ground, you
can take a direct strike with minimal damage to anything. If the antenna
is not grounded, you have a high resistance and the antenna will melt
like a piece of solder, and blow out anything in it's path to ground.
"Which it will choose, not you".
Much better for you to choose. As far as grounding the rig, thats really
up to you in my opinion. If the rig is tube type or runs off line
voltage in any way, it should at least be grounded to a power plug
ground pin.
If the rig is low voltage 12v etc, it really doesn't need a ground at
all. Unless you just want one. As long as the antenna and feedline is
proper there is no real need for an rf ground in the shack. A complete
antenna such as a dipole needs no rf ground at all. A vertical needs the
rf ground below the antenna. Having an rf ground at the shack is kinda
silly, unless the antenna leads all the way to the radio. And I'd never
really want to do that unless no other way. I can't think of why gap
would advise against lightning suppression, and no grounding. I don't

think thats very good advice, and could end up causing some real damage someday, somewhere.
I guess they think that being most will be ground mounted, the bulk of the strikes will follow the antenna to ground, which is probably true, but you can still have plenty of energy going to the house from the antenna. Poof, goes the rig. And if the ground return from the antenna to ground is really poor, it could be "poof" goes part of the house if the strike follows that path to ground. MK

--
http://web.wt.net/~nm5k

630. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF8040.63D1CDDB@dvol.com>
Source record: 178260

CAM wrote:

> Brian Kelly wrote:
> >
> > CAM wrote:
> > > Who said a 2:1 SWR was evil? I'm just trying to understand why an antenna
> > > that is supposed to have a feedpoint impedance below 50 ohms is "showing"
> > > an impedance of 75 ohms.
> > >
> > It was made by B&W, he has the resistor in the circuit.
> > The guy is looking for a fix he doesn't need.
>
> How do you know it was made by B&W and has a resistor?
> --

Yer new Nickle Extra fry yer brain or what? I wuz yankin' yer pud! . . The notorious B&W dipole is "broadbanded" with a resistor.
>
b.

631. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <MWfAeKAcX335Ew0n@ifwtech.demon.co.uk>
Source record: 178261

Reg Edwards wrote:
>G3IMX is frequently on 160m, 1930 kHz, very late in the
>evenings. QTH = Isle of Wight. Very strong signals. Always
>available for technical old-times rag-chew.

Thanks, Reg. If it ever stops raining, I'm hoping to get a 160m antenna up... first time in 35 years!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

632. Re: Adjust swr on beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF83DF.D87790F3@dvol.com>
Source record: 178262

David wrote:

> The SWR on my Hy-Gain Th5Mk2 antenna is a bit high in the area of the 20mtr
> band where I operate the most. It's center resonant (1:1) frequency is
> 14.230 and it scoots up to about 3:1 at the high end of the band. It's
> under 2:1 all the way down into the CW portion but I don't operate down
> there so I'd like to move the center freq up about 60khz. In other words I
> want under 2:1 swr from 14.350 to 14.175.
>
> I don't have a noise bridge or swr analyzer so it's going to be a "best
> guess" adjustment. So, folks, please give me some advice. Would you
> suggest shortening all of the radials about an inch? This is a dual driven
> beam, so would I shorten the ends of each element the same amount (an inch)?
> Would I also shorten the reflector and director? Since this is a trap
> tribander I would assume shortening the outer ends of each element really
> wouldn't affect 10 or 15mtrs, would it?
>
> Thanks in advance for your suggestions,
>
> David,K4ZZR

>
If it was a single-bander all you'd have to do is move the ends of the elements inward about a quarter inch each. But it's not a single-bander, it's a very complex contraption I wouldn't touch, not even with an anlalyzer because of the probable interactions on the other bands unless I knew exactly how the thing works. I'd call Hy-Gain and get it straight from them. I'll take a flyer and bet they'll tell you it meets it's specs and to leave it alone and put a tuner in the line.
>
w3rv

633. Re: GAP antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20001007172950.21189.00000658@ng-fq1.aol.com>
Source record: 178263

The answer is in the question. . .

Just what are you intending to ground?

The GAP is a vertical dipole - center fed. You wouldn't dream of grounding the business end of your horizontal dipole so you shouldn't be thinking about grounding this dipole either.

Now - are you talking about grounding the mounting mast? If you are on the roof, you have just added a vertical wire that is a great source to couple with the antenna or detune it and cause all sorts of grief.

When I first got my GAP, I ran a wire from the mast on the roof to a ground rod. I had terrible RF in the shack. It was so bad it would shut off the power on my XCVR. Georgeat GAP told me to get rid of the ground wire and run my feedline straight down for as far as I could before going horizontal with it. That cured the problem. He suggested taping about a foot of the coax to the groundng rod before it takes a right angle turn to the shack. Theory being that lightening likes a straight path and will jump to the ground rod before it turns and goes back to the shack. I don't know how sound that theory is but I do know getting rid of the ground wire cured my RF blues.
K4IA
Buck
Fredericksburg, Virginia USA

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634. Hygain 14AVQ question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: ydussaul@total.net
Message-ID: <39df9649.33176285@news.total.net>
Source record: 178264

I have a 14AVQ Hygain vertical and it works great.
But I often look at it and I am wondering what is the purpose of these
three small pieces of wire (about 8 inches long) at the top....You
might call it a top hat...
Yves-VE2ATD

635. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <BEMD5.1433$524.84787@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178265

"Walter Maxwell" <w2du@journey.com> wrote in message
news:ibID5.5068$mC.318349@monger.newsread.com...
>
> Fine Bill, but this concept doesn't negate the example in my Mar/Apr 1998
> QEX article, where the hardware short is a 150-ohm resistive load on a
> 50-ohm line, with the partial transmission and partial reflection with
> reflection coefficient of 0.5. In this example the reflection coefficients
> of voltage and current from the load mismatch are amplitude 0.5 at
> angles -60 and + 120 respectively, while the coefficients of the stub
> mismatch are 0.5 at angles +60 and -120 respectively. The resultant
voltage
> angle is 0 degrees and the resultant current angle is 180 degrees,
> establishing a virtual open circuit that re-reflects the energy contained
in
> the two sets of reflected waves.

In the case where a shunt stub is used to match a 150 ohm load, the total rearward traveling voltage at the stub connection point goes to 0 V. The total rearward traveling current at this point simultaneously goes to 0 A. This is rearward wave cancellation such that no net rearward power flow occurs forward of the stub connection point. A total re-reflection of the reflected wave simply does not occur, in fact, it is physical impossible under the conditions that you describe.

>Since the partial short provided by the
> 150-ohm terminating load determines the amplitude and angles of the
> inerfering reflected waves with resultants that establish the open
circuit,
> would not this satisfy the requirement that a virtual open or short
requires
> a hard short for its origination?
>
> Walt W2DU
>

In the example that you describe above, the forward source wave arriving at the stub connection point sees a physical reflection coefficient equal to -0.333. As a result of this physical reflection coefficient, there is a reflected source wave created in the main transmission line line. The steady state impedance match occurs because the steady state reflections from the antenna and the steady state reflections from the stub termination both deliver a rearward traveling wave back into the main transmission line. The net sum of these two steady state rearward traveling waves combine to cancel the source reflection created at the stub junction. The net rearward traveling ave goes to 0 V and 0 A. This wave cancellation process

is all that is necessary to explain the impedance match. A virtual short circuit simply does not exist.

If you define the example conditions, I would be happy to discuss this in more detail.

Steve, VE9SRB

636. Re: Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20001007173430.21189.00000659@ng-fq1.aol.com>
Source record: 178266

I think you should try using one of those MFJ Artificial Grounds. You run another shorter random length wire as a ground and the device tunes it to act as an effective counterpoise.

MFJ makes a combo antenna tuner and artificial ground that is perfect for random wire antennas. I just happen to have one in perfect condition (my antenna plans changed and I never used it) I will sell it for $100 plus shipping.
K4IA
Buck
Fredericksburg, Virginia USA

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637. Re: Tower grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF8724.6765D29A@dvol.com>
Source record: 178267

David wrote:

> Can someone tell me which dissimilar metals will corrode when they are in
> contact with each other? I'm using a solid copper gounding bar as a single
> point ground bulkhead for my tower and station equipment on the exterior
> wall of my house. I have ten 8' grounding rods surronding the tower and
> bonded together with the #2 copper wire which runs back to the bulkhead.
> I've got some large copper connectors to use with the #2 wire but what type
> of metal bolts can I use to attach the copper connectors to the copper bar?
> I looked everywhere for brass, bronze or copper bolts with no luck. Would
> stainless steel work? I just don't want to start corrosion using the wrong
> thing.

>
Dial up http://www.mcmaster.com
>

> Thanks for some advice,
> David, K4ZZR

>
w3rv

638. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001007174710.05301.00000599@ng-fc1.aol.com>
Source record: 178268

>I want to re-run some tests with my solid-state AM rigs to re-evaluate what happens at 100% modulation.<

To answer myself, here's what I found. With the 6-meter Nor'easter set for 3.0 watts output and tuned as perfectly for 100% modulation as I could get it, my Welz 220 (and a Bird 43) didn't budge regardless of modulation percentage. However, my Bird 4391 told a different story. The manual says my 4391 doesn't indicate average (heating) power in CW mode, but mine seems to because I saw a power increase to approximately 4.3 watts output under full modulation. Moreover, it correctly indicated 12.2 watts PEP under 100% modulation.

So, don't look for your Bird 43 to change, but more sophisticated instruments such as BC modulation indicators and the Bird 4391 will.

And that's the name of that tune.

Rick K1BQT

639. Re: Beverage - To terminate or not??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rmoa8$g2p$1@plutonium.btinternet.com>
Source record: 178305

Suggestion - use the Beverage wire and a ground return to
operate a relay to switch the terminating resistor on or
off. You will then have the best of both worlds.

Reg.

640. Relay replaces Trap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rms8mgbm1@uranium.btinternet.com>
Source record: 178306

Suggestion -

To shorten an antenna to resonate at a higher frequency,
insert a relay in the wire where a trap would normally be
used. The antenna conductor up to the relay can be twin 20
awg speaker wire or something similar. Operate the relay
from the shack to connect the length of conductor beyond it.

In the past I have used a reed relay at 100 watts RF. Would
need a vacuum relay for high power.

Anybody else done this to save loss in a trap ?

Reg, G4FGQ

641. Re: Antenna Construction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DEE734.AFC6F789@dvol.com>
Source record: 178307

"Malcolm J. Richardson" wrote:

> Please Help....
>
> I have recently become interested in building my own antennas for
> Australian UHF freq. I am interested in aquiring specs or software to help
> calculate length gain etc.

>
Cruise http://www.ac6v.com/ for antenna design info & software
>
w3rv

642. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <FMKiIPAIft35EwUV@ifwtech.demon.co.uk>
Source record: 178308

Rick Littlefield wrote:
>
>By way of history, two-dimensional loading schemes for the quad loop are
>nothing new. Andy Pfeiffer, K1KLO, built a linear-loaded 12-meter quad around
>10 years ago. Not long after, Paul Carr, N4PC,
>authored the "Squad", a 17-meter linear-loaded quad with 10-meter dimensions in
>the early 90's for CQ.
>
>Prior to building the two-element version, Paul built an experimental single
>quad loop yielding a near 50-ohm feedpoint and modeling less than 1-dB down
>from full size. Paul used a diamond-quad shape fed at its base and loaded by
>four-wire meander lines extending inward from each of the two horizontal
>corners. He claimed +5 dBd gain (calculated) for his two-element "Squad".
>

It goes back a long way further than that. Sometime back in the 1960s
(or maybe even earlier) G3IMX devised a quad element for 14MHz that was
the size of a 21MHz element. The loading was capacitive at the high-
impedance points.

Imagine a square element, fed at the bottom. The two loading wires that
bring the resonance down to 14MHz run parallel to each vertical leg of
the loop, inside the loop. At each side, a short jumper wire connects
the mid-points of the two vertical wires. The lengths of the two loading
wires adjust the resonance.

G3IMX's clever trick was to insert a 21MHz trap in the jumper wires, to
make a true dual-band element. The loop was self-resonant on 21MHz, and
the loading kicked in on 14MHz. A full-size 10m element could then be
nested inside. This idea was patented, and maybe G3IMX sold plans or
parts, but as far as I know it was never published in a magazine.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

643. Vent pipe as counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: n9yln@aol.com
Message-ID: <20001007065149.14601.00000936@ng-cn1.aol.com>
Source record: 178309

We will be building a 20 m vertical to go up on the roof of our 3 story apartment building. We will be mounting the antenna on a vent pipe up on the roof. We were wondering if attaching the shield of the coax to the vent pipe would provide efficient enough counterpoise? Or would we still need to lay out radials?
Please email me direct at: N9YLN@aol.com
73,
Renee

644. Re: Vent pipe as counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Den <dspiess@my-deja.com>
Message-ID: <8rn27q$1bv$1@nnrp1.deja.com>
Source record: 178310

Renee,

I'd say try it! What have you got to loose? I'd put a choke at the feed point (5-6 turns of coax) and run the coax away from the antenna at 90 degrees. If it doesn't work, no QSOs, then add a few radials, 3 should do.

73
Den W2DEN _._

In article <20001007065149.14601.00000936@ng-cn1.aol.com>,
n9yln@aol.com (N9YLN) wrote:
> We will be building a 20 m vertical to go up on the roof of our 3 story
> apartment building. We will be mounting the antenna on a vent pipe up on the
> roof. We were wondering if attaching the shield of the coax to the vent pipe
> would provide efficient enough counterpoise? Or would we still need to lay out
> radials?
> Please email me direct at: N9YLN@aol.com
> 73,
> Renee
>

Sent via Deja.com http://www.deja.com/
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645. Re: Relay replaces Trap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: jgboyles@aol.com
Message-ID: <20001007075832.04395.00000716@ng-ck1.aol.com>
Source record: 178311

Hi Reg,
You didn't mention how you operate the relay from the shack, assume you run relay DC current thru rf chokes to 2 speaker conductors. Novel idea, may give it a try.
73 Gary N4AST

646. Where to find heavy wall clear tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Ed/N3WJA <n3wja@arrl.net>
Message-ID: <aEED5.1236$cv4.376868@news.abs.net>
Source record: 178312

I have given up on trying to find the motorcycle fork cover suggested to cover the coil on my screwdriver antenna. I have contacted 6 motorcycle shops and no one has ever heard of the maker or model, Daystar model 69. While at a hamfest last week I walked around the parking lot and saw that just about every screwdriver antenna there had heavy wall clear plastic tubing with a flat, evidently machined, top under the stinger mount. It looks like mine would require 2.25 ID and I would like to acquire enough to build three covers. I need one for my DK3Z, one for my N9JMX Allbander and one for a spare. Top piece is about 3/8 inch thick and machined to fit the 2.25 ID tubing. The cover for the Allbander is approx. 2 foot long, not sure on the DK3Z at this point
Where can you find the tubing and top piece?

647. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF21A3.938BFB7B@bigfoot.com>
Source record: 178313

"Ian White, G3SEK" wrote:
> It goes back a long way further than that. Sometime back in the 1960s
> (or maybe even earlier) G3IMX devised a quad element for 14MHz that was
> the size of a 21MHz element. The loading was capacitive at the high-
> impedance points.

I've done a similiar thing for 20m/17m operation. The quad reflector element is sized such that a fixed open-wire stub can be either shorted or opened by a relay. Open it's capacitive and resonates on 17m and shorted it's inductive and resonates on 20m. The driven element is simply fed with open-wire feedline on both 17m or 20m. The result is a dual band quad beam.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

648. Re: Newby 40M Vertical Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DF1055.E1331C92@dvol.com>
Source record: 178314

CAM wrote:

> KI0MB wrote:
> >
> > I have put up a 40M Vertical and I am having trouble with it. It is a 1/4
> > wave with radials. It is cut to frequency as are the radials, but the SWR
> > is about 2:1 and showing 75 Ohms at that level.
>
> What is probably happening is that your resonant feedpoint resistance is
> around 35 ohms and is being transformed to 75 ohms by the feedline.
>
> Run a plot of SWR every 50kHz from 7.0 to 7.3 and tell us what the
> results are.

>
There is something inherently evil about a 2:1 swr? It won't work just fine
as-is??
>
w3rv

649. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8rn8th$2ra$1@plutonium.btinternet.com>
Source record: 178315

G3IMX is frequently on 160m, 1930 kHz, very late in the evenings. QTH = Isle of Wight. Very strong signals. Always available for technical old-times rag-chew.

Reg, G4FGQ.
==========

Ian wrote -
> It goes back a long way further than that. Sometime back in the 1960s
> (or maybe even earlier) G3IMX devised a quad element for 14MHz that was
> the size of a 21MHz element. The loading was capacitive at the high-
> impedance points.
>
> Imagine a square element, fed at the bottom. The two loading wires that
> bring the resonance down to 14MHz run parallel to each vertical leg of
> the loop, inside the loop. At each side, a short jumper wire connects
> the mid-points of the two vertical wires. The lengths of the two loading
> wires adjust the resonance.
>
> G3IMX's clever trick was to insert a 21MHz trap in the jumper wires, to
> make a true dual-band element. The loop was self-resonant on 21MHz, and
> the loading kicked in on 14MHz. A full-size 10m element could then be
> nested inside. This idea was patented, and maybe G3IMX sold plans or
> parts, but as far as I know it was never published in a magazine.

650. Re: magnet mount for rubber duck

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: etagg <etagg@twcny.rr.com>
Message-ID: <WFFD5.38497$355.5881016@typhoon.nyroc.rr.com>
Source record: 178316

cell phone magnetic mounts
"Cris Hanna" <crishanna@mindspring.com> wrote in message
news:5TwD5.112980$Qx4.3474113@news1.rdc1.il.home.com...
> Looking for mag mount which has the bnc connector on the mount to attach a
> rubber duck with bnc on it.
>
> I know I have seen these but can't find now
>
> Thanks
>
>

651. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001007094021.23734.00000593@ng-cp1.aol.com>
Source record: 178317

>Will I be in danger of being sued? And the biggest question of
>all --- was it *really* Al Gore who invented fractal antennas?
>

Quite possible. The big secret is that Chirp and Albore are illegitimate twins.
One went into scientwiphic field, the other one into politics. The lying genes
managed to survive and are surfacing now. The similarity is amazing, isn't it?

Hope it helps, but don't tell anybody!

bada BUm

652. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39DF275E.AC805876@bigfoot.com>
Source record: 178318

VE9SRB wrote:
> A refection of the forward traveling waves does not
> occur as a result of this forward wave cancellation.

But it resembles a reflection. You said voltages go to zero at a virtual short. The voltages in those two forward traveling waves have cancelled each other out, i.e. gone to zero at the Z0-match point. The two powers associated with the cancelled energy waves have gone to zero at the Z0-match.

The destructive interference pattern has caused reflected energy on one side of the Z0-match to disappear and appear on the other side of the Z0-match as constructive interference. That displaced energy changes directions much as happens with non-glare glass. It certainly seems to resemble a reflection.
--
http://www.mindspring.com/~w6rca

653. Re: 2m,6m,70cms Beam.Recommendations Please.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:00:36 UTC
From: egriffin@vnet.net
Message-ID: <39df674f.43889339@news.vnet.net>
Source record: 178288

Dolan.
Take a look at the KMA50500 at www.kmaantennas.com
73
Ed

On Fri, 6 Oct 2000 19:45:46 +0100, "dolan morrison"
<dolan.morrison@ntlworld.com> wrote:

>Any help on selecting a tribander beam for above frequencies with single
>feed and not
>too large.Thank you.
>GM0LZE.
>
>
>

KMA Antennas
VHF - UHF - HF log periodics
http://www.kmaantennas.com

help support qsl.net with a donation
https://proxy.qsl.net/donation

654. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 00:08:17 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <RPtD5.4806$mC.307324@monger.newsread.com>
Source record: 178290

Mr. Sabin, hereafter I shall refer to you as Mr. Sabin. During all the years I've heard you referred to, you were called either Bill, or Bill Sabin. Perhaps you prefer a more formal address than I require for myself, but from now on you are Mr. Sabin.

73,

Walter

PS--I observe that you sign your emails with 'Bill'.

655. Re: CB Antenna SkipShooter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 01:50:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DE7337.87E8576A@dvol.com>
Source record: 178289

Jï¿½é¥² wrote:

> i got a skipshooter #2 antenna and want to use it for a base antenna ...
> what do i need to do to make this work ..

>
A pole, a radio, an impedance bridge, a hacksaw and a soldering iron. Then
ground it.
>
w3rv

656. Re: Aluminum for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 02:25:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DE7B67.75C59D6F@dvol.com>
Source record: 178291

Bill Ogden wrote:

> Thank you both for the comments. Based on the comments my conclusion is
> that a 60+ vertical is not just a length of light-weight aluminum (as I had
> hoped). For anyone else thinking along the same lines, the site
> http://www.karlquist.com/Irrigation/irrigation.html is very interesting.
>
> I will probably stick with my original plan of a 40' tower (probably the
> aluminum variety) with a lightweight mast on top of it.

>
Weight in itself doesn't matter. A large diameter thin-wall some weight-per-foot tube will be be stiffer than a smaller diameter heavier-walled tube of the same weight-per-foot.
>

> I was looking for
> alternatives partly to avoid (or to try to avoid) a need for building
> permits, etc, etc. A tower is sufficiently permanent that it probably needs
> a building permit.

>
. . . OOPS! 'Nother whole dimension of concerns and you're absolutely correct. The Rohn stuff needs to be based in concrete and that's precisely when the building inspector and the zoning commission goobers get involved. My experience indicates that if you don't do any concrete you can pretty much do as you please within reasonable limits. If your local power company doesn't need building permits to put their poles in the ground without concrete or permits, which they don't, so do you.
>
heh. Go for it.
>

> Bill Ogden
> W2WO

>
w3rv

657. Re: California governor vetos antenna bill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 02:37:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39DE7E3B.74124A80@dvol.com>
Source record: 178293
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Phil Kane wrote:

> On Fri, 06 Oct 2000 10:04:42 GMT, Brian Kelly wrote:
>
> >> >if both the house and the senate passed it unamimously, why not just
> >> >override the veto and tell the governor to shove it.
> >>
> >> Good question.
> >
> >>
> >Glitch in the balance of powers theory.
>
> As Jim Maxwell, the ARRL Pacific Division Director pointed out,
> there is no political gain to be had in having a Democratic
> Senate and Democratic Assembly override a Dsmocratic governor's
> veto, and anyhow the Legislature has adjourned until next January.

>
Astute but how much political mileage does Davis get outta ham towers fer
chrissake and it's gonna be "different" in January is it? Go for it and God
bless.
>

> 73 de Phil Kane - K2ASP

>
w3rv

658. Re: 213 vs RG8U

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 03:03:28 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <39DE938B.81497902@hotmail.com>
Source record: 178292

Vince,

RG numbering is very dead. There are simply no firm standards for these RG numbers and, hence, no guarantee that the RG213 you have will be the same as another brand.
That said, the best value for the money right now are the Times Microwave LMR series. These are 100% shielded, semi-rigid and proven cables. Sure, you will need to source different connectors, but 3rd party ones are now available for the common LMR240,400 & 600 sizes. The exception is LMR195 which will take all the regular RG58 connectors. Another consideration is a hard-line style of cable - but this will be much more expensive.

MC

Vincent Charron wrote:
>
> Is the RG-213 more effecient than the RG8/U and if so how significant?
> I'm looking for very lo loss coax, apx 60 feet for VHF use.
>
> Vince
> VA3GX

659. Re: 2m,6m,70cms Beam.Recommendations Please.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 03:10:17 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001006231017.24637.00000537@ng-cq1.aol.com>
Source record: 178294

>Any help on selecting a tribander beam for above frequencies with single
>feed and not
>too large.Thank you.
>GM0LZE.

Cushcraft has a tri band beam that is a combination of thier a270-10s 2/440 verticle beam and thier 3 el 6 horizantal beam. I have one of each of the 2 beams up and both are excellent prefomers for me here.
73 de KG4FET SANDOR

660. magnet mount for rubber duck

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 03:36:33 UTC
From: Cris Hanna <crishanna@mindspring.com>
Message-ID: <5TwD5.112980$Qx4.3474113@news1.rdc1.il.home.com>
Source record: 178295

Looking for mag mount which has the bnc connector on the mount to attach a rubber duck with bnc on it.

I know I have seen these but can't find now

Thanks

661. Re: here's a 6 meter yagi at good price-a company doing something right

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 04:05:28 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <fb5ttsoivjs6g9jcle75io56467ffsane7@4ax.com>
Source record: 178296

On Fri, 06 Oct 2000 00:44:00 GMT, sts@ac.net wrote:
>I think the most bang for the buck is the KMA5054 by KMA Antennas.
>It's only $85 and performs amazingly well on 2 meters also. The
>nicest feature is that there is nothing to adjust and swr is less than
>1.5 across the whole band (both 6 and 2). Their web site is at
>www.kmaantennas.com

Yeah, I really like this antenna. It is rugged and works very well across
the entire 6m band. It has a very good front to back ratio and minimal
sidelobes on 6m. Note, however, that while it loads fine on 2m, the
2m pattern isn't very clean. The elements are roughly 3/2 wave on 2m,
so it has large sidelobes. KMA does make other LPs that have clean
2m patterns. This one is usable on 2m, but it isn't much of a beam on
2m.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

662. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 04:25:50 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <f59ttssg08qkqo1i28i5sbabhq5h84l7ge@4ax.com>
Source record: 178297

On Wed, 4 Oct 2000 20:56:54 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:
>Richard Clark, KB7QHC wrote:
>"I`ve seen a number of these instruments cross my bench for
>calibration."
>
>Yes, I`ve worked with models from several manufacturers too. Some if not
>all allow you to select positive or negative modulation peak monitoring.
>As pricey as these instruments tend to be, they should monitor both
>peaks simultaneously and allow you to alarm either or both peaks for
>near 100% or more modulation.
>But all I`ve seen were positive or negative peak detector, you choose
>which and what level to alarm.

TFT makes one with both positive and negative peak flashers that
work simultaneously. It also allows you to set the peak limits separately.
We're allowed to run up to 125% positive modulation, but only 100%
negative modulation (for obvious reasons), so we need to be able to
set different positive and negative peak limits.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

663. Re: AYEM Modulation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 04:26:38 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39DEA5A6.D0121B05@att.net>
Source record: 178298

Gary, remember all the debates, etc. re "Super Modulation" and "Extended Positive Peak Modulation?" A lot of that was the vogue prior to WWII. The old "Radio" magazine - forerunner of CW - ran a series of technical articles in 1939 or 40 as I recall. They were highly in favor of the technique as a means for improving AM efficiency without increasing bandwidth significantly.

I can recall when all conscientious AM operators - especially the high-power boys - had carrier shift meters and peak modulation detectors in the shack as standard operating equipment.

My, how times have changed . . .

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Gary Coffman wrote:

> >Yes, I`ve worked with models from several manufacturers too. Some if not
> >all allow you to select positive or negative modulation peak monitoring.
> >As pricey as these instruments tend to be, they should monitor both
> >peaks simultaneously and allow you to alarm either or both peaks for
> >near 100% or more modulation.
> >But all I`ve seen were positive or negative peak detector, you choose
> >which and what level to alarm.
>
> TFT makes one with both positive and negative peak flashers that
> work simultaneously. It also allows you to set the peak limits separately.
> We're allowed to run up to 125% positive modulation, but only 100%
> negative modulation (for obvious reasons), so we need to be able to
> set different positive and negative peak limits.

664. Re: Please explain

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 04:53:51 UTC
From: dustyut@citlink.net
Message-ID: <39deac20.1736414@news.citlink.net>
Source record: 178299
Cross-posted to: rec.pyrotechnics,rec.radio.amateur.antenna

They bought it out? Interesting. As I no longer have them, I am not
in tune to their activites. Only what I hear from friends and family
that have to put up with them.
Carl

On Fri, 6 Oct 2000 22:05:54 -0400, "bobby" <news@bobby.net> wrote:

>
>Dear CLK,
>Qwest bought US West. But thanks for playing the game.
>
>CLK wrote in message <39de1e44.1607257@news.citlink.net>...
>>They now call themselves "Qwest", I see. Typical. US West has always
>>been a bit shady since the feds broke up Ma Bell, and now to try to
>>shake the bad reputation they're changing the company name. Won't
>>work. Shit will still smell like shit, even if you call it roses.
>>Carl
>>
>>
>>On Fri, 06 Oct 2000 10:12:53 GMT, Unknown_User
>><UserID@invalid.domain.com> wrote:
>>
>>>Why not let this clown's ISP in on this GREAT DEAL? Forward to:
>>>mailto:dns-admin@QWESTIP.NET
>>>
>>> Domain Name: QWEST.NET
>>>
>>> Administrative Contact, Technical Contact, Zone Contact, Billing
>Contact:
>>> Qwest Communications (QC271-ORG) dns-admin@QWESTIP.NET
>>> Qwest Communications
>>> 4250 North Fairfax Drive
>>> Arlington, VA 22203
>>> USA
>>> 703-363-0220
>>>
>>>
>>>
>>>lhbjgz@SECONDRING.COM wrote:
>>>
>>>> Get in now THEY are going to make it BIGG!!
>>>>
>>>> I will share my referals with you if you email and ask!!
>>>> Of course you must send me the names of 5 people you signed up ;)

>>>>
>>>> http://www.alladvantage.com/go.asp?refid=BNO052
>>>>
>>>> SREYNOLDS@SECONDRING.COM
>>>> nkzrqlvoznkp
>>>
>>
>
>

665. Re: Proctenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 04:56:21 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39DEAD73.FF850782@bellatlantic.net>
Source record: 178300

Rick,

Brilliant!
If I connect a motor to the plumbers snake so I can crank
from inside the shack, will I be violating any patents? Will
I be in danger of being sued? And the biggest question of
all --- was it *really* Al Gore who invented fractal antennas?

Rick Littlefield wrote:

> RTS announces 10-Meter Flexible Flyer Antenna
>
> We've heard a lot about GA (Genetic Al Gore Rhythm) antennas. However, as the
> namesake implies, these designs tend to be both quirky in appearance and
> inhospitably rigid in their patterns.
>
> My Walkman has a GA antenna of sorts--a headphone cable which also is used to
> pick up the signal. While sitting in the doctor's office waiting for my son
> this afternoon, I attempted to listen to a weak public radio station amid a
> crush of computer and other electrical noises in the building. Marginal
> reception caused me to occupy most of my wait by continually adjusting and
> re-shaping the headphone cable to a variety of forms in order to obtain the
> best signal quality.
>
> That's when it hit me! In today's busy world, only the chronically
> under-employed would have time to do GA runs, then lope outside to re-bend the
> antenna to compensate for every new call zone, propagation change, or gust of
> QSB that blows by. What REAL hams need are instant flexibility and fast
> response. Inspiration!
>
> On the way home, we stopped at the local hardware store and for a tad
> under $35, obtained parts for the world's first 10-meter Flexible Flyer
> antenna. And, this sucker works! What's more, unlike some of the
> certificate-collectors around here, I'll tell you how to build your own in six
> easy steps with no strings attached. Here's what you do:
>
> 1. Get two large plastic trash cans.
> 2. Discard the lids and flip one on top of the other to form a chamber.
> 3. Take a tube of Liquid Nails and glue 'em together.
> 4. Drill a small hole in one end.
> 5. Insert about 8-1/2 feet of plumber's snake inside.
> 6. Connect coax, hook it up, and crank the snake for maximum signal.
>
> Sooner or later, that sucker's gonna flop into just the right shape, and you'll
> be in DX alley. If the band changes, no problem--just give it another crank!

>
> I know it's brilliant, but why would I withhold it? I figure anyone who'd get
> their schmecky out of joint over sharing intellectual property with their
> fellow hams must live on a very small lot!
>
> Enjoy!
>
> Rick K1BQT

666. Re: Third try

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 05:18:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39DEB281.CB1DAA87@bellatlantic.net>
Source record: 178301

Roy Lewallen wrote:

> If I were attacking that problem, I'd probably work on choking the DC
> supply and other lines coming into the electronics board which is being
> affected. Because it probably doesn't have to respond quickly to
> external stimulii, fairly heavy bypassing would also be possible and
> helpful.
>

Exactly. He has to go inside the range. As was shown, the ferrites
on the heavy wiring are not a safety hazard. BUT - he has to know
what he is doing to apply them. You can't choke the power cord
with Radio Shack clamp on chokes, as was recommended prior
to my first post. It is too big. It is also of doubtful benefit. He can't
get "regular" (ie not the clamp on kind) toroids on the power
cord without dissassembling the cord from the range. Much
smaller chokes can be applied to the low voltage DC supply lines
and the signal lines, where they are likely to do more good. Your
comment about safety earlier referred to the heavy wires, which
I told him to avoid.

>
> Roy Lewallen, W7EL
>
> Bart Rowlett wrote:
> >
> > I guess I really shouldn't post until I'm fully awake....
> >
> > Bart Rowlett wrote:
> > >
> > In the previous two posts I oversimplified the calculation of the
> > energy stored in a nonlinear ferrite toroid core. Both calculations
> > _over_ estimate the stored energy. I don't have the material
> > characteristic curves presently available but will dig them up and
> > post a correct calculation if anyone asks.
> >
> > bart
> > wb6hqk

667. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 05:37:31 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <vEyD5.20798$tl2.1378382@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178302

"Walter Maxwell" <w2du@journey.com> wrote in message
news:D7lD5.4701$mC.299174@monger.newsread.com...
>
> <snip>
>
> The answers above occur because either of the two stubs establishes a
short
> circuit on the line at the stub
> point. However, Steve said it's not necessary to consider the concept of a
> virtual short circuit, just basic
> transmission-line theory. As we proceed we'll see that whether the concept
> of a virtual short circuit is
> considered or not, the virtual short circuit is there, and it won't go
away
> by simply not considering it.
>

Walter presented a simple example where the input impedance or the effective line impedance at the input of a 1/4 WL stub line terminated in an open circuit is a short circuit. Walter defined this short circuit as a "virtual short circuit". I don't think anyone would disagree with the fact that the input impedance to this stub line is a short circuit. I would also not disagree with Walter calling this type of a short circuit a "virtual short circuit".

However, it is very important that everyone reading this thread understand that this is not the "virtual short circuit" that Walter and I disagree on. The definition of the virtual short circuit that I disagree with is related to impedance matching in the transmission line. In this case, Walter says that when an impedance match occurs, a virtual short circuit is created at the match point for only the reflected waves such that a total re-reflection of only the reflected waves occurs.

> Let's first define the virtual short circuit. The virtual short circuit
(and
> the virtual open circuit as well)
> results from interference between two harmonically related electromagnetic
> waves. When their voltage
> amplitudes are equal and 180 degrees out of phase, and their current
> amplitudes are equal and in phase,
> the result is zero impedance at the point where the interference occurs.
The
> effect of the virtual short
> circuit on the source wave at the stub point in the example is the same as
> if a hardware-type short circuit

> were placed at the stub point.
>

Short Circuits on a transmission line:

There are basically two types of short circuits that can occur in a transmission line. Before considering them, let's review some fundamental basics.

In any transmission line, the forward or rearward traveling waves only see the characteristic impedance (ZO) of the transmission line in which they travel. At all times, the following relationships remain valid:

Vforward / Iforward = ZO and Vrearward / Irearward = ZO

At any point in the transmission line, the total voltage is equal to Vtotal = Vforward + Vrearward. A short circuit will occur at any point on the transmission line where Vforward and Vrearward are 180 degrees out of phase. In this case, Vtotal = 0 V and the effective line impedance at this point is equal to 0 ohms. It is very important to understand that the effective line impedance in a transmission line is not a physical mechanism for wave transmission or wave reflection. Wave reflections will only occur at physical impedance discontinuities in the transmission line.

In any transmission line where two forward traveling waves are 180 degrees out of phase, the forward traveling voltages are 180 degrees out of phase and the forward traveling currents are 180 degrees out of phase. In this case, the two forward traveling waves cancel each other and the net forward traveling wave is 0. A refection of the forward traveling waves does not occur as a result of this forward wave cancellation. The same discussion holds true for two rearward traveling waves 180 degrees out of phase.

The other point to mention is that at any physical impedance discontinuity, the level of reflected voltage created at the discontinuity is equal to the incident voltage multiplied by the reflection coefficient. The level of voltage transmitted to or through the junction is equal to the incident voltage plus the reflected voltage.

Now back to the short circuits. The first short circuit in a transmission line is the obvious case of a physical short circuit terminating a transmission line. At this physical short circuit, the reflection coefficient is equal to -1 and the reflected voltage is 180 degrees out of phase with the incident voltage. The total voltage at the short circuit is 0 V and a physical total reflection of voltage, current and power occurs.

The second type of short circuit that occurs is where the effective steady state line impedance at some point along the line is a short circuit but a physical short circuit does not exist at that point. For example, 1/2 WL away from a physical short circuit terminating a transmission line, the effective line impedance is a short circuit. In this case, the forward and rearward voltages are 180 degrees out of phase and the total voltage at that point is 0 V. It is also critically important to understand that the forward and rearward traveling waves do not see this short circuit line

impedance as they travel through this point. The forward and rearward waves only see ZO as they travel through this point. No wave reflection occurs at this point, only at the physical short circuit terminating the transmission line.

> <snip>
>
> With the (virtual) short circuit established at the stub point on the line
> we can now explain the answers to
> the five quiz questions.
>
> <snip>
>
> Question 5. The answer here is that voltage and current are totally
> reflected back toward the source,
> because the virtual short circuit at the stub point prevents any energy to
> pass. Following the law of
> conservation of energy, energy cannot be destroyed or made to disappear as
> if by magic. It has to go
> somewhere, and the only place it has to go is back up the line toward the
> source. Contrary to statements
> made by some of the posters, when waves cancel due to interference the
> energy in those waves is
> comprised of real voltage and current, and therefore the energy does not
> disappear as a result of the
> cancellation. Consequently, when two waves of equal amplitude and opposite
> phase mutually cancel, the
> first result is destructive interference, which forms the virtual short
> circuit. This is followed by
> constructive interference, during which the respective voltages and
currents
> of the original waves combine
> in phase to form the re-reflected waves, emanating from total
re-reflection
> at the virtual short circuit. The
> changing phase relationships that occur on re-reflection that cause the
> re-reflected voltage and current
> waves to emanate from the reflection in phase with the voltage and current
> waves from the source is
> explained in detail in Reflections. There are no 'phantom' waves unless an
> ethereal 'medium' scanning a
> crystal ball is involved.
>

In the example presented by Walter, a 1/4 WL open circuit stub was connected in parallel with a transmission line terminated in ZO. At this connection point (junction), the effective line impedance is a short circuit. In this context, I would not disagree with calling this a "virtual short circuit". Again, this is not a situation where an impedance match is created.

What is physically happening at this junction point is quite complex and cannot be fully appreciated by looking at only the steady state conditions. The real question here is the following: Is the voltage and current arriving at this junction *physically* reflected back towards the source? It is an absolute fact that not *net* power is delivered to or through the junction. However, although there appears to be a "virtual" reflection of voltage and current at the junction, a physical reflection of voltage and current is not occurring at the junction. To believe this, we must realize that there is forward and rearward power flow occurring in the 1/4 WL stub. So, if a total reflection of power were occurring at the junction how could be real power be traveling in the stub line? Note that no net power is delivered to the stub line.

What happens in this transmission line system is the following (this will help us understand what happens when we discuss an example with an impedance match):

The forward source voltage of +1 V arrives at the junction point. The physical impedance discontinuity it sees at the junction is the parallel connection of the transmission line connected to the antenna and the stub line. The impedance it sees is the characteristic impedances of the two lines connected in parallel. The physical reflection coefficient at the junction is -0.33. As a result, a reflected voltage of -0.33 V is created. This -0.33 V travels rearward towards the source. The total voltage at the junction is now equal to +0.66 V (+1 + -0.33). This +0.66 V is delivered as a forward traveling voltage into the line connected to the antenna and into the stub line.

Let's look at what happens to the +0.66 V delivered into the stub line. This voltage travels 1/4 WL to the open circuit termination, it is reflected and travels rearward back towards the junction. The rearward voltage arriving back at the junction is now -0.66 V. The reflection coefficient this rearward voltage "sees" at the junction point is also -0.33. As a result, a re-reflected voltage is created in the stub line. The total voltage created at the junction from the reflection in the stub line is delivered as a rearward traveling voltage in the main line and a forward traveling voltage in the line connecting the antenna. This wave reflection process in the stub line continues until the steady state condition is reached.

In the steady state, the total reflected voltage in the stub line arriving back at the junction is -1.0 V. Seeing a reflection coefficient of -0.33, the steady state re-reflected voltage is +0.33. The total voltage developed at the junction from this reflection is therefore -0.66 V (-1 + 0.33). This -0.66 V is delivered as a rearward voltage in the main line towards the source and adds to the initial voltage reflected at the junction (-0.33 V). This -0.66 V is also delivered as a forward voltage towards the antenna and adds to the initial forward voltage delivered towards the antenna (+0.66 V). The total steady state rearward voltage traveling towards the source is now -1 V (-0.33 + -0.66) and the total steady state forward voltage in the antenna line is 0 V (+0.66 + -0.66).

The cancellation of forward voltages in the line connecting the antenna does not violate the principles of energy conservation. Conservation of energy demands that the total power delivered into the junction be equal to the total power "exiting" the junction, assuming no power dissipation occurs at the junction. In this case, the source "delivers" 1 W of power to the junction with 0.11 watt reflected (0.33^2 / Zo) and 0.44 W (0.66^2 / ZO)delivered forward into both the antenna line and the stub line. The reflected power arriving at the junction from the stub line is also 1 W. The re-reflected power in the stub line is equal to 0.11 W (0.33^2 / ZO), the rearward power delivered into the main line is 0.44 W and the forward power delivered into the antenna line is also 0.44 W. The forward powers traveling in the antenna line are 180 degrees out of phase so a complete power cancellation occurs. The rearward powers in the main line are in phase and add to a total rearward power of 1 W.

It's late, if this is not clear, please ask any questions you would like.

>
> Steve insists that on wave cancellation both the voltage and current waves
> go to zero. This is not true, because the voltages and currents in
reflected
> waves are real, not reactive, and therefore the voltages and currents
> contain energy. If the voltage and current both went to zero
simultaneously
> there would be no energy, but that energy cannot just disappear, it must
go
> somewhere, and indeed it is re-reflected into the forward direction.
>

When two waves are traveling in the same direction in a transmission line, if the total voltage of the wave traveling in that direction goes to 0, then the total current traveling in that direction must go to 0 as well. A traveling wave cannot have 0 voltage with some current nor can it have 0 current with some voltage. Voltage and current in a traveling wave cannot exist independently of each other. Note that we are not discussing the situation where total voltage in the transmission line goes to 0 - IE. Vforward + Vrearward = 0.

In the particular case of impedance matching, a situation occurs where two (multiple) waves traveling in the rearward direction combine to a net rearward traveling wave of 0 voltage and 0 current. This is a wave cancellation process that causes all energy flow in the rearward direction to cease. The individual wave energy still exists but no net or total energy flow is occurring. This is very similar to mulipath fading where multiple waves combine at the single point in space to a net wave of 0 energy. You cannot measure a total signal yet the energy associated with each component still exists.

The law of conservation of energy is not violated by the process of wave cancellation. Total energy dissipation is equal to total energy delivered - 0.

>
> An example appears in my QEX article for Mar/Apr 1998, which discusses
> matching a 150-ohm resistor to 50 ohms.
>

Walter, it would be interesting to discuss the specifics of the example in detail. If you post them, I would be pleased to discuss them in detail.

>
> The crucial point to remember concerning reflection and re-reflection is
> that the energies in the voltages and currents in the reflected waves
cannot
> disappear, and for this reason the voltage and current in the reflected
> waves cannot both be zero simultaneously on cancellation, only one or the
> other at a time. Reference to transmission-line theory books concerning
> reflection of electromagnetic waves will verify these statements.
>

It is physically impossible for a traveling wave to have current while having 0 voltage. It is also physically impossible for a traveling wave to have voltage while having 0 current. No text reference would state this to be possible.

We are discussing wave(s) traveling in a single direction. We are not discussing total voltage or current which is a function of waves traveling in opposite directions. Total voltage can be 0 while total current is not (short circuit line impedance) and total current can be 0 while total voltage is not (open circuit line impedance).

73,
Steve VE9SRB

668. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 06:25:33 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DEC1DD.D0A24C65@mwci.net>
Source record: 178303

Walter Maxwell wrote:

> Mr. Sabin, hereafter I shall refer to you as Mr. Sabin.

Baloney, Walter. "Bill" is plenty good enough, and you know it. But I am not "Sabin".

Bill W0IYH

669. Re: Virtual Short Circuits and Total Re-reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-07 06:43:29 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39DEC611.D00889AD@mwci.net>
Source record: 178304

VE9SRB wrote:

> It is very important to understand that the effective line
> impedance in a transmission line is not a physical mechanism for wave
> transmission or wave reflection. Wave reflections will only occur at
> physical impedance discontinuities in the transmission line.

Exactly and precisely correct.

Bill W0IYH

670. Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: jbhall1282@my-deja.com
Message-ID: <8s9kqbgqn1@nnrp1.deja.com>
Source record: 178119

My goal was to have a standard length of coax that I would use when measuring antenna impedance with my Palomar noise bridge. I carefully characterized a section of cable and then began testing various R-jX loads made from w resistors and fixed caps. I then used ZL-ZIN (nice program BTW) and compared its output with the impedance of the actual load.

Results compare pretty well as long as the SWR at the load is not way high and the test frequency is close (+/- 5%) to the wave length or multiple frequency of the cable. The frequency restriction means it will be difficult to come up with one cable length that works on all bands. Am I doing something wrong? I expected this to work over a wider frequency range. I know I need to avoid test frequencies close to odd multiples of the wave freq. Thanks in advance. 73
Jerry, W0PWE

```
Here are my cable parameters:
Type = Belden RG-58/U
Physical length = 60.0 ft
Resonant freq. = 10.675 MHZ
Characteristic Impedance = 52.2
Loss for 60ft @ 10.675MHZ = .82db
Velocity factor = .651

Sent via Deja.com http://www.deja.com/
Before you buy.
```

671. Catfish special 15 meter yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: ydussaul@total.net
Message-ID: <39e85f45.4383786@news.total.net>
Source record: 178120

Back in the '50's, there was an article in CQ about building a 15
meter 2 element yagi made of bamboo fishing poles and aluminum foil
covering them.
I had made that beam and it worked great for me.
I am looking for that article. I would like to build it again!
Any one can hekp???
73's to all.
Yves-VE2ATD
(On CW, PSK, MFSK, FeldHell)

672. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39e86454$1_1@news2.one.net>
Source record: 178121

"CAM" <cam2338@bigfoot.com> wrote in message
news:39E7752D.6B604C07@bigfoot.com...
> Rich Griffiths wrote:
> > Matter and energy can neither be created nor destroyed.
>
> Sounds like a 1930s physics book. Isn't the sun destroying
> hydrogen and creating energy and helium?

No.

The sun is rearranging the matter that constitutes hydrogen to make helium,
and it is converting a small amount of it into energy. E = mc^2. The
amount of m plus mc^2 does not change.

Care in wording is essential here. To the physicist, the hydrogen is not
"destroyed", as in blinking out of existence. And the helium and energy are
not "created", as in "In the beginning...."

Rich W2RG

673. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39e8650d$1_2@news2.one.net>
Source record: 178122

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:cau7s8.1mb.ln@mail.specsol.com...
> CAM <cam2338@bigfoot.com> wrote:
> > Rich Griffiths wrote:
> >> Matter and energy can neither be created nor destroyed.
>
> > Sounds like a 1930s physics book. Isn't the sun destroying
> > hydrogen and creating energy and helium?
> > --
> > http://www.mindspring.com/~w6rca
>
> Aren't semantics wonderful?
>
> Most would say the sun is converting hydrogen to....
>
> The math is less open to such quibbles.
>
> Jim Pennino
>

It took me at least 5 times as many words to say that. FB, Jim.

Rich

674. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39e86821$1_2@news2.one.net>
Source record: 178123

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:8s8js0$30mq$1@heap.juniper.net...
<big snip>
> "Waves" are derived after the fact. By definition, waves travel in
> the direction of the cross product E x H, with the amplitude of the
> wave being |E x H| and with the wave front being the surface that E x H
> is normal to. But note that E x H is the power flux (W/m^2), so in
> fact waves are *defined* by the power flow through the field of E and
> H vectors computed by Maxwell's equations. I don't think it is correct
> to say that power is not a fundamental player in wave motion when
> waves are in fact nothing more than a representation of where the
> power is moving through an electomagnetic field. The waves are "power
> waves" by definition (though those anal about terminology might wish
> to replace "power" with "energy" in the above).

It's not an issue of being anal about the terminology. The two are not the same, and confounding them leads to all kinds of erroneous conclusions.

Power does not move. Power is not conserved. This discussion might be clearer, and arguments that are not-wrong but not-entirely-correct might be avoided by being "anal".

How about "E x H is the energy flux (J/s-m^2), so in fact waves are *defined* by the energy flow ..."?

Rich W2RG

675. Re: feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8s9osp$3lh$1@neptunium.btinternet.com>
Source record: 178124

From comments it appears there's some doubt about the inherent ability of a balanced open-wire line to radiate. It is being confused with the radiation which always occurs from a twin line when longitudinal currents exist. But the two effects are unrelated. Even a coaxial line will radiate quite happily when longitudinal currents flow along it.

Cecil gives the correct explanation of radiation from a truly balanced line by stating that although the pair of line currents may be equal and opposite, the two wires do not occupy the same positions in space and so their respective fields do not cancel out at a distance. But he then spoils the story by confusing matters with how near a balanced line can be to other structures before loss (due to effects other than radiation) becomes excessive. That's also unrelated.

Consider a 500-ohm line, wires spaced 4 inches apart, 4 inches long, operating at 1.5 GHz. 4 inches is 1/2-wave at that frequency and we have an excellent radiating system which will still be performing after a fashion over longer lengths on 2 metres.

And a rhombic on 7 MHz is nothing more than a wide-spaced balanced transmission line.

Reg, G4FGQ

676. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15292-39E8638D-54@storefull-114.iap.bryant.webtv.net>
Source record: 178125

Jerry, W0PWE wrote:
"My goal was to have a standard length of coax that I would use when measuring antenna impedance with my Palomar noise bridge."

A 1/2-wavelength of transmission line repeats the impedances it sees at its ends. A true 1/2-wavelength of coax (considering the velocity factor and assorted disturbances) can be added or removed from a transmission line with no effect.

I used to do this at VHF using ny Bird wattmeter as part of the 1/2-wavelength of line. Insertion of my wattmeter did not upset the line and removal did not undo any adjustment I may have made.

Best regards, Richard Harrison, KB5WZI

677. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Fd_F5.28685$tl2.1853370@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178126

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39E7E555.C887F27D@mwci.net...
>

>
> The mathematics is crystal clear and perfectly correct. I will PDF copies
of the
> letters by email.
>
> Bill W0IYH
>
>

Bill:

I would appreciate copies. srbest@att.net

Steve

678. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <bp_F5.28703$tl2.1852548@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178127

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39E786ED.4C2950C2@mwci.net...
> VE9SRB wrote:
>
> > In the transmitter, I am curious as to how efficiency is actually
determined
> > mathematically.
>
> Efficiency is the ratio of RF power output to power supply DC power input.
>

Bill:

The internal workings of a transmitter is an area where I simply have little experience, so bear with me a bit. I also need to read through some of the posts.

Here's the basic issue for me.

Let's agree that efficiency of a transmitter is defined as the ratio of total RF power output to DC power input. This is not a problem for me. So, from my perspective the total RF power output should include the power lost in the transmitter and the power delivered to the load. Now, when we speak of the "conjugate match" we talk about efficiency in terms of RF power delivered to the load with respect to the total RF power output of the transmitter. I think these are two independent definitions of efficiency.

As an example, could a transmitter be operating in a "conjugate match" at 50% RF efficiency (RF load power/total RF power) but at the same time be operating at a higher efficiency wrt DC input (total RF power/DC power input)?

Steve

679. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Tz_F5.28721$tl2.1854874@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178128

"Walter Maxwell" <w2du@journey.com> wrote in message
news:XVOF5.6455$mC.451470@monger.newsread.com...
>
>
> Yo Richard! The last sentence of your last paragraph is proven by many
> measurements I've made of the output resistance of RF power amps using Mr.
> William Sabin's expression where Rout = delta E / delta I, and where delta
I
> (and thus delta E) results from a small change in load resistance. My
> measurements show that when the loading is adjusted for delivery of all
the
> available power into a load with a given level of drive, the output
> resistance of the amp is exactly equal to the load resistance. And the
> output power is greater than the power dissipated as heat in the tube. The
> description of my measurement setup, and all the data appear in a new
> chapter in Reflections 2.
>
> Walt, W2DU
>

Walt:

I don't want to get into any more "I said, you said" discussions, but I seriously would like to understand the semantics of some of your statements.

Above you state that "when loading is adjusted for delivery of all available power .." Do you equate delivery of available power to a conjugate match? I assume that a transmitter will deliver a total power to a load as a function of internal losses and the load impedance. In all cases, I would define the power delivered to the load as the "available power". I don't necessarily equate this to "maximum power" delivery. In your measurements are you adjusting the load impedance to a point where you measure maximum power delivery from the transmitter or do you assume that a ZO match at the transmitter output is the condition of maximum power output?

Steve VE9SRB

680. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E87645.AFCBEB76@bigfoot.com>
Source record: 178129

Rich Griffiths wrote:
> Care in wording is essential here. To the physicist, the hydrogen is not
> "destroyed", as in blinking out of existence. And the helium and energy are
> not "created", as in "In the beginning...."

If I melt down my chain link fence into molten metal, my chain
link fence has ceased to exist. You say, no, it has been converted
to molten metal. I say molten metal is *NOT* a chain link fence.
I also say a helium atom is *NOT* a hydrogen atom.
--
http://www.mindspring.com/~w6rca

681. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E87819.B860E959@bigfoot.com>
Source record: 178130

Rich Griffiths wrote:
> Power does not move.

Then I guess we can stop paying the *power* company for their *power*
generation and *power* distribution systems. They have been pulling
the wool over our eyes all these years. :-)

> Power is not conserved.

The only difference between power and energy is time. For most practical
purposes, the flow of time is a constant. The energy flowing past a
point in a unit time is defined as power and the energy is conserved.
--
http://www.mindspring.com/~w6rca

682. Re: feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E8795C.5AE31CAF@bigfoot.com>
Source record: 178131

Reg Edwards wrote:
> But he
> then spoils the story by confusing matters with how near a
> balanced line can be to other structures before loss (due to
> effects other than radiation) becomes excessive. That's
> also unrelated.

When I was in college, Reg, the textbook defined the point at
which the fields cancel for all practical purposes at ten times
the spacing between the wires. This is only loosely associated
with "other structures" which I didn't mention in my posting.
--
http://www.mindspring.com/~w6rca

683. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <O3=oOZvh4m9yO=BckdKhV9o4ru0p@4ax.com>
Source record: 178132

On Sat, 14 Oct 2000 15:02:11 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>
>"Walter Maxwell" <w2du@journey.com> wrote in message
>news:XVOF5.6455$mC.451470@monger.newsread.com...
>>
>>
>> Yo Richard! The last sentence of your last paragraph is proven by many
>> measurements I've made of the output resistance of RF power amps using Mr.
>> William Sabin's expression where Rout = delta E / delta I, and where delta
>I
>> (and thus delta E) results from a small change in load resistance. My
>> measurements show that when the loading is adjusted for delivery of all
>the
>> available power into a load with a given level of drive, the output
>> resistance of the amp is exactly equal to the load resistance. And the
>> output power is greater than the power dissipated as heat in the tube. The
>> description of my measurement setup, and all the data appear in a new
>> chapter in Reflections 2.
>>
>> Walt, W2DU
>>
>
>Walt:
>
>I don't want to get into any more "I said, you said" discussions, but I
>seriously would like to understand the semantics of some of your statements.
>
>Above you state that "when loading is adjusted for delivery of all available
>power .." Do you equate delivery of available power to a conjugate match?
>I assume that a transmitter will deliver a total power to a load as a
>function of internal losses and the load impedance. In all cases, I would
>define the power delivered to the load as the "available power". I don't
>necessarily equate this to "maximum power" delivery. In your measurements
>are you adjusting the load impedance to a point where you measure maximum
>power delivery from the transmitter or do you assume that a ZO match at the
>transmitter output is the condition of maximum power output?
>
>Steve VE9SRB
>

Hi Steve, Walt,

And again, as distinctly shown above, you two seem to be talking your logic based on different Basis of Analysis. As you both persist in posting to this thread which contains

all the necessary definitions, and from an acknowledged authority (at least Walt acknowledges this authority), Why is it that neither of you can flatly state which Basis you employ, and more importantly when?

73's
Richard Clark, KB7QHC

684. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39E8693A.6F78@pacbell.net>
Source record: 178133

CAM wrote:
>
> Rich Griffiths wrote:
> > Care in wording is essential here. To the physicist, the hydrogen is not
> > "destroyed", as in blinking out of existence. And the helium and energy are
> > not "created", as in "In the beginning...."
>
> If I melt down my chain link fence into molten metal, my chain
> link fence has ceased to exist. You say, no, it has been converted
> to molten metal. I say molten metal is *NOT* a chain link fence.
> I also say a helium atom is *NOT* a hydrogen atom.
> --
> http://www.mindspring.com/~w6rca

Physicists refer to what happens when matter and antimatter come
together as "annihilation." My old American Heritage dictionary
defines annihilate as "1. To destroy completely; wipe out; reduce
to nonexistence." In view of this, it's pretty hard for me to
believe that matter is conserved.

Tom Donaly KA6RUH

685. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <qYDoObST2H2C73pL90A7QSXzYcpM@4ax.com>
Source record: 178134

On Fri, 13 Oct 2000 23:50:07 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Nick Kennedy wrote:
>"I can`t understand what other kind (lossless resistance) there can be
>(within a transmitter) or why it`s necessary to postulate that this
>other kind exists."
>
>Resistance is a voltage to current ratio. If this ratio comes from a
>resistor, heat is produced by the voltage and current.
>

Hi Richard, Nick,

Not all resistors are carbon. Plate Resistance is a perfect example of real Resistance in every sense of the word (fully conformable to the odious IEEE dictionary too).

The coupling circuit transforms this value.

The amplifier circuitry establishes this value.

Through the change in drive, bias or feedback, the Plate Resistance follows with its own change. This change is transformed through the coupling to the antenna connector. Looking back into this connector through this change will reveal a Source Z exhibiting a pool of values, any single value dependant on these variables. The pool of values will generally fall within a 2:1 SWR of the nominal 50 Ohms we call Z0. When I speak of SWR here, it is due to the mismatch between the last active element and the antenna port loaded with a Z0 load.

More exotic amplifiers (Calibration Bench equipment - RF Amps limited to 10W) have followers that can force the amplifier to present a known Source Z. These amplifiers are exotic because this costs a LOT of money. The action of these followers (more correctly, the feedback sense path) is to inject an imaginary resistance into the match. In the parlance of design this was called noise gain. I've worked with a lot of Unity Gain precision Amplifiers that were built from 10 dB Amplifiers where the feedback discarded all of the available gain! The 10 dB went to stabilize the Source Z - hence we have a more stable Unity Gain amplifier. A secondary feature of Unity Gain amplifiers is found in Z transformation. The same feedback also maintains the Input Z of the active device controlled by this feedback.

The common amplifiers exhibit this same behavior at a far more modest specification. Where the exotic amplifier discards 10 dB of gain from 10 dB available, the common amplifier discards 1 dB of 10 dB available. Discard means to turn that gain into feedback. The common amplifier's owner expects more than Unity Gain and price drives to the minimum market value in the design. This is why the common amplifiers' measure of Source Z is pooled. Without even that little feedback, the pool would enlarge, the SWR would climb, and the rig would begin to toast at some frequencies. This is the principal

evidence of failure when unbalanced elements (the source of failure) are used in bridged circuits.

This last is compelling proof of the Conjugate Match or the Z0 Match (choose your own poison, but at least declare your preference) and that there is Real Resistance absorbing Real energy entering the antenna connector.

Thus, by design, 1 dB of feedback is employed to actively match against changes of the load within roughly a SWR of 2:1 relative to a Z0 Load. This means that the average amplifier, much less the exotic, does not conform to the idealized Thevenin source (they are non-linear). However for the sake of the argument, such close reading is a slavish devotion. 1 dB feedback is hardly robust, nor does it dominate the over all amplifier characteristics.

This is called Production Engineering. The common design of the average amplifier must compete in the marketplace. This means that the Production Engineer must constrain his design to the most relaxed standards (lowest cost) to solve the technical requirement (increasing cost). 1 dB feed back is a compromise between robbing forward Gain and being tolerant of mismatch. 6 dB would be far better, if you could live with your rig maxing out at 4 dB gain. It also means you could comfortably drive higher SWRs (anachronism: comfortably for more money from a Ham?).

73's
Richard Clark, KB7QHC

686. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <LF0G5.1389$7N.62998@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178135

"Richard Clark" <rwclark@rwclark.seanet.com> wrote in message
news:O3=oOZvh4m9yO=BckdKhV9o4ru0p@4ax.com...
> Hi Steve, Walt,
>
> And again, as distinctly shown above, you two seem to be talking your
logic based on
> different Basis of Analysis. As you both persist in posting to this
thread which contains
> all the necessary definitions, and from an acknowledged authority (at
least Walt
> acknowledges this authority), Why is it that neither of you can flatly
state which Basis
> you employ, and more importantly when?
>
> 73's
> Richard Clark, KB7QHC

Richard:

I think the basis that I employ in my discussions has been consistent and clearly defined.

As for the conjugate match in impedance matching re: a T-network: I have always stated that a conjugate match will occur at the network output when the source driving the network input delivers maximum power to the load connected at the network output inclusive of network losses and mismatch at the network input.

As for output impedance of a T-network: it is simply defined as the impedance one would see or calculate looking rearward into the network.

As for Walt and I disagreeing, I think that the basis for our disagreement has been stated very clearly. My post to this thread dated Wed October 11, 9:16 AM clearly states the basis of my disagreements with Walter's calculation of output impedance and his definition of the conjugate match re: a lossy T-network circuit.

If anything I have stated seems unclear, I would be happy to address it specifically.

Steve

687. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <8sa4v2nfg1@news.service.uci.edu>
Source record: 178136

CAM <cam2338@bigfoot.com> wrote in message
news:39E87819.B860E959@bigfoot.com...

> Then I guess we can stop paying the *power* company for their *power*
> generation and *power* distribution systems.

Very poor conclusion. Most electrical utility companies now refer to themselves as energy companys. They do not charge you for power (watts) they charge you for the energy (watt-hours) that you convert in the appliances in your home. They do that by measuring voltage, current, and time and calculating how much energy was converted in your home. It's easier to do that than to put each of your appliances in an adiabatic chamber along with a calibrated bolometer.

> The only difference between power and energy is time.

Likewise, the only difference between charge and current is time. Seems to be a rather significant difference though.

> For most practical
> purposes, the flow of time is a constant.

Humm, dt/dt. Interesting. Once you get your gravity wave detector working, you can plot that. :-)

> The energy flowing past a
> point in a unit time is defined as power and the energy is conserved.

There's probably a difference between a "definition" and an "equality". This argument is a good example of the misuse of the term definition.

73, Jim AC6XG

688. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <O5noOWvRnTILaYoD46Fos27UlcrD@4ax.com>
Source record: 178137

On Sat, 14 Oct 2000 12:50:19 GMT, jbhall1282@my-deja.com wrote:

>My goal was to have a standard length of coax that I would use when
>measuring antenna impedance with my Palomar noise bridge. I carefully
>characterized a section of cable and then began testing various R-jX
>loads made from ï¿½ w resistors and fixed caps. I then used ZL-ZIN (nice
>program BTW) and compared its output with the impedance of the actual
>load.
>
>Results compare pretty well as long as the SWR at the load is not way
>high and the test frequency is close (+/- 5%) to the ï¿½ wave length or
>multiple frequency of the cable. The frequency restriction means it
>will be difficult to come up with one cable length that works on all
>bands. Am I doing something wrong? I expected this to work over a wider
>frequency range. I know I need to avoid test frequencies close to odd
>multiples of the ï¿½ wave freq. Thanks in advance. 73
>Jerry, W0PWE
>
>Here are my cable parameters:
>Type = Belden RG-58/U
>Physical length = 60.0 ft
>Resonant freq. = 10.675 MHZ
>Characteristic Impedance = 52.2
>Loss for 60ft @ 10.675MHZ = .82db
>Velocity factor = .651
>

Hi Jerry,

I've done this with about a dozen cables around the shack and my binary variable transmission line tuner (coax version of Cecil's method that I built 5 years ago). I took all my leads from Walt's book "Reflections" which is an excellent source for the work you are entering into.

To the matter of your question, Walt's material reveals that for measuring Z, the best choice would be wavelength based and cut to an odd eighth-wave length. This allows for unknown but tolerable loads to be measured away from outrageously transformed values. Mathematically it is casting errors out of the more error prone operations.

73's
Richard Clark, KB7QHC

689. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <jJ3oORCne4s+q9T29DGpyNOs7IrP@4ax.com>
Source record: 178138

On Sat, 14 Oct 2000 17:24:59 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>
>"Richard Clark" <rwclark@rwclark.seanet.com> wrote in message
>news:O3=oOZvh4m9yO=BckdKhV9o4ru0p@4ax.com...
>> Hi Steve, Walt,
>>
>> And again, as distinctly shown above, you two seem to be talking your
>logic based on
>> different Basis of Analysis. As you both persist in posting to this
>thread which contains
>> all the necessary definitions, and from an acknowledged authority (at
>least Walt
>> acknowledges this authority), Why is it that neither of you can flatly
>state which Basis
>> you employ, and more importantly when?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Richard:
>
>I think the basis that I employ in my discussions has been consistent and
>clearly defined.
>
>As for the conjugate match in impedance matching re: a T-network: I have
>always stated that a conjugate match will occur at the network output when
>the source driving the network input delivers maximum power to the load
>connected at the network output inclusive of network losses and mismatch at
>the network input.
>
>As for output impedance of a T-network: it is simply defined as the
>impedance one would see or calculate looking rearward into the network.
>
>As for Walt and I disagreeing, I think that the basis for our disagreement
>has been stated very clearly. My post to this thread dated Wed October 11,
>9:16 AM clearly states the basis of my disagreements with Walter's
>calculation of output impedance and his definition of the conjugate match
>re: a lossy T-network circuit.
>
>If anything I have stated seems unclear, I would be happy to address it
>specifically.
>
>Steve

>

Hi Steve,

What Basis of Analysis do you employ?

"BASIS OF ANALYSIS
"To analyze a particular case of mismatch an appropriate basis of calculation must be chosen. If the power actually delivered to the load is to be compared with maximum available from the source, this is on a conjugate basis. If comparison is made with the power the source will deliver to a Z0 load, this is on a Z0 basis. These are two of a number of possibilities.
"Considerable confusion has arisen over the use of terms such as "match" and "mismatch" since it is not always clear just what basis is intended. R.W. Beatty of NBS has proposed a complete set of specific terms and definitions [subject of my other thread, rwc]... From here on, all terms used in this Application Note will follow these definitions where any possibility of ambiguity might otherwise exist. Thus, "conjugate mismatch" and "Z0 mismatch" are used to describe the actual figures obtained in the examples.
"The general formula for power transfer between a source and a load of reflection coefficients GammaG and GammaL is:
((1 - |GammaG|^2) * (1 - |GammaL|^2)) / | 1 - GamaG * GammaL |^2
"where |GammaG| and |GammaL| can be obtained from the SWR's sigmaG and sigmaL by the simple relation:
|Gamma| = (sigma - 1) / (sigma + 1)
This is the fraction of the maximum available power that is actually absorbed by the load. Here the Z0 mismatch losses associated with the source and the load are give by (1 - |GammaG|^2) and (1 - |GammaL|^2) respectively, while the uncertainty in the power transfer is given by (1 ï¿½ |GammaG| * |GammaL|)^2. It can be seen that the rather vague term "mismatch error" applies in general to a combination of calculable mismatch losses and uncertainties."

73's
Richard Clark, KB7QHC

690. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39e89eaa$1_1@news2.one.net>
Source record: 178139

"CAM" <cam2338@bigfoot.com> wrote in message
news:39E87819.B860E959@bigfoot.com...
> Rich Griffiths wrote:
> > Power does not move.
>
> Then I guess we can stop paying the *power* company for their *power*
> generation and *power* distribution systems. They have been pulling
> the wool over our eyes all these years. :-)
>
> > Power is not conserved.
>
> The only difference between power and energy is time. For most practical
> purposes, the flow of time is a constant. The energy flowing past a
> point in a unit time is defined as power and the energy is conserved.

Yes, time is "the only difference." But Vive la difference! Sometimes,
it's an important distinction. If ignoring the distinction leads you to
conclude that power is conserved, that's a mistake. Power is not conserved.
Energy is.

As for the "power" companies etc., that's an excellent example of how
ignoring the distinction can lead to mistaken conclusions. We/they have
used the terminology loosely for many years. But in fact, they don't charge
for power consumption, they charge for energy consumption. Good thing for
them, because their users don't consume any power at all, but they consume
lots of energy. My bill is based on kilowatt-hours (1 kW-h = 3600
kiloJoules), which is an amount of energy, not power.

Rich

691. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39e8a47f$1_2@news2.one.net>
Source record: 178140

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:39E8693A.6F78@pacbell.net...
> CAM wrote:
> >
> > Rich Griffiths wrote:
> > > Care in wording is essential here. To the physicist, the hydrogen is
not
> > > "destroyed", as in blinking out of existence. And the helium and
energy are
> > > not "created", as in "In the beginning...."
> >
> > If I melt down my chain link fence into molten metal, my chain
> > link fence has ceased to exist. You say, no, it has been converted
> > to molten metal. I say molten metal is *NOT* a chain link fence.
> > I also say a helium atom is *NOT* a hydrogen atom.
> > --
> > http://www.mindspring.com/~w6rca
>
> Physicists refer to what happens when matter and antimatter come
> together as "annihilation." My old American Heritage dictionary
> defines annihilate as "1. To destroy completely; wipe out; reduce
> to nonexistence." In view of this, it's pretty hard for me to
> believe that matter is conserved.
>
> Tom Donaly KA6RUH

If you don't believe that matter and energy (the combination, since they're interchangeable) are conserved, then you're forsaking one of the most fundamental principles of modern physics. Don't do that on the basis of what the American Heritage dictionary thinks.

Recognize what the definitions in a good dictionary represent. They are an attempt to characterize what a broad range of literate users think the words mean. Sometimes, that does not jibe fully with "extended" meaning employed in technical fields. The one you have provided is a good example of that.

To do justice to the probable interaction of matter and antimatter would require a dissertation in quantum mechanics that Feynman might be able to do briefly, but I can't <g>.

Rich W2RG

692. Re: feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8sa89p$lh8$1@uranium.btinternet.com>
Source record: 178141

At 10 times the wire spacing the *near field*, which induces
losses into neighbouring structures, may very well be zero
for all practical purposes. In fact its much less than
that. 3 or 4 times is sufficient for most purposes.

But its too late - the *far field* radiation is already
well into its stride.

As for me - I never had any college, old wives' text books
to pass on to the blame. ;o)

Reg

693. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <uo9as8.se.ln@mail.specsol.com>
Source record: 178142

Donaly <dtdonaly@pacbell.net> wrote:
> CAM wrote:
>>
>> Rich Griffiths wrote:
>> > Care in wording is essential here. To the physicist, the hydrogen is not
>> > "destroyed", as in blinking out of existence. And the helium and energy are
>> > not "created", as in "In the beginning...."
>>
>> If I melt down my chain link fence into molten metal, my chain
>> link fence has ceased to exist. You say, no, it has been converted
>> to molten metal. I say molten metal is *NOT* a chain link fence.
>> I also say a helium atom is *NOT* a hydrogen atom.
>> --
>> http://www.mindspring.com/~w6rca

> Physicists refer to what happens when matter and antimatter come
> together as "annihilation." My old American Heritage dictionary
> defines annihilate as "1. To destroy completely; wipe out; reduce
> to nonexistence." In view of this, it's pretty hard for me to
> believe that matter is conserved.

> Tom Donaly KA6RUH

Once again, aren't semantics wonderful. Normal language is rather poor
for describing what happens at the quantum level.

Physicists don't define matter in terms of "chain link fences" or "atoms",
nor do they use the American Heritage dictionary to define "annihilation".

You HAVE to look at the math; matter is not conserved, matter and energy
are conserved.

Jim Pennino

694. Re: Catfish special 15 meter yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39e8b6b6_3@news3.prserv.net>
Source record: 178143

Try Nov. '55 CQ, page 11.

--
Crazy George
Yves Dussault <ydussaul@total.net> wrote in message
news:39e85f45.4383786@news.total.net...
> Back in the '50's, there was an article in CQ about building a 15
> meter 2 element yagi made of bamboo fishing poles and aluminum foil
> covering them.
> I had made that beam and it worked great for me.
> I am looking for that article. I would like to build it again!
> Any one can hekp???
> 73's to all.
> Yves-VE2ATD
> (On CW, PSK, MFSK, FeldHell)

695. Re: Multiband HF Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: "Paul R. Stoetzer" <pstoetze@tir.com>
Message-ID: <9U2G5.37535$F65.2285474@nntp2.onemain.com>
Source record: 178144

The MFJ-1798 is a very good antenna, not the best-looking animal, but I have worked 102 DXCC entities since I put mine up in July. The Butternut HF-9V is also good, but requires radials.

73 es gud luck
Paul, N8HM

"Mike" <mike0537@mediaone.net> wrote in message
news:39E7F1AE.63B10CE0@mediaone.net...
> I am considering the purchase of a HF multiband vertcal. I have limited
> space and I want the least
> intrusive antenna to keep my neighbors happy. I was considering either
> The GAP Eagle or the Cushcraft R6000.....Anybody have comments good or
> bad on either of these antennas?....Any other suggestions...
>
> Thanks...
>

696. Re: Ominous mail from MA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: who? <glennt@ibm.net>
Message-ID: <39e8bf34_3@news1.prserv.net>
Source record: 178145

chantey wrote in message ...
>What, not "Dewey, Cheatem, and Howe" of Car Talk fame?
>
>Bob, N1RC

Speaking of copyright infringement, the above mentioned law
firm is cited in the book, "Wit and Humor of the Age" by the
well known humorist Eli Perkins. The copyright date of the
book is (FWIW) 1883 (not a typo... I have a copy) ;-)

73 de Glenn wb6w

697. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E8C087.69A7DA7C@bigfoot.com>
Source record: 178146

Richard Clark wrote:
> ... (fully conformable to the odious IEEE dictionary too).

Hey, I resemble that remark.

> This last is compelling proof of the Conjugate Match or the Z0 Match (choose your own
> poison, but at least declare your preference) ...

I vote for the Z0-match because - if reflected energy doesn't make it
back to the generator, whether a Z0-match exists or not doesn't depend
on the generator source impedance. I don't see any reason for a ham
to care about a conjugate match except for academic reasons. We can
have a Z0-match without a conjugate match.
--
http://www.mindspring.com/~w6rca

698. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39E8C3F3.FE3F5E60@oio.net>
Source record: 178147

Jerry,
I don't think your going to find one 'standard' cable to
use on all bands. Since an electrical 1/2 wave length is
frequency dependant, just isn't going to happen... sorry.
'Doc

699. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E8C2B1.252FC156@bigfoot.com>
Source record: 178148

Rich Griffiths wrote:
> If you don't believe that matter and energy (the combination, since they're
> interchangeable) are conserved, then you're forsaking one of the most
> fundamental principles of modern physics.

One doesn't have to disagree with the matter/energy conservation principle
to believe that an atom with two protons and two electrons is NOT a hydrogen
atom. A hydrogen atom has one proton and one electron and that entity, by
definition, has ceased to exist. Or another way to put it, is a wooden
bookshelf still a tree?
--
http://www.mindspring.com/~w6rca

700. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E8C3B1.9C51C07C@bigfoot.com>
Source record: 178149

Jim Pennino wrote:
> You HAVE to look at the math; matter is not conserved, matter and energy
> are conserved.

Nope, I don't have to look at the math to know that an atom with one
proton and one electron has ceased to exist and something else has
been created in its place. This is simple binary logic. Either an
atom is a hydrogen atom or it is not a hydrogen atom.
--
http://www.mindspring.com/~w6rca

701. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E8C56E.B3A8F9E1@bigfoot.com>
Source record: 178150

Rich Griffiths wrote:
>
> "CAM" <cam2338@bigfoot.com> wrote in message
> > The energy flowing past a point in a unit time is
> > defined as power and the energy is conserved.

> If ignoring the distinction leads you to
> conclude that power is conserved, that's a mistake.
> Power is not conserved. Energy is.

That's what I said, Rich, please read it again. I did not
"conclude that power is conserved".

> But in fact, they don't charge
> for power consumption, they charge for energy consumption.

There you go, violating your own stated principle. :-) Energy
is NOT consumed - it is only transformed to a different level.
--
http://www.mindspring.com/~w6rca

702. Re: Ig-Nobel prize to Cornell researcher.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001014174036.05326.00001661@ng-fc1.aol.com>
Source record: 178151

>
>Chip- here is an example of what you have done to others. A direct quote
>from Chip.
>
>Hope this helps
>
>Bill
>
>
>Fractenna wrote:
>> everyone from Cornell should be
>> labelled as incompetent?
>>
>> NC

Nope;

Don't get it.

Be clear; concise; and provide supporting evidence for any statement you make.

Otherwise you are assuming that only through the blood red filter of personal
hate does your comment make any sense. And if that does, then just stay away
from people who worship a loving God.

Thank you.

73
Chip N1IR

703. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <gy4G5.5583$9T4.283455@bgtnsc04-news.ops.worldnet.att.net>
Source record: 178152

"Richard Clark" <rwclark@rwclark.seanet.com> wrote in message
news:jJ3oORCne4s+q9T29DGpyNOs7IrP@4ax.com...
> Hi Steve,
>
> What Basis of Analysis do you employ?
>
>
> "BASIS OF ANALYSIS
> "To analyze a particular case of mismatch an appropriate basis of
calculation must
> be chosen. If the power actually delivered to the load is to be compared
with maximum
> available from the source, this is on a conjugate basis. If comparison is
made with the
> power the source will deliver to a Z0 load, this is on a Z0 basis. These
are two of a
> number of possibilities.
> "Considerable confusion has arisen over the use of terms such as "match"
and
> "mismatch" since it is not always clear just what basis is intended. R.W.
Beatty of NBS
> has proposed a complete set of specific terms and definitions [subject of
my other thread,
> rwc]... From here on, all terms used in this Application Note will follow
these
> definitions where any possibility of ambiguity might otherwise exist.
Thus, "conjugate
> mismatch" and "Z0 mismatch" are used to describe the actual figures
obtained in the
> examples.
> "The general formula for power transfer between a source and a load of
reflection
> coefficients GammaG and GammaL is:
> ((1 - |GammaG|^2) * (1 - |GammaL|^2)) / | 1 - GamaG * GammaL |^2
> "where |GammaG| and |GammaL| can be obtained from the SWR's sigmaG and
sigmaL by
> the simple relation:
> |Gamma| = (sigma - 1) / (sigma + 1)
> This is the fraction of the maximum available power that is actually
absorbed by the load.
> Here the Z0 mismatch losses associated with the source and the load are
give by
> (1 - |GammaG|^2) and (1 - |GammaL|^2) respectively, while the uncertainty

in the power
> transfer is given by (1 – |GammaG| * |GammaL|)^2. It can be seen that
the rather vague
> term "mismatch error" applies in general to a combination of calculable
mismatch losses
> and uncertainties."
>
> 73's
> Richard Clark, KB7QHC

Hi Richard:

I am not really sure of the point of the above discussion.

All discussions that have occurred relative to the transmission line problem, impedance matching and the conjugate match have been based on the generally accepted method used to determine Gamma. In all of these discussions, Gamma is determined as a function of load impedance (or impedance discontinuity) and the ZO of the transmission line. The steady state solution to any transmission line problem can be found using Gamma determined in this manner.

Understanding the differences between an impedance match and a conjugate match is a different issue in my opinion.

In the most general case, ZS, ZO and ZL are complex and of the form R + jX.

The condition of an impedance match will occur when the load impedance ZL is equal to the characteristic impedance ZO. In this case, the forward source power delivered to the transmission line will be delivered to the load and no reflections will exist on the transmission line.

In the general case where ZS, ZO and ZL are complex, an impedance match is not a conjugate match.

A conjugate match occurs when maximum power is delivered to the load. If we define the conjugate match to occur at the source output terminals then, in the general case, more power will be delivered to a load equal to ZS* where reflections exist on the transmission line than will be to a load equal to ZO where no reflections exist on the transmission line.

In the special case where ZO is purely real, when ZS = ZL = ZO, an impedance match and a conjugate match will exist at the same time.

When a lossy tuner is used in impedance matching the discussion is more complicated because we also have to define the point where we want the conjugate match to occur. This was discussed in the previous post that I referred you to.

Steve

704. Re: Ig-Nobel prize to Cornell researcher.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001014180242.03686.00001732@ng-cd1.aol.com>
Source record: 178153

>...then just stay away from people who worship a loving God.<

Sage advice, Bill, otherwise they might act on their "assumptions" and shoot your children just to emphasize the point.

Rick K1BQT

705. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39E8BA18.5200@pacbell.net>
Source record: 178154

Rich Griffiths wrote:

>
> If you don't believe that matter and energy (the combination, since they're
> interchangeable) are conserved, then you're forsaking one of the most
> fundamental principles of modern physics. Don't do that on the basis of
> what the American Heritage dictionary thinks.
>
> Recognize what the definitions in a good dictionary represent. They are an
> attempt to characterize what a broad range of literate users think the words
> mean. Sometimes, that does not jibe fully with "extended" meaning employed
> in technical fields. The one you have provided is a good example of that.
>
> To do justice to the probable interaction of matter and antimatter would
> require a dissertation in quantum mechanics that Feynman might be able to do
> briefly, but I can't <g>.
>
> Rich W2RG

Feynman says matter and antimatter annihilate one another. Here
is a list of what he says are conserved: momentum;
charge; energy; strangeness. I can't vouch for strangeness,
but the others seem right. Where did you get the idea that
matter is conserved?

Tom Donaly KA6RUH

706. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39E8C029.54A6@pacbell.net>
Source record: 178155

Jim Pennino wrote:

> Once again, aren't semantics wonderful. Normal language is rather poor
> for describing what happens at the quantum level.
>
> Physicists don't define matter in terms of "chain link fences" or "atoms",
> nor do they use the American Heritage dictionary to define "annihilation".
>
> You HAVE to look at the math; matter is not conserved, matter and energy
> are conserved.
>
> Jim Pennino

Richard P. Feynman was a physicist. According to the Nobel committee, he was a very fine physicist, so good, in fact, that they gave him a prize. When he writes, in his lectures, that if a clock made of matter and one made of antimatter come together they will annihilate one another, who am I to question what he means by the word annihilate? Feynman was usually very careful with his words. If you say that Feynman didn't really mean annihilate when he said annihilate you'll have to prove it if you want anyone to believe you. As for myself, I'm willing to believe that the matter and the antimatter in the clocks is converted to energy, but, once converted, it isn't matter and antimatter any more, it's some other form of energy. Matter is just one form of energy, if Einstein is correct. The energy can be conserved, the form can't.

Tom Donaly KA6RUH

707. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39E8EA22.3ECE50C9@mwci.net>
Source record: 178156

VE9SRB wrote:

> "William E. Sabin" <sabinw@mwci.net> wrote in message
>
> >
> > Efficiency is the ratio of RF power output to power supply DC power input.
> >
>
> Let's agree that efficiency of a transmitter is defined as the ratio of
> total RF power output to DC power input. This is not a problem for me. So,
> from my perspective the total RF power output should include the power lost
> in the transmitter and the power delivered to the load.

Consider a tube amplifier as a simple example:
(A) The DC plate power is the product of DC plate voltage and DC plate current.
(B) The RF plate power is the RF power that is delivered to the plate load resistance (the input resistance of the tank circuit).
(C) A small amount of this is lost in the coil of the tuned circuit (this is the RF power "lost inside the transmitter").

The "plate efficiency" is the RF power that is actually delivered to an external load (B-C) divided by (A). The difference between (A) and (B) is dissipated in the tube itself, not in the "dynamic plate resistance due to internal negative feedback" but in the actual plate dissipation, which is an *entirely different* thing. The plate glows red and gets hot, but the *dynamic plate resistance* does not do *anything* like this. It is a dynamic, internal, lossless feedback mechanism.

> Now, when we speak
> of the "conjugate match" we talk about efficiency in terms of RF power
> delivered to the load with respect to the total RF power output of the
> transmitter. I think these are two independent definitions of efficiency.

No. Conjugate match involves the dynamic plate resistance and the RF load resistance. When the load resistance equals the dynamic output resistance then no more power can be obtained by either increasing or decreasing the load resistance, *while holding everythng else constant*. We see this a lot in small-signal tube/transistor circuits.

BUT, let's be clear about this: This match between load and dynamic resistance has absolutely nothing to do with the definition of efficiency that I mentioned. Specifically, the efficiency of a tube with very high plate resistance (like a pentode) can be identical to the efficiency of a triode with much lower plate resistance, both having the same value of load resistance. Furthermore, the pentode has such a high plate resistance that the possibility of getting a conjugate match is very small. What happens is that if we increase plate load

resistance to try to get a conjugate match, the situation changes. The plate voltage variations become so large that the tube goes into regions where it is no longer acting as a true pentode. Using this shenanigan, we can make the dynamic output resistance look like just about anything we like. We can also get into plate current saturation and cutoff.

Comparing pentodes and triodes, the maximum plate voltage variations and maximum plate current variations are restricted in not exactly, but pretty much the same way.

This dynamic resistance situation is different from the usual passive-network idea of a generator with an actual physical resistor in the generator and an actual physical resistor in the load. In the case that we are discussing, the power dissipated in the generator resistor is 0.0000 watts.

This idea takes some getting used to. All we need to do is imagine a resistor that does not dissipate power. That is the dynamic output resistance of the tube.

Others have talked about "current pulses" in amplifiers, and tried to relate that to output resistance. But a triode (voltage source) and a pentode (current source) can deliver exactly the same current pulses to the same load resistance and yet have drastically different dynamic output resistance. This difference does not prevent equal performance of the two tubes (the triode with low value of plate resistance will need a larger grid drive).

Bill W0IYH

708. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8saq2p$204o$1@heap.juniper.net>
Source record: 178157

William E. Sabin <sabinw@mwci.net> wrote:
>Dennis Ferguson wrote:
>
>> Maxwell's equations may
>> be formulated in terms of E and H vectors, but they also don't directly
>> produce "waves" as results. Given appropriate boundary conditions,
>> solutions to Maxwell's equations simply produce fields of time-varying
>> E and H vectors.
>
>Definitely not true. The wave equation being discussed is sinusoidal,
>not only in
>time, but in distance. This equation is the one that is the basis for
>*everything* in transmission line theory. I suggest you dust off your
>text books.

Who said that a field of time-varying E and H vectors derived from
a solution to Maxwell's equations couldn't vary sinusoidally with
distance? I think we've changed topics, however, since the post
I responded to only mentioned "Maxwell's curl equations" in which
sinusoids don't appear (though they may appear in solutions).

So you are saying that the wave equations you are now talking about
don't define waves to travel in the direction E x H? What direction
do they travel in then?

Dennis Ferguson

709. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39E8F0C2.A9406A62@mwci.net>
Source record: 178158

Dennis Ferguson wrote:

> William E. Sabin <sabinw@mwci.net> wrote:
> >Dennis Ferguson wrote:
> >
> >> Maxwell's equations may
> >> be formulated in terms of E and H vectors, but they also don't directly
> >> produce "waves" as results. Given appropriate boundary conditions,
> >> solutions to Maxwell's equations simply produce fields of time-varying
> >> E and H vectors.
> >
> >Definitely not true. The wave equation being discussed is sinusoidal,
> >not only in
> >time, but in distance. This equation is the one that is the basis for
> >*everything* in transmission line theory. I suggest you dust off your
> >text books.
>
> Who said that a field of time-varying E and H vectors derived from
> a solution to Maxwell's equations couldn't vary sinusoidally with
> distance? I think we've changed topics, however, since the post
> I responded to only mentioned "Maxwell's curl equations" in which
> sinusoids don't appear (though they may appear in solutions).

The curl equations, written in phasor form, contain j-omega.

> So you are saying that the wave equations you are now talking about
> *don't* define waves to travel in the direction E x H?

I certainly did not say that. I said exactly the opposite.

> What direction
> do they travel in then?

E x H is correct. If E is in the plus X direction and H is in the plus Y
direction, the wave travels in the plus Z direction.

Bill W0IYH

>
>
> Dennis Ferguson

710. Re: Ig-Nobel prize to Cornell researcher.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39E8F0FE.E408F81D@hiwaay.net>
Source record: 178159

Fractenna wrote:
>
> >
> >Chip- here is an example of what you have done to others. A direct quote
> >from Chip.
> >
> >Hope this helps
> >
> >Bill
> >
> >
> >Fractenna wrote:
> >> everyone from Cornell should be
> >> labelled as incompetent?
> >>
> >> NC
>
> Nope;
>
> Don't get it.

That's too bad, I thought I was clear.
>
> Be clear; concise; and provide supporting evidence for any statement you make.

This a fine instruction for a junior professor to make, but (thank God)
I'm NOT one of your students.
>
> Otherwise you are assuming that only through the blood red filter of personal
> hate does your comment make any sense. And if that does, then just stay away
> from people who worship a loving God.

Wow!- I know the moon is almost full, but that statement is pretty
arrogantly stupid, even for Chip. The Pneumonia medicine must have side
effects not mentioned on the bottle.

Hope this helps

Bill

P.S. - I meant no disrespect to Cornell by my little quote from Chip- I
know it is a great school- after all- Feynman did teach there.

711. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <3fLoORn0NZeARV8nK4Vvvb6C+qFz@4ax.com>
Source record: 178160

On Sat, 14 Oct 2000 21:50:04 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>Hi Richard:
>
>I am not really sure of the point of the above discussion.
>

Hi Steve,

What is the Basis of Analysis that you employ, and more importantly when?

73's
Richard Clark, KB7QHC

712. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <9PfoOZ+HHfuqvtS2hn8vh=AmIAy1@4ax.com>
Source record: 178161

On Sat, 14 Oct 2000 15:22:31 -0500, CAM <cam2338@bigfoot.com> wrote:

> We can
>have a Z0-match without a conjugate match.

Hi Cecil,

Is this simply a statement of personal choice, or is it the question under consideration? It doesn't say much given we CAN have a Z0 Match and a Conjugate Match too.
>
>Z0 Mismatch:
>The condition in which the impedance seen looking into a transmission line is not equal to
>the transmission line characteristic impedance Z0. In general, conjugate match is a case
>of Z0 mismatch.

Given the NBS definition above, it responds directly to the mutual exclusivity of the two Basis of Analysis for this point; but this is not said by you - or anyone except through indirection. No wonder these threads run 600 postings with some running at 800 line entries.

Steve is having an incredibly difficult time simply stating which Basis is being used, and when; and Walt, who acknowledges this reference, has been completely silent on this point for two years.

There are not that many definitions, they are not terribly written or vague, and yet when two choices are presented, neither correspondent can identify which he employs, and when in his arguments. I am not surprised they are at cross purposes.

73's
Richard Clark, KB7QHC

713. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <tvzoORDj5TXlsEzr+fyAY6GApKc8@4ax.com>
Source record: 178162

On Sat, 14 Oct 2000 13:20:57 -0700, Donaly <dtdonaly@pacbell.net> wrote:

>Jim Pennino wrote:
>
>>
>> Once again, aren't semantics wonderful. Normal language is rather poor
>> for describing what happens at the quantum level.
>>
>> Physicists don't define matter in terms of "chain link fences" or "atoms",
>> nor do they use the American Heritage dictionary to define "annihilation".
>>
>> You HAVE to look at the math; matter is not conserved, matter and energy
>> are conserved.
>>
>> Jim Pennino
>
>Richard P. Feynman was a physicist. According to the Nobel
>committee, he was a very fine physicist, so good, in fact,
>that they gave him a prize. When he writes, in his lectures,
>that if a clock made of matter and one made of antimatter
>come together they will annihilate one another, who am I to
>question what he means by the word annihilate? Feynman was
>usually very careful with his words. If you say that Feynman
>didn't really mean annihilate when he said annihilate you'll
>have to prove it if you want anyone to believe you. As for myself,
>I'm willing to believe that the matter and the antimatter in
>the clocks is converted to energy, but, once converted, it isn't
>matter and antimatter any more, it's some other form of energy.
>Matter is just one form of energy, if Einstein is correct. The
>energy can be conserved, the form can't.
>
>Tom Donaly KA6RUH

Hi Tom,

If we are to lean upon the master, we should also quote him to the matter:

"...conservation of energy. It states that there is a certain quantity, which we call energy, that does not change in the manifold changes which nature undergoes. ...it says that there is a numerical quantity which does not change when something happens. It is not a description of a mechanism, or anything concrete; it is just a strange fact that we can calculate some number and when we finish watch nature go through her tricks and calculated the number again, it is the same. (Something like the bishop on a red square, and after a number of moves - details unknown - it is still on some red square. It is a law of this nature.)"

73's
Richard Clark, KB7QHC

714. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <Of3oOYeOLEviNEsgKCjyRC=UGlnH@4ax.com>
Source record: 178163

On Sat, 14 Oct 2000 15:43:26 -0500, CAM <cam2338@bigfoot.com> wrote:

>
>There you go, violating your own stated principle. :-) Energy
>is NOT consumed - it is only transformed to a different level.

Hi Cecil,

Energy at a different level is more (or less) energy. To increase (decrease) energy requires the addition (subtraction) of more energy, not a transformation. Energy is not transformed to a greater (lesser) energy. Transformation is, afterall, the change in point of view (reference) of the variables, not a change of the variables themselves.

73's
Richard Clark, KB7QHC

715. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39E8F783.4552@pacbell.net>
Source record: 178164

Richard Clark wrote:
>
> On Sat, 14 Oct 2000 13:20:57 -0700, Donaly <dtdonaly@pacbell.net> wrote:
>
> >Jim Pennino wrote:
> >
> >>
> >> Once again, aren't semantics wonderful. Normal language is rather poor
> >> for describing what happens at the quantum level.
> >>
> >> Physicists don't define matter in terms of "chain link fences" or "atoms",
> >> nor do they use the American Heritage dictionary to define "annihilation".
> >>
> >> You HAVE to look at the math; matter is not conserved, matter and energy
> >> are conserved.
> >>
> >> Jim Pennino
> >
> >Richard P. Feynman was a physicist. According to the Nobel
> >committee, he was a very fine physicist, so good, in fact,
> >that they gave him a prize. When he writes, in his lectures,
> >that if a clock made of matter and one made of antimatter
> >come together they will annihilate one another, who am I to
> >question what he means by the word annihilate? Feynman was
> >usually very careful with his words. If you say that Feynman
> >didn't really mean annihilate when he said annihilate you'll
> >have to prove it if you want anyone to believe you. As for myself,
> >I'm willing to believe that the matter and the antimatter in
> >the clocks is converted to energy, but, once converted, it isn't
> >matter and antimatter any more, it's some other form of energy.
> >Matter is just one form of energy, if Einstein is correct. The
> >energy can be conserved, the form can't.
> >
> >Tom Donaly KA6RUH
>
> Hi Tom,
>
> If we are to lean upon the master, we should also quote him to the matter:
>
> "...conservation of energy. It states that there is a certain quantity, which we
> call energy, that does not change in the manifold changes which nature undergoes. ...it
> says that there is a numerical quantity which does not change when something happens. It
> is not a description of a mechanism, or anything concrete; it is just a strange fact that
> we can calculate some number and when we finish watch nature go through her tricks and

> calculated the number again, it is the same. (Something like the bishop on a red square,
> and after a number of moves - details unknown - it is still on some red square. It is a
> law of this nature.)"
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
yes, he did say that. Thank you for the quote. Do you think
we could substitute the word "matter" for the word "energy" in that
quote? If we could, I would gladly concede the point to the other
side.

Tom Donaly KA6RUH

716. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E914B2.240FA8B4@bigfoot.com>
Source record: 178165

Richard Clark wrote:
>
> On Sat, 14 Oct 2000 15:22:31 -0500, CAM <cam2338@bigfoot.com> wrote:
> > We can have a Z0-match without a conjugate match.
>
> It doesn't say much given we CAN have a Z0 Match and a Conjugate Match too.

I said it that way because some people equate a Z0-match with a conjugate match. What we normally achieve with an antenna tuner is a Z0-match, not necessarily a conjugate match. Given a transceiver designed to drive a 50 ohm load, a 50 ohm Z0-match is all we need.

> Given the NBS definition above, it responds directly to the mutual exclusivity of the two
> Basis of Analysis for this point; but this is not said by you - or anyone except through
> indirection.

50+j0 looking one direction and 50-j0 looking the other direction is a conjugate match, right? (trivial case) It is also a Z0-match where Z0 = 50 ohms. The analyses may be mutually exclusive but the two *conditions* are not mutually exclusive.
--
http://www.mindspring.com/~w6rca

717. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39E917E5.DED568E2@bigfoot.com>
Source record: 178166

Richard Clark wrote:
> Energy at a different level is more (or less) energy.

Doesn't allowing for more (or less) energy violate the
conservation of energy principle? Seems to me we have
the same total amount of energy no matter what the level.
--
http://www.mindspring.com/~w6rca

718. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-14 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <sui9f2d9frq40e@corp.supernews.com>
Source record: 178167

>
>I tried to show earlier in another posting how a Class C amplifier
>shares some of the lossless characteristics of this off-on switching.
>Since Class C amplifier switching has imperfections, its total output
>resistance is made up of the equivalent of two resistances in series.
>One of these is the lossy type of resistance. The other is the lossless
>resistance produced by the switching action of the amplifier.
>
>This lossless resistance is necessary to explain how a Class C amplifier
>can produce maximum power output which exceeds 50% efficiency in the
>transmitter.
>
>Best regards, Richard Harrison, KB5WZI
>

The analogy of a switch and tank circuit to a Class C amplifier is a good one and I agree with your conclusion of how this allows greater than 50% efficiency.

But is this supposed to explain the "different kind of resistance that is non-dissipative" that we've been talking about? I don't see where it comes in. Taking the switch and tank illustration to the extreme (ideal) point, let the switch and DC source and tank be ideal (lossless--no arcing, no resistance). Now the efficiency of this rf generator connected to a load will be quite high--100%, I'd guess. But it didn't require any creation of a new kind of resistance to get there--just an rf generator with zero source resistance.

As I understand it, the argument for this non-dissipative resistance goes like this:

1. An optimum match is a conjugate match.
2. A conjugate match is only 50% efficient.
3. We know of rf generators matched to loads with greator than 50% efficiency.
4. But since they have to be conjugately matched (see 1), there must be some kind of non-dissipative resistance at work here to get the >50% efficiency.

I guess I don't agree because I don't agree with (1). Maximum power transfer is not "optimum" if you seek higher than 50% efficiency, so a good, high efficiency match isn't equivalent to a conjugate match. I know this dead horse has been flogged here before, but I've got to get my licks in too.

73--Nick, WA5BDU

719. Re: Power waves

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-15 02:44:11 UTC
From: dennis@wawa.juniper.net
Message-ID: <8sb5lr$28m9$1@heap.juniper.net>
Source record: 178168

CAM <cam2338@bigfoot.com> wrote:
>Rich Griffiths wrote:
>> But in fact, they don't charge
>> for power consumption, they charge for energy consumption.
>
>There you go, violating your own stated principle. :-) Energy
>is NOT consumed - it is only transformed to a different level.

If you don't give the energy back to the power company in the
form in which you received it then it is "consumed" from their
point of view. If the transformation you cause the energy to
undergo generates entropy then you'll never be able to use that
energy for the same transformation again either, so it is pretty
much "consumed" from your point of view as well. Entropy generation
is energy consumption (at least if I use the "to expend; use up"
dictionary definition rather than the "to destroy totally" one).

Dennis Ferguson

720. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F38E9A.10202941@oio.net>
Source record: 178069

Frac,
Tape a quarter to it and set it by the curb. Then, maybe
someone will pick it up.
'Doc
PS - And that's a non-Ph.D. (Why any one would care about
a nick-name, except you, I don't know.)

721. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F39079.5E5E@wt.net>
Source record: 178070

Dick Carroll wrote:

frac wrote:

> > Mr. Lewallen--
> >
> > You need to speak to an attorney.

Why on earth would he want to do something like that? Frac is confused.
If he files a suit, he's the one that needs an attorney.
> >
> > Ask him or her whether it is copyright infringement for you to type up a copy
> > of Robert Frost's 'North of Boston' and publish and distribute it on your web
> > site.

I bet it's legal for me to make a eznec model of it and post on my
website. I'm sure Robert Frost would cringe at the thought, but oh
well...
> >
> > Understand this clearly: YOU HAVE STOLEN this copyright material. You MUST
> > remove it immediately. Litigation WILL occur and you will be continually
> > presented to the public as in violation of copyright.

Well, ok then. I wish he'd @#$% or get off the pot.
> >
> > Nothing.
> >
> > NOTHING.
> >
nothing back again.
> > Nothing will stop this short of you removing the file.

I know thats right. Even if he removes it, Frac will think of something
new to whine about.
> >
> > Nathan Cohen, Ph.D.
>
> Now he's foaming at the mouth. Can the white-coat squad with the wrap
> restraints be that far away?

I wonder , he may have rabies. I've heard that can cause delirium in
advanced stages. MK

--
http://web.wt.net/~nm5k

722. Re: Roy Lewallen Copyright Violation-- Personal Notification

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F39314.3F7D@wt.net>
Source record: 178071

Gilbert Mouget wrote:
>
> 22 Oct 2000 22:46:40 GMT dans l'article
> <20001022184640.21730.00001046@ng-cd1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
> :After conferring with XXXXX, Fractal Antenna Systems, Inc.s' attorney
>
> A member of the FAA in relapse ? FAA = Fractal's Attorneys Anonymous ?

Anonymous...You got that right. Anonymous as in none around.
>
> Fracky, if it is a personal notification why not keep it on the mail ?

Because he has his add on module to the Ph.d which allows him to act in
such a manner. He is one of the few that applied for the full blown
AH-Ph.d. Yep, no sears ph.d for ole Frac.
>
> BTW a traceroute on your IP ends in the psychiatric ward of a well
> known hospital, seems you forgot again to take your medication.

Cuz , Phil keeps scamming it all for himself. None left for poor old
mistreated Frac. MK
--
http://web.wt.net/~nm5k

723. Re: EZNEC: Fine analysis of fractal's dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F39517.4521@wt.net>
Source record: 178072

Dick Carroll wrote:

>
> It's not the truth that he's afraid of. He knows the truth. It's what
> the truth will ultimately do to him that he fears.

!!!!!!Quote of the year award winner!!!!!
You win a free frectal oven mitt. MK

--
http://web.wt.net/~nm5k

724. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <39F3999F.86C5D0C7@bright.net>
Source record: 178073

I have about 4 ft of clearance to the peak, no foil insulation and a couple of electrical runs on the floor of the attic, but the aluminum ridge vent vexes me no end on designs I've tried...at least on 6M.
Paul N8ULS

Fractenna wrote:

> In the late Fall, I will put up a web page on the next fractal antenna for
> hams. This is a low height monopole which fits in a small space, such as an
> attic.
>
> Assuming a design for 20M, I would appreciate knowing what some typical form
> factor restrictions are in attics/crawl spaces. For the moment I am assuming
> about 3 feet of height and of order 14 by 14 feet of footprint available.
>
> Thanks for the fedback.
>
> 73
> Chip N1IR

725. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <39F39B15.50F60588@bright.net>
Source record: 178074

Where I live with 2M antennas below tree top level my summertime range is
much less than half my wintertime range when the leaves are down. 6M is not
a whole lot different.(vertical polarization).
Paul N8ULS

Brian Kelly wrote:

> Trees make great freebie, inconspicuous supports for HF wire antennas.
> Assuming the use of insulated wire such as common #14 THHN do such
> antennas suffer losses vs. the same wire installed over the same ground
> at the same height but out in the open? I've gotten very good
> performance out of a number of "treed" antennas but that's highly
> subjective and doesn't mean I haven't been heating the trees along with
> working the dx. Ideally I'd run A-B tests and find out for myself but
> I'm not in a position to do that. Has anybody done any actual studies or
> published any articles or papers on the matter?
> >
> Tnx,
> >
> Brian Kelly w3rv

726. Re: PIRACY BY W7EL-EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F3A68E.97FA99DD@oio.net>
Source record: 178075

Frac,
Put up, or shut up, Frac. ALL of us are tired of seeing
and hearing this BS. If there are three people on this NG,
or in the 'free', and 'not so free' world who want to see
more of this off-topic spam, why don't you email them direct?
'Doc

727. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t09so$t0l$1@iac5.navix.net>
Source record: 178076

Heil Fracky! Ya vo mein furore

"Fractenna" <fractenna@aol.com> wrote in >
> I hold the copyright on MI2. I created it; and now I own it. Its
distribution
> and publication, BY LAW, is under my control.
>
> Nathan Cohen, Ph.D.

728. Re: Multi-Band Mini Quad Antenna - Comments

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: zd <zdano@uniserve.com>
Message-ID: <39F2B5C1.1148E891@uniserve.com>
Source record: 178077
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

antenna wrote:

> We are currently doing our field testing on a new antenna design that you
> may be interested in. This antenna is a multi-band (10m, 15m, 20m)
> mini-quad (smaller than a full size quad) and portable (easily folded).
>
> This antenna is designed for:
>
> 1. High performance
> 2. Ease of installation (and disassembly, if required). No wires to string.
> 3. Small turning radius (7ft).
>
> Our field tests to date indicates that the antenna is performing as designed
> on all bands.
>
> Any comments are welcome either by the newsgroups or email as we are trying
> to determine the interest level in this product.
>
> If you wish to be kept update with the latest information, please drop use
> an email at: antenna@attcanada.net
>
> Thank you for your interest.
>
> GS
>
> PS - We do not distribute an email address to others as we do not believe in
> spam !

Pse, keep info coming, 73! zdano@uniserve.com

729. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <sv7eqe9ifk5jc8@corp.supernews.com>
Source record: 178078

"Brian Kelly" <kelly@dvol.com> wrote in message
news:39F3A757.DFB654A@dvol.com...
>
>
> John Moriarity wrote:
>
> > > Anyone know of a telescoping , non metallic mast i could use.
> >
> > Judd,
> >
> > How about a "Hot Stick"?
> >
> > Take a look at http://www.hfgp.com/pictures/A-1.jpg .

> Slick idea but not cool for an antenna mast, better lightning should
hit
> a steel mast than the vee. How much is "not cheap"?

New, about $250 for a 30 footer. As I said, not cheap!
But that's for a *very* sturdy pole.

As for the lightning problem (an this is a high risk area)
I simply plan to disconnect and ground the feedline some
distance before it would enter the house, whenever it is not
in use. I've done that with all my antennas for 50 years.
So far, it's been successful.

Hams used wooden poles for their antennas for many
years in the past, and I haven't heard of any serious
problems as a result. Just use common sense.

73,

John, K6QQ

730. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <5hf0t8.su3.ln@mail.specsol.com>
Source record: 178079

Fractenna <fractenna@aol.com> wrote:
>>Subject: Re: NOTICE: ENFORCEMENT OF COPYRIGHT
>>From: Jim Pennino jimp@mail.specsol.com
>>Date: 10/22/00 8:57 PM Eastern Daylight Time
>>Message-id: <ad20t8.hik.ln@mail.specsol.com>
>>

<snip>

>>I've received it, what are you going to do about it?
>>
>>Jim Pennino
>>

> Pass it onto counsel as public evidence that the illegally distributed file is
> being received illegally and that traffic in this distribution is clear.

> NC

Since you've publicly called me a liar, that should make good evidence.

BTW, have you drawn enough attention to yourself to satisfy your ego yet?

Jim Pennino

731. AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Wayne Watson <mtn_view@sirius.com>
Message-ID: <39F3D3E2.5CF7707C@sirius.com>
Source record: 178080

On many AM/FM radios there's a rod antenna that collapses. I'm sure it is the FM antenna, and a
small ferrite AM antenna is inside. However, what's the deal with the old AM rod antennas on autos?
Is there actually some sort of ferrite antenna disguised in the fat portion of the rod and the rest
of the rod is used for FM?

--
"Reality is merely an illusion, albeit a very persistent one."
-- Albert Einstein

732. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F3DACF.47A1A4E7@eznec.com>
Source record: 178081

No, the rod functions as both an AM and FM antenna. It's very
inefficient on AM, but that's made up for by a large amount of receiver
gain. The capacitance of the coax acts as part of a voltage divider
which reduces the AM signal from the rod. It's specially made to have as
little capacitance as possible to minimize this attenuation. Someone
with more experience can correct me on this, but I don't think a typical
ferrite rod antenna will receive as much signal as a typical whip of
half meter or so length. If I'm correct about that, a portable AM/FM
radio probably has a ferrite rod antenna mostly because it doubles as
the inductor in a couple of tuned circuits, and it allows use of the
radio on AM without extending the antenna.

Roy Lewallen, W7EL

Wayne Watson wrote:
>
> On many AM/FM radios there's a rod antenna that collapses. I'm sure it is the FM antenna,
and a
> small ferrite AM antenna is inside. However, what's the deal with the old AM rod antennas
on autos?
> Is there actually some sort of ferrite antenna disguised in the fat portion of the rod
and the rest
> of the rod is used for FM?
>
> --
> "Reality is merely an illusion, albeit a very persistent one."
> -- Albert Einstein

733. Re: Slopers II

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023070224.03695.00000885@ng-ff1.aol.com>
Source record: 177919

>Hello again,
>
>Could someone please share his experiences with the subject of half slopers,
>please.....
>
>Regards, Nermin S58DX
>
>Nermin Bajramoviï¿½ wrote in message ...
>>Hello om's,
>>Anyone out there, have had some usable experience with half slopers for low
>>bands. i.e. Chokes, lengths, grounding, right formula for cutting the
>active
>>part etc...
>>Formulas for calculating the electrical length of tower with single or
>>stacked beams...
>>
>>Thanks in advance,
>>
>>Nermin S58DX
>>
>>

To see a compact, high perfromance extreme, see the K2 Fractal Flyer on the
ham page of

http://www.fractenna.com

73
Chip N1IR

734. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023072123.05606.00000125@ng-cb1.aol.com>
Source record: 177920

>:Here are some places I have offered and sent files in response to:
>:
>:NEC-LIST
>
>Fractanal postings from <fractenna@aol.com> are banned on NEC-LIST.
>Never seen MI2 file on NEC-LIST. Just an off-topic post asking for
>crackware:
>
>X-POP3-Rcpt: moumoug@Cyberiane
>Message-Id: <199912210940.BAA15730@fs3.ece.ubc.ca>
>From: Fractenna@aol.com (Chip N1IR)
>Date: Mon, 20 Dec 1999 12:46:22 EST
>Subject: NEC-LIST: Writing PDF File?
>To: nec-list@ee.ubc.ca
>
>I would be grateful if someone could point out an easy, or cheap, way
>of doing a PDF write. I need to upload a paper (of NEC results)into
>PDF format . I do not have this facility here, and a search yields a
>morass of complex info.
>
>E-mail response is fine.
>
>Thank you!
>
>Chip N1IR
>
>
>--
>Gilbert.
>

I have never, ever, ever, been banned from the NEC-LIST.

Nathan Cohen, Ph.D.

735. Re: NBS Conjugate Match & Z0 Match Definitions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <LqWI5.12460$7N.723245@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177921

"Walter Maxwell" <w2du@journey.com> wrote in message
news:SSJI5.8541$mC.585598@monger.newsread.com...
>
>
> My wife Jean had major shoulder surgery last Wednesday, so I've had the
task
> of nursing her, but also last Friday I had spinal surgery for a pinched
> nerve, so I'm still on light duty on the RRAA. So Steve, for this reason I
> haven't had time to solve the problem you gave me.
>

Walt: Your wife's and your health is much more important than this
discussion. I wish you both a quick recovery. Look forward to talking
again at your convenience.

Take care

Steve

736. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001023085233.02767.00000452@ng-cl1.aol.com>
Source record: 177922

>This is not a beauty contest. Lewallen is prating something

NC, ID1OT

Never argue with an idiot. He'll drag you down to his level and beat
you with experience. :)

-- jm

737. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <EKWI5.7744$bL1.162293@news6-win.server.ntlworld.com>
Source record: 177923

Judd

I use a steel scaffolding pole (22') with a one piece windsurf mast on top. There is an extension windsurf mast in the middle giving 43'. The mast is very strong with guys at 120 degrees, I live on Portland on the south coast of the UK which is very windy and have had no problems. Over here we can get the masts very cheaply (free). I just go to a windsurf shop and ask for old ones, these are usually worn out and starting to splinter so a couple of coats of varnish are necessary. They are better than PVC and much stronger. Mine supports one end of a dipole with the other end on the chimney and fed with ladder line.

Jon M0BQQ

JD <jds_14@hotmail.com> wrote in message
news:sv64fct2g6u1af@corp.supernews.com...
> Hi all. I just moved to an area where my beam is out of the question. Was
> thinking about using a random length inverted v and feeding it with ladder
> line and using a tuner. My problem is what to use for a mast. I will be
> mounting it on the roof, and want to get the center at least 30' high.
Have
> thought about using different sizes of pvc and telescoping it up , but i
> tried using pvc on a loop and it flexes quite a bit, and is heavy also.
> Anyone know of a telescoping , non metallic mast i could use. Any input
> greatly appreciated.
>
73,
> Judd-KC7MPD
>
>

738. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F439ED.AD491B08@dvol.com>
Source record: 177924

John Moriarity wrote:

>
> > Slick idea but not cool for an antenna mast, better lightning should
> hit
> > a steel mast than the vee. How much is "not cheap"?
>
> New, about $250 for a 30 footer. As I said, not cheap!
> But that's for a *very* sturdy pole.

>
I've seen 'em in use and they seem to be pretty rugged. Could be worth
every nickel in specific situations.
>

> As for the lightning problem (an this is a high risk area)
> I simply plan to disconnect and ground the feedline some
> distance before it would enter the house, whenever it is not
> in use.

>
Can't beat the basic premise but hoofing around in the dark and/or in the
wx every time ya sign on/sign off strikes me as a real nuisance. It gets
bloody cold around here. Heh. Then comes the time ya forget to disconnect
.
>

> I've done that with all my antennas for 50 years.
> So far, it's been successful.
>
> Hams used wooden poles for their antennas for many
> years in the past, and I haven't heard of any serious
> problems as a result. Just use common sense.

>
I've always been a bit nutty abt full-time completely grounded antennas
for my near half-century in the game, to each their own.
>
I had a stack on a well-grounded tower which went thru 100ft. The power
line took a direct strike somewhere in the neighborhood and blew my ham
station all to hell. I was right there, I jumped up on the radio bench and
dove for the equipment plugs and started yanking, it wasn't 30 seconds
later that another strike landed and tossed me halfway across the
basement. So much for the old "lightning never strikes twice" nonsense. We
lost a bunch of appliances, 110vac outlets got embedded in walls on the
other sides of three rooms, etc. Bloody scary stuff. Yeah, I'm paranoid

abt lightning.
>

> 73,
>
> John, K6QQ

>
Brian, w3rv

739. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Rttyman <jlockett@lightspeed.net>
Message-ID: <yfXI5.18044$cO4.707656@nntp3.onemain.com>
Source record: 177925

If this is your idea of a 'legacy' for your son, I feel sorry for the lad....and a whole lot of us will really be glad when you are not here forever!!!!!!

JL

> history of creative output and the fact that this is a legacy for my son, and I
> will not be here forever..
> NC

740. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <9449-39F43EC3-19@storefull-115.iap.bryant.webtv.net>
Source record: 177926

George, W5YR wrote:
"So, if anyone has any information on this, I would appreciate hearing from them."

Bird says to consider what + or - 5% accuracy means. Checking the 500 watt scale at a level of 10 watts allows + or - 25 watts variation while the 100 watt full-scale tolerance allows only + or - 5 watts variation.

Bird says that replacing the crystal rectifier should yield + or - 3% of the full-scale reading of the factory calibrated unit.

Bird says inaccuracies may result from spurious signals outside the design range, effects of the deviation from purely sinusoidal wave shape, effects of ambient and instrument temperature, meter movement accuracy, and the history of the instrument`s maintenance.

To calibrate, Bird says, requires concern with the standards used, the media employed, and the operator performing the calibration.

George is surely right. Bird will very likely say, "return it to the factory".

Best regards, Richard Harrison, KB5WZI

741. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t1hrp$q00$0@208.207.71.150>
Source record: 177927

Fractenna wrote:
>
> >Meet the ENFORCER:
> >
> >First the enforcer sold publication rights to a series of articles containing
> >material he'd previously transferred the copyright to--and no longer owned.
> >
> >Later, the enforcer attacked and threatened fellow hams for "fair use" of a
> >portion of that material shared in the course of scientific inquiery.
> >
> >Now, way after the fact, the enforcer procures a copyright to the material
> >and
> >acts as if he'd owned it all along--presumably so he can use it as a weapon
> >in
> >a nuisance law suit.
> >
> >Finally, the enforcer complains because his actions create a PR problem that
> >make him "look bad".
> >
> >As the monkey said when he got his tail caught in the ringer, "OUCH, that's
> >quite a stretch!!!"
> >
> >Rick K1BQT
> >
>
> Mr, Littlefield--
>
> It seems to me that this whole affair can be easily ended for Mr. Lewallen by
> producing a document showing transfer of copyright to CQ Communications. There
> isn't one--I told you this.
>

Yeah, that was after you said it *had* been transferred.

> As I have told you, I never, ever, ever, transfered copyright to CQ
> Communications. NOR WAS I ASKED TO.
>
> This is a lie which only fuels an irrational and mendacious diversion from the
> fact which is:
>
> ROY LEWALLEN IS A PIRATE who is ILLEGALLY publishing and distributing
> unauthorized copyright material.
>
> NC

You are one sick puppy, Doktor. Better start to heal thyself why you
still have a shot at it. Time is growing shorter and shorter......
The patience of even such a congenial individual as Roy has its limits.

742. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t1huo$q00$1@208.207.71.150>
Source record: 177928

What I'm waiting for is for Gentleman Roy to get a gut full of this crap and hit HIM where it hurts with a SERIOUS suit for libel, slander and damage to his professional reputation among whatever else a good torts attorney can work up from all that has gone on here.
I'd imagine he's harvesting message headers with contents as we speak for submission for his attorney to consider. Maybe Roy will wind up the owner of Fractalcrap, INC and then he can - I started to say he could just burn the building, but I don't think there IS a building. He'll just have settle for burning the company charter. In any case the world would finally be free of fractalcrap.

743. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14501-39F4475E-29@storefull-113.iap.bryant.webtv.net>
Source record: 177929

George, W5YR wrote:
"Can these (Bird slugs) be calibrated in "the field" i.e., my
workbench?"

About 40 years ago I sucessfully recalibrated a Sierra wattmeter which uses the same principle to indicate power, but physically is quite different. It is a big clunker which uses a rotating barrel in place of plug-in elements.

Some years later I saw an article in some ham magazine, I am sorry I don`t remember the details, on how to repair and recalibrate Bird elements.

Return to the factory for recalibration is likely to restore confidence.

Best regards, Richard Harrison, KB5WZI

744. Copper Electronics "not so" Specials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: n7kn <n7kn@hotmail.com>
Message-ID: <wqYI5.1157$eB6.2004548@feed.centurytel.net>
Source record: 177930
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.misc

This is an email I received from Dan Asbjornsen (kb7uxe) regarding Mike Laferla (k7jml) and his experience with a 10 Meter rig bought from Copper Electronics. The letter is addressed to Jerry Seligman (w7bun) who is very active with the Radio Club of Tacoma.
I thought you may wish to share this information with other hams.
-n7kn

Hi Jerry, my sad story goes like this:

Mike Laferla K7JML purchased an RCI 10M radio from Copper Electronics (mail order)
at a cost of just under $400... Mike had the radio for about 3 months before he installed it and tried
it for the first time... It didn't work. It had cxr on am & fm,but no audio,
and nothing on ssb or cw..
He sent it back to copper for repair or replacement. They returned it saying
it was fixed..
When he tried it again, same thing, no change........ so he sent it back a
second time...
and once again, copper returned it, still not working. once again, Mike contacted copper
they wouldn't return his calls, or answer his e-mails. Mike returned the radio addressed to the
the copper VP.. they returned it, unopened.......
Mike has spent just under $100. in return charges, and still, the radio doesn't work, and it appears
that copper does not wish to face up and deal with the problem.....
Mike has contacted Ranger communications directly, and they have said, THEY
WILL make it right...
(repair or replace ?)...
So the moral of the story,
DO NOT BUY ANYTHING FROM COPPER ELECTRONICS,
THEY WILL NOT SUPPORT WHAT THEY SELL....

745. Re: Nathan Cohen Cease and Desist

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: n7kn <n7kn@hotmail.com>
Message-ID: <XGYI5.1160$eB6.2006494@feed.centurytel.net>
Source record: 177931

There is a group which is full of "armchair PhD's and amateur political pundits, Nathan. It's called alt.radio.scanner.flame_fest. Perhaps you may feel more "well adjusted" there.
John Black, PFO

"Gerald Schmitt" <kk5yyNOSPAM@arrl.net> wrote in message news:39f2a48e.129196419@nntp.mindspring.com...
>
> Nathan,
>
> Please consider this a formal notice to cease and desist using
> the PhD after your name. You abhorrent behavior is an
> embarrassment not only to Cornell and B.U but to all PhDs
> everywhere.
>
> It is bad enough that PhDs are called cone-heads but now
> the more insulting are stooping to using the term "Cohen Head".
> No innocent PhD should have to endure this.
>
> Stop immediately or face the consequences of marsupial
> justice.
>
> Latest survey 48 of 50 PhDs surveyed found Nathan to be an
> embarrassment the other 2 had meetings and didn't answer
> the survey.
>
>

746. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <85j8vsk84m69tvfs9j8ir80ib4e7vomvp3@4ax.com>
Source record: 177932

On Sat, 21 Oct 2000 05:15:36 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>On Fri, 20 Oct 2000 13:05:23 -0400, Jake Brodsky <frussle@erols.com> wrote:
>>Personally, I think this whole issue is just plain stupid. It's ok
>>for me to use a 100 watt 48 MHz FM 2-Way radio with a trunk mounted
>>antenna on a sedan at work, but I have to study the issue if I were to
>>do the same at 52 MHz. What nonsense.
>
>Actually, an evaluation had to be done for the commercial 2-way installation
>too. Your company as licensee is responsible under law for seeing that this
>was done, and the 2-way shop that did the installation was likely the one who
>your company commissioned to do the evaluation.

And I know for a fact that our radio shop did not go through the whole fleet of radio equipped sedans and test exposure from each one. Yeah, they may have done a paper exam and figured out that there is no danger. But I wonder if they even have that on file. After all, I haven't heard of even so much as an OSHA representative looking for this paper-work.

Aside of the ANSI exposure limits (which already have a fudge factor built in) there is no documented and reproducible "non-thermal" radiation hazard. This whole issue has become a snipe hunt.

Most of the positive studies are so close to the statistical sampling noise floor that even if it is real and even if it does represent a doubling of the supposed "hazard" it is still a very small risk. Other more common hazards dwarf this issue to irrelevancy. And following that wonderfully bogus data by Dr. Liburdy of Stanford University, I really have to wonder if there are any real effects to be found at all.

So we're supposed to do RF studies. I find no fault for wanting to ensure that the RF goes where it's supposed to. Certainly it will reduce TVI and other such problems. Adding test questions and distributing advisories to all hams is not a bad idea. But to keep a study on file so others can subpena this document and make life a legal hell for the ham? What does that accomplish? Does it lessen the RF radiation? Does it make neighbors feel any better?

The writers of this legislation and regulation have every reason to be ashamed of themselves. Not only have they written a fundamentally useless regulation, but they have damaged the credibility of the FCC as a reasonable regulatory agency. This is exactly the sort of fodder anarchists love to use.

It doesn't get any worse than that.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

747. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F45BBD.3D3E3497@bellatlantic.net>
Source record: 177933

The antenna information is in the public domain. It was published in
73 magazine in the fall of 1999. Dimensions and pictures are there.
I have the magazine. Others have reported that the antenna was
in Comm Quarterly pre-'99. I don't have that publication, but if
what they report is true, then the information went public at least
twice.

Anyone with skill using EZNEC can produce a file from that information.
I have no idea what arrangement you have with the author of that 73
article, if any, or the Comm Quarterly article for that matter, but you are
too late to complain now.

Fractenna wrote:

> >Fractenna wrote:
> >> . . .
> >> I hold the copyright on MI2. I created it; and now I own it. Its
> >distribution
> >> and publication, BY LAW, is under my control.
> >>
> >> Nathan Cohen, Ph.D.
> >
> >An antenna cannot be copyrighted. Features about it can be patented, but
> >to my knowledge, no one has a patent which prevents anyone from making,
> >using, or selling the MI2.
> >
> >Roy Lewallen, W7EL
> >
> >
> >
> >
> >
> >
>
> Mr. Lewallen--
>
> I hope you understand the gravity of the circumstance: YOU ARE VIOLATING
> COPYRIGHT. The MI2 *****FILE*** which you post is copyright; I have notified
> you of such and you insist on continuing to post the file ILLEGALLY.
>
> YOU ARE NOT AUTHORIZED TO PUBLISH AND DISTRIBUTE THIS FILE.
>
> REMOVE IT.
>
> You need to see an attorney before the continued flagrant violations and

> outrageous statements you have made take this to a very serious lawsuit with
> major damages requested.
>
> Nathan Cohen, Ph.D.

748. need parts for Cushcraft R7 vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: jdprislupski@aol.com
Message-ID: <20001023114158.01497.00000057@ng-fy1.aol.com>
Source record: 177934

I need a 36 inch capacitance rod and mounting hardware for a Cushcraft R7.
I contacted Cushcraft, and they no longer have the parts.
Does anyone have parts for one, or know where I can get them?
Thanks John WC3Z
JDPrislupski@aol.com

749. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t1nmu$ag0$1@neptunium.btinternet.com>
Source record: 177935

CAM wrote
> Reg Edwards wrote:
> > And none of them measure SWR. Its just a figment of the
> > user's imagination.
>
> Assuming the boundary conditions associated with a
transmission
> line, the addition of phasors proportional to the voltage
and
> current vectors results in a traveling wave proportional
to
> forward power. The subtraction of those phasors results in
> a traveling wave proportional to reflected power. If you
haven't
> actually waded through the math, it is an interesting and
> enlightening exercise.
==========
Cecil,

When an SWR meter is connected immediately at the output of a transmitter (it nearly always is) it indicates the SWR on a transmission line which does not exist. Who wants to know that ?

But at least it does correctly indicate the magnitude of the reflection coefficient of the load relative to 50 ohms. Unfortunately it does NOT indicate the angle of the reflection coefficient. So half of the information which might be useful to the station mainenance people is not available.

Reg.

750. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001023122447.08625.00000081@ng-da1.aol.com>
Source record: 177936

For 6 meter SSB I would reccomend Arrow's 4 element yagi.

It fetures ease of assembly and very good workmanship.

It turns with a light rotator and performs pretty well. I just got one and am quite happy with it.

73 Doug

751. US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENT REQUIREMENT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dave Moen <dmoen@mac.com>
Message-ID: <B619BC3F.2FF0%dmoen@mac.com>
Source record: 177937

US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENT REQUIREMENT)

URGENT REQUIREMENT - For Senior Team Member with Experience in the Cellular Industry as RF Engineer working with Antenna design or Sales.

The company is willing to relocate candidates but, will give a preference for Phoenix, Arizona based candidates.

Please, forward your resume with contact information for consideration to davemoen@mac.com

Will forward the job descriptions ASAP, as these positions just opened today the job descriptions will not be complete until later this afternoon.

752. Re: Stupid Smith Chart trick: is this a circle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8t1seg$9jc$1@nnrp1.deja.com>
Source record: 177938

In article <39EE4650.FF2AD863@mwci.net>,
sabinw@mwci.net wrote:

> OK. The constant K maps one Smith chart to a modified Smith chart.

Yes, and of course Smith charts are commonly printed with "1" in the center, and every point on the chart is then scaled (by the user) by the reference impedance chosen for that chart.

An interesting (well, to me anyway) question that grows out of the original one posted about, "Does a constant |rho| circle on a chart transform on the same chart to a circle if you scale all the impedances represended by that circle by some constant?" That is, "does a circle on one chart (arbitrary diameter and center location) transform to a circle on a chart scaled to a difference reference impedance?" I believe the answer is yes, as a correlary to the original question.

Cheers,
Tom

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

753. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <l3L0OSqYddoIfbCHAhn6hEE3rooj@4ax.com>
Source record: 177939

fractenna@aol.com (Fractenna) wrote:

>This constitutes a public notice that unless expressly stated as an authorized
>distributor, it is ILLEGAL to distribute and receive the data file constituting
>the MI2 antenna. At present only the http://www.fractenna.com web site is so
>authorized.

Anytime anyone accesses a web site, they essentially download the
material they are viewing. It ends up in the cache of the user's
browser. What are you going to do -- sue everyone who visits your
website and, hence, downloads your data?

Bob
k5qwg

>
>Roy Lewallen, W7EL has placed this file illegally on his web site. This
>commercial site dies not have authorization to publish nor distribute this
>file.
>
>Any 'copycat' placement on other webs sites will be considered clear intents to
>break copyright law and will be dealt with accordingly.
>
>Nathan Cohen, Ph.D.

754. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <ivs8vso0b91vr07bd3qb9anhpscjp7ffh6@4ax.com>
Source record: 177940

On Mon, 23 Oct 2000 02:32:19 GMT, "George, W5YR" <w5yr@att.net> wrote:
>I can only conclude that the 250-watt HF element is at fault.
>
>Question: can these be calibrated in "the field" i.e., my workbench? I
>have never seen anything on this procedure and supposed that it was a
>factory-only affair. I do have an accurate r-f power source to use in a
>calibration procedure.

George, if you peel back the label on the slug you'll find a screwdriver adjustable pot. That will adjust the slug's calibration. But unless you really have the proper setup to do the calibration, I'd send the slug back to Bird. You don't want to twiddle this unless you're 100% absolutely sure that it is the problem.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

755. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t1tuo$a3r$1@neptunium.btinternet.com>
Source record: 177941

Tom, of all the many answers to the question, I think yours
is the only one correct.

Only in the case of the generator having an internal
resistance of 50 ohms (ie., a conjugate match) will the
forward power, as indicated on the meter, remain constant as
the load impedance is varied.

The indicated reflected power will of course change with
load impedance.

Reg, G4FGQ

Tom wrote
> Hmmm...now I'm seeing two different questions. With
respect to "can
> the meter read more if you vary only the load from the Z0
cal point,
> with no generator adjustment," the answer is still yes,
but it depends
> on the generator. If the generator is a linear system
(seldom the
> case with a transmitter or power amplifier running max
rated power)
> and its source impedance is Z0*, then I believe the answer
would be no,
> assuming a properly calibrated meter.
>
> By definition, Vforward/Iforward = Z0. If Z0 is real,
then any
> non-zero Vforward and Iforward are in phase, independent
of the load.
> But of course, V and I are not. A properly designed and
calibrated
> meter of the Bird type will correctly resolve "forward"
and "reverse"
> power according to the definitions, though of course none
is ever
> perfectly calibrated.
>
> The network analyzers we build commonly have a source
which is
> auto-leveled, so it looks like a "zero" output impedance
at the
> particular point which the leveling loop monitors. That

point is
> typically followed by a splitter whose output impedances
are each 50
> ohms. That 50 ohm source impedance feeds a bridge which
can resolve
> forward and reverse power, and you will measure a constant
forward
> power, independent of the load, in such a system. I would
not expect
> such nice conditions to hold where transmitters and power
amplifiers are
> involved. I would expect that the Bird or other
directional wattmeter,
> if properly calibrated, would be a reasonable
approximation of the
> precision bridges we build, at least over a limited
frequency range. I
> would expect any directional wattmeter with diode detector
to have
> linearity problems at low signal levels, but that's
another issue.
>
> Cheers,
> Tom
>
>
>
>
> In article <8sk6tkkr1@uranium.btinternet.com>,
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
> > Cecil wrote,
> > > the Bird makes the assumption that the forward voltage
> > > is in phase with the forward current and that they
exist
> > in a
> > > 50 ohm environment, i.e. Vf*If=Pf, Vf/If=50. A
> > characteristic of
> > > a Z0-match in a system with reflections is that the
> > forward power
> > > exceeds the power delivered by the generator.
> > ==============================
> >
> > If a line of impedance Zo is terminated with Zo there
is a
> > Zo match at the termination - and there are NO
reflections
> > or standing waves on the line. The forward power
measured at
> > any point along the line is identical to the power
delivered

> > by the generator regardless of the generator's internal
> > impedance. Pf does not exceed Pg.
> >
> > Or am I missing the point of your reminder that
Vf*If=Pf,
> > Vf/If=50 ?
> >
> > But what interests me at present is - does the meter
> > correctly indicate forward and reflected power when
there's
> > a mismatch and the termination has a reactive component.
> > Forward current and forward voltage are then no longer
in
> > phase.
> > ---
> > Reg.
> >
> >
>
> --
> Tom Bruhns -- K7ITM
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

756. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F479BD.BA4F5458@bigfoot.com>
Source record: 177942

Reg Edwards wrote:
> When an SWR meter is connected immediately at the output of
> a transmitter (it nearly always is) it indicates the SWR on
> a transmission line which does not exist. Who wants to know
> that ?

Again, the SWR meter reacts to voltage and current exactly *as if*
it were installed in a 50 ohm coax line and if one understands
that, length doesn't matter (except for losses). If the SWR meter
is installed between a transmitter designed to drive 50 ohms and
the 50 ohm Z0-match provided by a tuner, all is well. And when we
adjust the SWR to 1:1, we know the exact magnitude and phase of
the reflection coefficient and impedance seen by the transmitter. :-)
--
http://www.mindspring.com/~w6rca

757. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F47D55.E0A9C2@bigfoot.com>
Source record: 177943

Reg Edwards wrote:
> Only in the case of the generator having an internal
> resistance of 50 ohms (ie., a conjugate match) will the
> forward power, as indicated on the meter, remain constant as
> the load impedance is varied.

My IC-706 delivers full power into a 50 ohm load.
Delivered power falls off on each side of 50 ohms
but forward power does appear to remain constant
until foldback conditions take over.
--
http://www.mindspring.com/~w6rca

758. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t21qvkpo1@iac5.navix.net>
Source record: 177944

Hmmmm. Fracky and Clinton both trying to manufacture a legacy... Both will be about the same in their success rate...

Fracky, I will see your attorney and raise you two of mine. Mine state you do not have a case. Get over it, or if you think you have a case solve it in the courts. This news group has no color of law and the only thing you are doing is to once again display to the public your apparent mental illness.

"Fractenna" <fractenna@aol.com> wrote in message , given my
> history of creative output and the fact that this is a legacy for my son, and I
> will not be here forever..
>
> Mr. lewallen is a pirate. His commercial site contains unuathorized copyright
> material. HE MUST REMOVE IT.
>
> NC

759. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t2298kvv1@iac5.navix.net>
Source record: 177945

Not any more, I saw an ad on TV last night for a "Wave Scrambler" that removes 99% of the RF from your head. This modern marvel is only $19.95 and comes with an internal antenna that is glued under your battery and has 120dB gain. We hams are so far behind the curve on technology...

"Brian Kelly" <kelly@dvol.com> wrote in message a bit dicey if you plant a microwave
> rubber duckie in yer ear

760. Re: m12 NEC file

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t22jq$l5b$1@iac5.navix.net>
Source record: 177946

Thank you, please add me at once to your law suit.

I have passed your many missives to my corporate attorney and he salivated.
Govern yourself accordingly. For purposes of service you may use:

Fred Hambrecht
2990 Chalybeate Rd
Manchester, Ga 31816-5519

I await service with anticipation, please do not disappoint me.

Sorry Roy, I guess you will only own 1/2 of Fractenna...

"Fractenna" <fractenna@aol.com> wrote in message
news:20001022185458.04419.00000425@ng-cd1.aol.com...
> >I will be posting the M12 NEC file on my website, and would invite
everyone
> >to do the same. Maybe we can drive Fracky totally nuts and he will get
the
> >heck off the newsgroup.
> >
> >http://w4jle.com
> >
>
>
> Any distribution of the MI2 file by you constitutes copyright
infringement. You
> would do well to watch what happens to the Roy Lewallen case before you
take a
> rash action which will indicate deliberate intent to break the law.
>
> Nathan Cohen, Ph.D.

761. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: IJ.McCrum@ulst.ac.uk
Message-ID: <39f48c07.2134247@News.worldaccess.co.uk>
Source record: 177947

On Mon, 23 Oct 2000 00:21:58 -0700, ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote:

>In article <DyOI5.911$zn3.1253489@nnrp4.proxad.net>, Gilbert Mouget ><gilbert.mouget@waika9.com> wrote:

>> I would be grateful if someone could point out an easy, or cheap, way
>> of doing a PDF write. I need to upload a paper (of NEC results)into
>> PDF format . I do not have this facility here, and a search yields a
>> morass of complex info.

The programs Ghostview and Ghostscript are used to view and print postscript. They can also convert postscript into a variety of formats, various graphic types and .... pdf

I use this a lot and it works well. On a windows machine select a "printer" of an APPLE LASERWRITER and print to file. Give the file a ps extension. You can then create a postscript file from any windows application. e.g word or netscape.

Using explorer doubleclick on the .ps file, ormanually launch Ghostview and once you see the postscript file in a window, select PRINT, the list of printers within Ghostview includes bmp and png writers, if you scroll down the list you'll see PDFWRITE, tick the box to create a file and you'll end up with a .PDF file.

It takes longer to describe tha to do. Installation of the Ghostview and Ghostscript package is easy now, a single click installs both. The laserwriter printer is on the W95 CD.

Cheers, Ian McCrum, MI5AFL

762. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20001023154558.06144.00000784@ng-cj1.aol.com>
Source record: 177948

In regards to typing a book and publishing it on a web site, if a bibliography and footnotes are given, then it is legal. Anybody who has written a research paper in college can attest to that. Are all the research papers, and thesis on the web in violation of copyrights?

Randy ka4nma

763. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F497FD.A75D003E@uci.edu>
Source record: 177949

Fractenna wrote:
> I hold the copyright on MI2. I created it; and now I own it. Its distribution
> and publication, BY LAW, is under my control.

Which of the following best describes the MI2?

a. a literary work
b. a musical work
c. an artistic work

764. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39F48B86.4A218DC7@berkshire.net>
Source record: 177950

and if you look real close at the magic antenna they sell along with that to put in the battery compartment it sure looks like a fractal! i'll bet the 'wave scrambler' part of that hoax is a fractal design also!

W4JLE wrote:
>
> Not any more, I saw an ad on TV last night for a "Wave Scrambler" that
> removes 99% of the RF from your head. This modern marvel is only $19.95 and
> comes with an internal antenna that is glued under your battery and has
> 120dB gain. We hams are so far behind the curve on technology...
>
> "Brian Kelly" <kelly@dvol.com> wrote in message a bit dicey if you plant a
> microwave
> > rubber duckie in yer ear

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

765. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F4995E.80B962E1@uci.edu>
Source record: 177951

Fractenna wrote:
> Mr. Lewallen--

> I hope you understand the gravity of the circumstance: YOU ARE VIOLATING
> COPYRIGHT. The MI2 *****FILE*** which you post is copyright; I have notified
> you of such and you insist on continuing to post the file ILLEGALLY.
>
> YOU ARE NOT AUTHORIZED TO PUBLISH AND DISTRIBUTE THIS FILE.

Are you now claiming credit for creating the file that Roy has on his
site?
From what I understand, these EZNEC files are essentially tables of
numbers. Are the numbers in your "copyrighted" file the same as the
numbers in the file on Roy's site? If not, your copyright would not
apply to that file, and it is not your IP.

766. WTB: Service Manual for Icom 745 HF Transciever

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <39F4A64D.95EB6C5C@swbell.net>
Source record: 177952

WTB: Service Manual for Icom 745 HF Transciever

I want to buy the service manual for the Icom 745 HF Transciever and the
Service Manual for the IC-PS15 AC Power Supply.

Pat Green....KC5WCC
Beaumont, Texas

767. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023170109.23228.00002063@ng-ch1.aol.com>
Source record: 177953

>
>In regards to typing a book and publishing it on a web site, if a
>bibliography
>and footnotes are given, then it is legal. Anybody who has written a
>research
>paper in college can attest to that. Are all the research papers, and thesis
>on the web in violation of copyrights?
>
>Randy ka4nma
>
>
>
>
>
>

According to your perception of copyright law, I should be able to get all
copies of the 'Harry Potter' books as free downlaods from the web.

Ask yourself: why is this not so?

73
Chip N1IR

768. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023170212.23228.00002065@ng-ch1.aol.com>
Source record: 177954

>
>
>
>Fractenna wrote:
>> I hold the copyright on MI2. I created it; and now I own it. Its
>distribution
>> and publication, BY LAW, is under my control.
>
>Which of the following best describes the MI2?
>
>a. a literary work
>b. a musical work
>c. an artistic work
>

Which best describes EZNEC?

73
Chip N1IR

769. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023170353.23228.00002066@ng-ch1.aol.com>
Source record: 177955

>Are you now claiming credit for creating the file that Roy has on his
>site?
>From what I understand, these EZNEC files are essentially tables of
>numbers. Are the numbers in your "copyrighted" file the same as the
>numbers in the file on Roy's site? If not, your copyright would not
>apply to that file, and it is not your IP.
>

I am stating as a fact that I am the author and copyright holder of the
original work of which this derivative is "substantially the same".

Yes.

NC

770. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023170516.23228.00002067@ng-ch1.aol.com>
Source record: 177956

>Hmmmm. Fracky and Clinton both trying to manufacture a legacy... Both will
>be about the same in their success rate...
>
>Fracky, I will see your attorney and raise you two of mine. Mine state you
>do not have a case. Get over it, or if you think you have a case solve it in
>the courts. This news group has no color of law and the only thing you are
>doing is to once again display to the public your apparent mental illness.
>
>"Fractenna" <fractenna@aol.com> wrote in message , given my
>> history of creative output and the fact that this is a legacy for my son,
>and I
>> will not be here forever..
>>
>> Mr. lewallen is a pirate. His commercial site contains unuathorized
>copyright
>> material. HE MUST REMOVE IT.
>>
>> NC

Mr. Lewallen is a pirate. His commercial site contains unuathorized
copyright
material. HE MUST REMOVE IT.

NC

771. Re: Stupid Smith Chart trick: is this a circle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <8t28md$9h9$1@news.asu.edu>
Source record: 177957

tom_bruhns@agilent.com wrote:
snip

: An interesting (well, to me anyway) question that grows out of the
: original one posted about, "Does a constant |rho| circle on a chart
: transform on the same chart to a circle if you scale all the impedances
: represended by that circle by some constant?" That is, "does a circle
: on one chart (arbitrary diameter and center location) transform to a
: circle on a chart scaled to a difference reference impedance?" I
: believe the answer is yes, as a correlary to the original question.

I haven't been reading this thread, so maybe all of this has already
been said. The Smith chart is essentially a plot of the complex
reflection coefficient. The mapping from the complex impedance to the
reflection coefficient or vice versa is what is known as a bilinear
conformal mapping. That is it is a combination of translation, scaling
and inversion. Under each of these a circle remains a circle.
Translation moves all points the same amount, so a circle stays a
circle. Scaling, expands the size of a figure, so circles stay
circles. Inversion is a little trickier. For it you choose a center and
radius a, for the new point you draw a line segment from the center to
the point and call its length r. You then replace the point with a new
one along the same line but at a distance a^2/r. If you start with the
equation of a circle and do this you can readily show that under an
inversion a circle remains a circle too (if the inversion center lies
on the circle, it becomes a circle of infinite radius or a line).

So if I understand Tom's statement correctly, those structures are also
circles, since the above says you can start with any circle on the
Smith Chart, make a bilinear transformation to the impedance plane,
scale the result (or in fact do any translation, scaling or
inversion to an impedance that keeps it a circle on the impedance
plane) and then reverse the bilinear transformation to return to the
Smith chart. All of these transformations map circles to circles.

73 Kevin w9cf@ptolemy.la.asu.edu

772. R8 on 6m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: w2wx@aol.com
Message-ID: <20001023172457.13348.00001904@ng-md1.aol.com>
Source record: 177958

I'm wondering if anyone has any experience with the Cushcraft R8 vertical on six meters (and the other bands as well). Am thinking of selling my R 7000 and upgrading to an R 8. Is it worth it?

Steve, W2WX

773. Re: Band Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fazamy@aol.com
Message-ID: <20001023172644.06201.00000178@ng-fg1.aol.com>
Source record: 177959

I've been a ham since 1962. Almost exclusively I've used a 40m dipole. I use it on all bands from 40m thru 10m, including the WARC bands. I use this dipole with an MFJ tuner. I work mostly cw, some ssb, and have made a few contacts on 10m fm. I've gotten good results from this setup. If you got the space rig up a 40m dipole.

73,
Evan
KB2AMY

774. Re: Band Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fazamy@aol.com
Message-ID: <20001023173137.06201.00000180@ng-fg1.aol.com>
Source record: 177960

I've been a ham since 1962 and have used almost exclusively a 40m dipole. I operate on 40m thru 10m, including the WARC bands. I use it with an MFJ tuner. I do mostly cw, some ssb, and made a few contacts on 10m fm. If you have the space use a 40 m dipole.

73,
KB2AMY
Evan

>Being new to the whole HF world of Ham radio, what is a good band to begin
>with? If I was to purchase a HF rig that covers many bands, what would be a
>good antenna to start with or should I just build some long wire antennas?
>
>Pete
>
>
>
>

775. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F4B2C3.7FAFAB22@uci.edu>
Source record: 177961

Fractenna wrote:
>
> >Fractenna wrote:
> >> I hold the copyright on MI2. I created it; and now I own it. Its
> >distribution
> >> and publication, BY LAW, is under my control.
> >
> >Which of the following best describes the MI2?
> >
> >a. a literary work
> >b. a musical work
> >c. an artistic work

> Which best describes EZNEC?

For the purpose of this discussion, EZNEC is best described as an
intellectual property that you do not own.

Do you still claim to have a copyright on an antenna, as you did above?

776. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F4B445.11B667F3@uci.edu>
Source record: 177962

Fractenna wrote:
>
> >Are you now claiming credit for creating the file that Roy has on his
> >site?
> >From what I understand, these EZNEC files are essentially tables of
> >numbers. Are the numbers in your "copyrighted" file the same as the
> >numbers in the file on Roy's site? If not, your copyright would not
> >apply to that file, and it is not your IP.
> >
>
> I am stating as a fact that I am the author and copyright holder of the
> original work of which this derivative is "substantially the same".

> Yes.

So your claim is that it is a violation of copyright to produce a table of numbers which represent the dimensions of an antenna that is in the public domain, and for which radio amateurs and others have been publicly invited to build? Sounds like a weak case to me.

777. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t2cl6$p1p$1@neptunium.btinternet.com>
Source record: 177963

CAM wrote
> Reg Edwards wrote:
> > When an SWR meter is connected immediately at the output
of
> > a transmitter (it nearly always is) it indicates the SWR
on
> > a transmission line which does not exist. Who wants to
know
> > that ?
>
> Again, the SWR meter reacts to voltage and current exactly
as if
> it were installed in a 50 ohm coax line and if one
understands
> that, length doesn't matter (except for losses). If the
SWR meter
> is installed between a transmitter designed to drive 50
ohms and
> the 50 ohm Z0-match provided by a tuner, all is well. And
when we
> adjust the SWR to 1:1, we know the exact magnitude and
phase of
> the reflection coefficient and impedance seen by the
transmitter. :-)
==========

Cecil, you used the word "if" three times.

That would hardly correspond to a positive and determined approach to fault-finding problems in the station mainenance handbook. ;o)

Incidentally, during WW2 the maintenance handbooks which accompanied USA-manufactured radar equipment excelled at describing unambiguously, in a crystal-clear manner, exactly what and how to do things. If you could read and understand English, and were not physically handicapped, you were as good as the radio and electronic engineers at MIT.

Reg.

778. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t2fod$s9b$1@plutonium.btinternet.com>
Source record: 177964

CAM wrote,
> Reg Edwards wrote:
> > Only in the case of the generator having an internal
> > resistance of 50 ohms (ie., a conjugate match) will the
> > forward power, as indicated on the meter, remain
constant as
> > the load impedance is varied.
>
> My IC-706 delivers full power into a 50 ohm load.
> Delivered power falls off on each side of 50 ohms
> but forward power does appear to remain constant
> until foldback conditions take over.
==========

But that's because the Icom range of HF transceivers (and probably other manufacturers') with a built-in swr meter have an ALC system which is designed precisely to maintain a constant forward power. The swr forward power meter voltage is fed back into the ALC line. (When the reflected power exceeds some pre-determuned level then THAT takes control.)

But that must not be taken to show that the dynamic internal resistance of the IC-706 is 50 ohms. Almost certainly it isn't. What it might be is anybody's guess.

Without ALC, the only condition under which a 50-ohm swr/power meter will indicate a constant forward power versus a variable load is a generator with an internal resistance also of 50 ohms. So with a different internal resistance, depending on how a meter is used or calibrated, it can indicate such things as a reflection coefficient greater than 1.0

Cec, just out of curiosity, how does your IC-706 behave at about 10 or 20 watts output versus changes in load. Just watch forward power while detuning the tuner a long way without touching the transmitter. Make sure the load has an appreciable reactive component.

Reg G4FGQ

779. Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: spam_me_not@azstarnet.com
Message-ID: <39f4b7b3.801507@news.azstarnet.com>
Source record: 177965

I promised that I wouldn't respond to any thread that included the "F" word, so this isn't about "F" words, but about a practical side of the lawsuit bullshit.

Whether or not a lunatic holds/doesn't hold, owns/doesn't own, once held/never held any rights to a disputed, copyrighted/not copyrighted 'intellectual' property is specious.

The fact is that when the disputed item is valueless the purloining, theft, misuse, usurpation, copying, misappropriation or defacement of said valueless item does no financial harm to the alleged owner.

No criminal act has occurred. This is a civil (legally speaking only) matter and there certainly wouldn't be any jail time forthcoming, so the only possible (and this is a real stretch) penalty would be the imposition of monetary damages commensurate with the financial loss to the aggrieved party. Since the material is without value there is no financial loss and therefore no damage

I once created an intellectual work when I performed 'original' electrical measurements of a pair of parasitic suppressors as reported on my home page. I declared the material copyrighted to me but stipulated that anyone could freely use the material for non-commercial purposes. Tom Rauch honored that request, Rich Measures did not.

Measures posted the material on his web site, where he was advertising and selling nichrome wire parasitic suppressors. I considered that to be commercial use of my material and politely asked him to remove the material.

He in turn more-or-less told me to go piss up a rope and the material remains, albeit totally twisted (doesn't this sound familiar) into an endorsement of his product. The data of course do not support his claims (familiar territory again) but he has the temerity to claim that they do. He did add, "**Copyright 1997 by W. D. Stewart, Jr" to his web page.

So we have a similar (maybe) situation. I believe I have a (much) better claim of misuse but practically speaking, how have I been financially harmed. Fact is I haven't been and neither has a fruitcake. Whoops, I used an "F" word.

Hypothetically speaking of course.

Sorry.

Wes Stewart

780. Re: Dipole for 6M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Web <WebFx27@hotmail.com>
Message-ID: <NI3J5.3550$MR3.202803@bgtnsc04-news.ops.worldnet.att.net>
Source record: 177966

Thank you all for the time to answer my question

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8svpovmjh1@nnrp1.deja.com...
> Here is an excellent 6m dipole design:
>
> http://www.amateuradio.org/arant.html#hp6mdpl
>
> It can be oriented horizonal or vertical and if mounted to a rotor can
> easily be rotated to "aim" your signal.
>
> In article <1HEI5.2117$MR3.124980@bgtnsc04-news.ops.worldnet.att.net>,
> "Web" <WebFx27@hotmail.com> wrote:
> > Anyone can tell me if a 6M dipole is ok?? Any suggestions for a
> limited
> > space yard??
> >
> >
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

781. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a08c312.620328865@news.seanet.com>
Source record: 177967

On Mon, 23 Oct 2000 14:57:25 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

> Sounds like a weak case to me.

Hi Jim,

A case of fractal law.

73's
Richard Clark, KB7QHC

782. 20 hours in a chair kills!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001023185654.06545.00000781@ng-fe1.aol.com>
Source record: 177968

And you worry about RF exposure? Maybe FCC will now establish "Contester Operating Hours" law?
Woman sat in a chair for "whole" 20 hours, we sit for 48 and so far not known case of contester going SK during the contest. Another proof that RF has therapeutic effect and the FCC "RF exposure regulations" are pure bunk!
Is Chipster endangering himself by trying to operate contests?

73 and CU all on 10m with verticals on the beach as N2EE from Cape Hatteras!

Yuri, K3BU

>>A young British woman died minutes after a long-haul flight from Australia when she developed a blood clot.

It has been reported that Emma Christoffersen collapsed and died after sitting in a cramped seat for 20 hours.

The 28-year-old bride-to-be is one of the youngest victims of deep veined thrombosis, which is thought to affect dozens of passengers every year.

The condition, which has been nicknamed "economy class syndrome", struck after the 10,000 mile fight to Heathrow had ended, according to The Sun.

Miss Christoffersen's mother, Ruth, 54, from Newport, South Wales, told the newspaper: "We were told she died from sitting on the jet for such a long time.

"I'd never heard of the condition before but apparently passengers on long flights suffer from reduced circulation and that can cause the blood to clot."

etc.
<<

from:
http://www.itn.co.uk/news/20001023/britain/06planedeath.shtml

783. Re: 20 hours in a chair kills!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F4C8CA.F0696CA9@dvol.com>
Source record: 177969

Yuri Blanarovich wrote:

> And you worry about RF exposure? Maybe FCC will now establish "Contester
> Operating Hours" law?
> Woman sat in a chair for "whole" 20 hours, we sit for 48 and so far not known
> case of contester going SK during the contest.

>
Yeah, but Yuri, we don't do 48 straight in 27E in a #@%^x#! UselessAir 737 . .
'nuff to kill all contesters.
>
>Another proof that RF has

> therapeutic effect and the FCC "RF exposure regulations" are pure bunk!
> Is Chipster endangering himself by trying to operate contests?
>
> 73 and CU all on 10m with verticals on the beach as N2EE from Cape Hatteras!

>
Wunnerful! Spank the livin' bejesus outta somebody we all know and love . .
>

> Yuri, K3BU

>
w3rv

784. Re: US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENTREQUIREMENT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8t2hmr$7b$1@bob.news.rcn.net>
Source record: 177970

"Dave Moen" <dmoen@mac.com> wrote in message
news:B619BC3F.2FF0%dmoen@mac.com...
>
> US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENT REQUIREMENT)
>
> URGENT REQUIREMENT - For Senior Team Member with Experience in the
Cellular
> Industry as RF Engineer working with Antenna design or Sales.
>
> The company is willing to relocate candidates but, will give a preference
> for Phoenix, Arizona based candidates.
>
> Please, forward your resume with contact information for consideration to
> davemoen@mac.com
>
> Will forward the job descriptions ASAP, as these positions just opened
today
> the job descriptions will not be complete until later this afternoon.
>

785. Re: US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENTREQUIREMENT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8t2hpkni1@bob.news.rcn.net>
Source record: 177971

BIG SNIP

"> Will forward the job descriptions ASAP, as these positions just opened
today
> the job descriptions will not be complete until later this afternoon.
>

You've been posting this notice for months, and with each post the job
discriptions are
hours from completion. Give it up--this is pure spam.

786. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a09c379.620431393@news.seanet.com>
Source record: 177972

On Mon, 23 Oct 2000 14:50:59 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Fractenna wrote:
> >
>> >Fractenna wrote:
>> >> I hold the copyright on MI2. I created it; and now I own it. Its
>> >distribution
>> >> and publication, BY LAW, is under my control.
>> >
>> >Which of the following best describes the MI2?
>> >
>> >a. a literary work
>> >b. a musical work
>> >c. an artistic work
>
>> Which best describes EZNEC?
>
>For the purpose of this discussion, EZNEC is best described as an
>intellectual property that you do not own.
>
>Do you still claim to have a copyright on an antenna, as you did above?

Hi Jim,

There are no copyright issues with owning/using a copy of EZNEC.

There is also no issue of intellectual property with owning/using a
copy of EZNEC.

Roy is not liable for the use/mis-use of his product (read the legal
fine print in the terms and conditions of its use). Roy does not
warrant what is generated either (except at some additional cost no
doubt ;->).

Some laws to these matters of intellectual property clearly state that
if you do not pursue your rights - you lose your rights. Pursuit over
this matter has lapsed for a period of at least 8 months (Roy, this
was the genesis of your question way back then over just what I had
that was sue-able - the responses were equally silly then). Clearly
this claim against me was abandoned long ago.

And lest we forget - quite a number of fraudulent claims of technology
covered by patents pending were made.... No wonder some arguments are

never returned to again - after the patent office publication revealed those frauds. These may be noted in the record by my refusal to suborn illegal activity in this regard.

Are the frauds actionable? All depends on who took these claims for real (I never did certainly, considering the source; and by all appearances no one else did either).

73's
Richard Clark, KB7QHC

787. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001023195441.05419.00001131@ng-cb1.aol.com>
Source record: 177973

There is no formal notice or even a passing mention of copyright in N1IR's original article describing the M12. There is no mention of a copyright assignment to Chip or to FAS for anything. Nor is there academic attribution crediting the origin of the "Minkowski" fractal shape. Last I knew, Chip's last name isn't Cohen-Minkowski, so there must be an uncredited source for this graphic somewhere. But, we don't know where it came from. It just "appeared".

So, any judge will probably want to know if Chip sold first North American publication rights on copyrighted material and then failed to attribute that copyright to either FAS or to himself. The judge will want to know if Chip failed to state that the material was provided by him with the company's express permission and consent. The judge will have plenty of questions.

As Comm Quarterly readers, we don't know--nor could any reasonable person be expected to know--the answers to these questions. The article revealed nothing. Zip. Not a peep.

All we know is that Chip threatened to sue Roy back in September over material that he almost certainly didn't own the rights to at the time.

Rick K1BQT

788. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39f4d067@news.planetc.com>
Source record: 177974

Fractenna:

Do you read English? Do you comprehend what you read? Or, have you been nipping at the hard stuff?

Read this -- and read it this time:

QUOTE

> >I have no idea whether, and if so, how, this can be done inexpensively on
> >a Windows machine. There is an excellent Macintosh program (by no means
> >"crackware"!) which does just this. It is shareware and costs US $ 20 (and
> >yes, I paid). Quoting from the file "PrintToPDF Manual.pdf" (which I would
> >not be surprised to find was itself constructed using PrintToPDF):
> >
> >> PrintToPDF is a shareware Macintosh printer driver that creates PDF (Adobe
> >> Acrobat®) files from within your application programs. You can create PDF
> >> bookmarks to your section and subsection headings, and URLs will become hot
> >> links. PrintToPDF is not as powerful as the full Acrobat package, but it
> >> creates simple PDFs for a much lower price ($20).
> >
> >The program is available at
> >
> ><http://www.jwwalker.com/>
> >
> >I should state that my only relationship to James W. Walker, the author,
> >is that of a satisfied user.

END QUOTE

The man clearly said that the application was shareware and that it carried a $20 price tag, which he paid.

Then you come in announcing that you do not use pirated software. Fair enough, though it does seem as though you are operating with a pirated brain.

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

Fractenna <fractenna@aol.com> wrote in message
news:20001023065915.03695.00000884@ng-ff1.aol.com...
> >Subject: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)
> >From: ryeburn@sfu.caz (David or Jo Anne Ryeburn)
> >Date: 10/23/00 3:21 AM Eastern Daylight Time
> >Message-id: <ryeburn-2310000021580001@a3a05603.sympatico.bconnected.net>
> >
> >In article <DyOI5.911$zn3.1253489@nnrp4.proxad.net>, Gilbert Mouget
> ><gilbert.mouget@waika9.com> wrote:
> >
> >> Fractanal postings from <fractenna@aol.com> are banned on NEC-LIST.
> >> Never seen MI2 file on NEC-LIST. Just an off-topic post asking for
> >> crackware:
> >>
> >> X-POP3-Rcpt: moumoug@Cyberiane
> >> Message-Id: <199912210940.BAA15730@fs3.ece.ubc.ca>
> >> From: Fractenna@aol.com (Chip N1IR)
> >> Date: Mon, 20 Dec 1999 12:46:22 EST
> >> Subject: NEC-LIST: Writing PDF File?
> >> To: nec-list@ee.ubc.ca
> >>
> >> I would be grateful if someone could point out an easy, or cheap, way
> >> of doing a PDF write. I need to upload a paper (of NEC results)into
> >> PDF format . I do not have this facility here, and a search yields a
> >> morass of complex info.
> >
> >I have no idea whether, and if so, how, this can be done inexpensively on
> >a Windows machine. There is an excellent Macintosh program (by no means
> >"crackware"!) which does just this. It is shareware and costs US $ 20
(and
> >yes, I paid). Quoting from the file "PrintToPDF Manual.pdf" (which I
would
> >not be surprised to find was itself constructed using PrintToPDF):
> >
> >> PrintToPDF is a shareware Macintosh printer driver that creates PDF
(Adobe
> >> Acrobat®) files from within your application programs. You can create
PDF
> >> bookmarks to your section and subsection headings, and URLs will become
hot
> >> links. PrintToPDF is not as powerful as the full Acrobat package, but
it
> >> creates simple PDFs for a much lower price ($20).

> >
> >The program is available at
> >
> ><http://www.jwwalker.com/>
> >
> >I should state that my only relationship to James W. Walker, the author,
> >is that of a satisfied user.
> >
> >Any file belonging to an application with both Windows and Macintosh
> >versions (e.g., a Microsoft Word file) should be able to use PrintToPDF.
> >Move the file to a Macintosh that has the corresponding Mac version of
the
> >application and on which PrintToPDF has been installed. Open the file
> >there, select the PrintToPDF pseudo printer driver in the Chooser
> >(normally the Chooser selects among different printer drivers for
> >different printers), and "print" the file. The result will be a PDF file
> >representing the original document. Since PDF files are platform
> >independent, once this is done the PDF file can be moved back to a
Windows
> >machine and used there. Be aware that PDF files are closely related to
> >PostScript files and thus can be enormous (compared with their non-PDF
> >ancestors).
> >
> >Those Macs which have floppy drives (none made in the last several years)
> >can read Windows floppies, and write to them. Newer Macs without floppy
> >drives can accept Windows-formatted Zip disks (if equipped with a Zip
> >drive), or Windows-formatted CDs (all recent Macs have CD ROMs or DVD
> >drives). Of course the quick way to exchange files is over a network, or
> >over the Internet (e.g. e-mail the file as an attachment). If you do the
> >latter, make sure the Macintosh user realizes that your Windows e-mail
> >program likely cannot understand the BinHex encoding format most
> >frequently used in the Macintosh world, but can understand AppleDouble
> >(which is essentially MIME encoding) when he or she e-mails the PDF file
> >back to you. In the other direction there is no problem; most Mac e-mail
> >programs can deal with all sorts of encoding methods.
> >
> >David, ex-W8EZE
> >
> >--
> >David or Jo Anne Ryeburn
> >ryeburn@sfu.caz
> >To send e-mail, remove the letter "z" from this address.
> >
>
>
> Excuse me;
>
> I DO NOT USE, NOR HAVE EVER USED, pirated material.
>

> I DID NOT REQUEST , nor did not encourage, ANY suggestioins on pirated
> software.
>
> I was, and am, happy to pay for the least expensive means to write a PDF
file.
>
> It so happens that Acrobat had a free file available, which I uploaded
from
> their web site shortly after that post.
>
> I DO NOT ADVOCATE, USE, OR ENCOURAGE PIRATED SOFTWARE.
>
> Nathan Cohen, Ph.D.

789. Why does N1IR cancel NG postings so often?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8t2t6fheu1@bob.news.rcn.net>
Source record: 177975

Hey fracky,

I was refering to the fact that YOU were piss weak with the stations you were
talking to, and many of them told me that I was 20 to 30 dB louder than you were!!
And, I wonder how much louder I would have been if I had the amplifier on....

A question for you to ponder...
Why do you think that a "Q" rate on an open band without a contest represents
any indication of your performance under the gun in a real contest??? This is just
more of your huffing and puffing....must be your phd disconnection with reality....

Also:
I never made a "date" with you...you're not my type...you would need a sex change
and a brain change....

Hope this helps....

Hi Chuck--

Probably the reason I was so weak was that you hear me as groundwave and are off the back of the beam. The 10M Fractal Quad Yagi (see ham page on:

http://www.fractenna.com)

gives the all important specs.

Would you like me to post some of my runs from last weekend? I was on a total of 10 hours and filled a couple of logbooks--but of course, you know this because whenever I get on, you focus on LISTENING to me...must be a very good reason:-)! I'm flattered:-)

Note that I was working Europe only--and I am not using an amplifier.

Remember! We have a 'date' to compete in the 10M Contest!

Sorry; all the time I have at moment. Recovering from some severe flu bug.

73
Chip N1IR

790. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39F4E7DA.5184@rpi.edu>
Source record: 177976

Brian Kelly wrote:
>
> Robert Joshua Chen wrote:
>
> > I just installed a 40m antenna and would like to get a feel for the
> > band. Anybody have any recommendations about which freqs to listen to at
> > what times (i.e., nets, rag-chewing get-togethers, etc.)?
> >
> > Thanks,
> > -Robert
>
> >
> 40m is not in the least bit "channelized" or "scheduled" or "organized". The
> cw starts at 7.0005 and goes up, the digital modes are generally found at
> 7.050 and up, Stateside ssb is further up the band. 40m cooks between
> sundown and sunup, hook that new antenna to a decent radio, tune, tune,
> tune, LEARN and enjoy.
> >
> w3rv

Unfortunately, most of the "cooking" is being done by SW
broadcasters... It's a really different band than it was in the 70's
when I first got started in ham radio! I'm told that some good
filtering or DSP will help to make "nighttime-40" worth trying, but I
don't have that on my Yaesu FTDX 560....so I mostly avoid it and stick
to the lower part of 20m SSB in the evenings.

Curt Breneman
RPI Chemistry
KC2EBP

791. Re: Copper Electronics "not so" Specials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <39F4FA58.80C8627E@sccoast.net>
Source record: 177977
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.misc

n7kn wrote:
>
> This is an email I received from
> Dan Asbjornsen (kb7uxe) regarding Mike
> Laferla (k7jml) and his experience
> with a 10 Meter rig bought from Copper
> Electronics. The letter is addressed
> to Jerry Seligman (w7bun) who is very
> active with the Radio Club of Tacoma.
> I thought you may wish to share this
> information with other hams.

Well, what the heck did Mike expect from Copper Electronics? Their main business is the sell of radio equipment intended for illegal use in the CB band, which suggests they don't have a lot of respect for the law (so much for the character of the owners and employees).

In other words, if you're dumb enough to buy something from a sleazy company, then don't be surprised when that same company treats you in a sleazy manner.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

792. Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F50987.331F19DD@hiwaay.net>
Source record: 177978

I have been off-line for a week, and come home to find that the Belmont Brat has hit the fan again. This time it is one of the most ridiculous flaps I have ever seen- He accuses one of the better practitioners of the Antenna Arts of Piracy and various other unethical acts- and fills the Bandwidth available with S**T under several subject headers.

He is still a Brat- Still need sprofessional (mental) help- and still has the capacity to be a complete Ass in any fiels he chooses.

Pure Crap- that's Cohen

Bill-W4BSG

793. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <3a23t8.frs.ln@mail.specsol.com>
Source record: 177979

Curt M. Breneman <brenec@rpi.edu> wrote:
> Brian Kelly wrote:

> Unfortunately, most of the "cooking" is being done by SW
> broadcasters... It's a really different band than it was in the 70's
> when I first got started in ham radio! I'm told that some good
> filtering or DSP will help to make "nighttime-40" worth trying, but I
> don't have that on my Yaesu FTDX 560....so I mostly avoid it and stick
> to the lower part of 20m SSB in the evenings.

> Curt Breneman
> RPI Chemistry
> KC2EBP

Try PSK31 at 7070; not a lot of stations yet, but sometimes....

Jim Pennino

794. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F50B83.E29@silverstar.com>
Source record: 177980

Not only do trees absorb RF, they make dandy emitters as well. Will try to hunt up documentation for "hidden tree antennas" I have laying around here - somewhere?

795. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F50E21.488E@silverstar.com>
Source record: 177981

Reminds me of a line Robin williams said in good morning vietnam.

"You're more in need of a b--w job than any white man in history!"

Course he may only be qualified to receive since he surely can't give.

796. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F50E8D.12CA@silverstar.com>
Source record: 177982

NEW problem!

What to do about all those who have downloaded the file? Gonna try a
class action suit?

797. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F50F1D.2D40@silverstar.com>
Source record: 177983

> Nothing will stop this short of you removing the file.
>
> Nathan Cohen, Ph.D.

Too late, now thousands of people have the file. You have promoted EZNEC beyond the wildest dreams of the programmer.

I'm surprised you haven't asked for a commission.

798. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F50F9E.4291@silverstar.com>
Source record: 177984

> ...and now I own it. Its distribution and publication, BY LAW, is
> under my control.

As of what date? Recorded where? Not ASS-U-MEd, recorded!

799. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F51052.74D8@silverstar.com>
Source record: 177985

> An antenna cannot be copyrighted. Features about it can be patented,
> but to my knowledge, no one has a patent which prevents anyone from
> making, using, or selling the MI2.
>
> Roy Lewallen, W7EL

Shhhh, he's so riled that umpteen of us can check out the attributes of its form and determine if any claims have merit one.

800. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F5141C.5746@silverstar.com>
Source record: 177986

Shame for you to try to have battle of wits with someone only
half-equipped.

801. Re: Nathan Cohen Cease and Desist

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F515A6.32F5@silverstar.com>
Source record: 177987

Now, now, just because Cohen presumes [note: I do not like to use word assume to keep from making ASS out of U and ME] to use letters Ph.D does not mean he is trying to pull wool over anyone's eyes. Are you sure his intent does not mean Piled Higher and Deeper?

Linear steps from Associate of S__t; to Bachelor of S__t; to Master of S__t; to pinnacle of Piled Higher and Deeper.

802. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F5166D.7699@silverstar.com>
Source record: 177988

APPLICABLE AFTER DATE OF PUBLICATION ONLY...

...This constitutes a public notice that unless expressly stated as an authorized distributor, it is ILLEGAL to distribute and receive the data file constituting the MI2 antenna.

READ IT AND WEEP, AIRHEAD. GUESS HOW MANY OF US ALREADY DOWNLOADED IT PRIOR TO YOUR IDIOTIC ANNOUNCEMENT?

How do you propose to track down individual downloads?

803. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F5175F.26D@silverstar.com>
Source record: 177989

I've definitely got to stop responding to this hogwash. Much like jammers, he gets off on his postings. If everyone turned a deaf ear/blind eye to his rants, he'd have to go somewhere else to start another brush fire to feed his ego.

Let's leave him to his own sandbox and not join in - unless you enjoy dropping down to his level.

804. Re: PIRACY BY W7EL-EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F518B5.F77@silverstar.com>
Source record: 177990

I wonder if, in the interests of honesty, Cohen would condescend to list the court he has filed his complaint with, the filing fee, the court clerk assigned file number and the date of initial hearing.

In the interests of honesty, that is, not just ranting and raving.

805. Re: The Boy Genius

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <39F51914.65A9@silverstar.com>
Source record: 177991

Would a moral lawyer condescend to be a party to Cohen-head's fantasies?

806. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39F5301B.8D12E783@haertig.com>
Source record: 177992

And the ferrite rod has the annoying habit of being bi-directional and
not omni-directional to vertically polarized waves. How about a gyro
stabilized, rotatable ferrite antenna for cars!

Gray

Roy Lewallen wrote:
>
> No, the rod functions as both an AM and FM antenna. It's very
> inefficient on AM, but that's made up for by a large amount of receiver
> gain. The capacitance of the coax acts as part of a voltage divider
> which reduces the AM signal from the rod. It's specially made to have as
> little capacitance as possible to minimize this attenuation. Someone
> with more experience can correct me on this, but I don't think a typical
> ferrite rod antenna will receive as much signal as a typical whip of
> half meter or so length. If I'm correct about that, a portable AM/FM
> radio probably has a ferrite rod antenna mostly because it doubles as
> the inductor in a couple of tuned circuits, and it allows use of the
> radio on AM without extending the antenna.
>
> Roy Lewallen, W7EL
>
> Wayne Watson wrote:
> >
> > On many AM/FM radios there's a rod antenna that collapses. I'm sure it is the FM
antenna, and a
> > small ferrite AM antenna is inside. However, what's the deal with the old AM rod
antennas on autos?
> > Is there actually some sort of ferrite antenna disguised in the fat portion of the rod
and the rest
> > of the rod is used for FM?
> >
> > --
> > "Reality is merely an illusion, albeit a very persistent one."
> > -- Albert Einstein

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

807. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <sva9slnh2ceq46@corp.supernews.com>
Source record: 177993

>
> You got me to thinking a bit more. They gotta be out there used for
> cheaper. So say ya need, for instance, a really decent quick-erect
> portable vertical.

Yes, I think the power companies must discard them while they are
still useful to us.

> One of these poles could very easily be the next step
> up from a w6mmr Saint Looie Special.

> I think you hit on something really useful John.

Not my idea, I just passed it on.

> Now all I gotta do is work out how Cecil can install one of these on
his
> rear bumper for his next shootout and we'll make some ham radio
history.

:-) :-) :-) :-)

73,

John, K6QQ

808. Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2310000021580001@a3a05603.sympatico.bconnected.net>
Source record: 178104

In article <DyOI5.911$zn3.1253489@nnrp4.proxad.net>, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:

> Fractanal postings from <fractenna@aol.com> are banned on NEC-LIST.
> Never seen MI2 file on NEC-LIST. Just an off-topic post asking for
> crackware:
>
> X-POP3-Rcpt: moumoug@Cyberiane
> Message-Id: <199912210940.BAA15730@fs3.ece.ubc.ca>
> From: Fractenna@aol.com (Chip N1IR)
> Date: Mon, 20 Dec 1999 12:46:22 EST
> Subject: NEC-LIST: Writing PDF File?
> To: nec-list@ee.ubc.ca
>
> I would be grateful if someone could point out an easy, or cheap, way
> of doing a PDF write. I need to upload a paper (of NEC results)into
> PDF format . I do not have this facility here, and a search yields a
> morass of complex info.

I have no idea whether, and if so, how, this can be done inexpensively on a Windows machine. There is an excellent Macintosh program (by no means "crackware"!) which does just this. It is shareware and costs US $ 20 (and yes, I paid). Quoting from the file "PrintToPDF Manual.pdf" (which I would not be surprised to find was itself constructed using PrintToPDF):

> PrintToPDF is a shareware Macintosh printer driver that creates PDF (Adobe
> Acrobat®) files from within your application programs. You can create PDF
> bookmarks to your section and subsection headings, and URLs will become hot
> links. PrintToPDF is not as powerful as the full Acrobat package, but it
> creates simple PDFs for a much lower price ($20).

The program is available at

<http://www.jwwalker.com/>

I should state that my only relationship to James W. Walker, the author, is that of a satisfied user.

Any file belonging to an application with both Windows and Macintosh versions (e.g., a Microsoft Word file) should be able to use PrintToPDF. Move the file to a Macintosh that has the corresponding Mac version of the application and on which PrintToPDF has been installed. Open the file there, select the PrintToPDF pseudo printer driver in the Chooser (normally the Chooser selects among different printer drivers for different printers), and "print" the file. The result will be a PDF file representing the original document. Since PDF files are platform

independent, once this is done the PDF file can be moved back to a Windows machine and used there. Be aware that PDF files are closely related to PostScript files and thus can be enormous (compared with their non-PDF ancestors).

Those Macs which have floppy drives (none made in the last several years) can read Windows floppies, and write to them. Newer Macs without floppy drives can accept Windows-formatted Zip disks (if equipped with a Zip drive), or Windows-formatted CDs (all recent Macs have CD ROMs or DVD drives). Of course the quick way to exchange files is over a network, or over the Internet (e.g. e-mail the file as an attachment). If you do the latter, make sure the Macintosh user realizes that your Windows e-mail program likely cannot understand the BinHex encoding format most frequently used in the Macintosh world, but can understand AppleDouble (which is essentially MIME encoding) when he or she e-mails the PDF file back to you. In the other direction there is no problem; most Mac e-mail programs can deal with all sorts of encoding methods.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

809. FREE Amateur Radio Swap Shop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: va3wm@haybay.net
Message-ID: <50033814.4ADCB0D0.7fda7a9a2d02cc5b30de5dd727139d65@haybay.net>
Source record: 178105

Welcome to a totally free Amateur Radio Swap 'n Shop website

http://www.va3wm.haybay.net/class/classifieds.cgi

73 de John

810. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <seUI5.27849$bM2.13817@newsfeed.slurp.net>
Source record: 178106

.. K3BHJ

811. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ReUI5.27850$bM2.14370@newsfeed.slurp.net>
Source record: 178107

.. K3BHJ

812. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <hfUI5.27851$bM2.15282@newsfeed.slurp.net>
Source record: 178108

.. K3BHJ

813. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <FfUI5.27852$bM2.15180@newsfeed.slurp.net>
Source record: 178109

.. K3BHJ

814. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <XfUI5.27854$bM2.15304@newsfeed.slurp.net>
Source record: 178110

.. K3BHJ

815. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <dgUI5.27855$bM2.15294@newsfeed.slurp.net>
Source record: 178111

.. K3BHJ

816. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <DgUI5.27856$bM2.15232@newsfeed.slurp.net>
Source record: 178112

.. K3BHJ

817. DO NOT REPLY TO F-WORD TROLLS ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <UgUI5.27857$bM2.15210@newsfeed.slurp.net>
Source record: 178113

.. K3BHJ

818. Re: WTB a ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <otUI5.27878$bM2.15308@newsfeed.slurp.net>
Source record: 178114

Hi, Cec:

Thanx to F-WORD, we all have heightened sensitivity to such stuff.

I asked to buy a registered, used version so that I could re-register it with Roy under my name. Given those circumstances, the seller, not the buyer, is responsible for what you described. I do not propose to contribute to a Beezeley-type recurrence.

73, Dave, K3BHJ

819. Re: Slopers II

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <cEUI5.107$821.5122@news.siol.net>
Source record: 178115

Hello again,

Could someone please share his experiences with the subject of half slopers, please.....

Regards, Nermin S58DX

Nermin Bajramovi&#65533; wrote in message ...
>Hello om's,
>Anyone out there, have had some usable experience with half slopers for low
>bands. i.e. Chokes, lengths, grounding, right formula for cutting the
active
>part etc...
>Formulas for calculating the electrical length of tower with single or
>stacked beams...
>
>Thanks in advance,
>
>Nermin S58DX
>
>

820. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023065032.03695.00000878@ng-ff1.aol.com>
Source record: 178116

>
>Fractenna <fractenna@aol.com> wrote:
>>>Subject: Re: NOTICE: ENFORCEMENT OF COPYRIGHT
>>>From: Jim Pennino jimp@mail.specsol.com
>>>Date: 10/22/00 8:57 PM Eastern Daylight Time
>>>Message-id: <ad20t8.hik.ln@mail.specsol.com>
>>>
>
><snip>
>
>>>I've received it, what are you going to do about it?
>>>
>>>Jim Pennino
>>>
>
>> Pass it onto counsel as public evidence that the illegally distributed
>file is
>> being received illegally and that traffic in this distribution is clear.
>
>> NC
>
>Since you've publicly called me a liar, that should make good evidence.
>
>BTW, have you drawn enough attention to yourself to satisfy your ego yet?
>
>Jim Pennino
>

This is an issue of ownership and piracy.

If I make a million enemies it will not change the fact that Roy Lwallen has broken the law; That Roy Lewallen is acting in the capacity of a pirate.

Please; several people have been trying to apply 'peer pressure' to say how horrible I look in this.

This is not a beauty contest. Lewallen is prating something that belongs to me. No one will dissuade me from this course; I find it offensive that some will try.

READ THOSE WORDS CAREFULLY

Please: if you are uncomfortable with that then sever contact with me. I, personally, cannot maintain friendship with those who advocate piracy, given my history of creative output and the fact that this is a legacy for my son, and I will not be here forever..

Mr. lewallen is a pirate. His commercial site contains unuathorized copyright material. HE MUST REMOVE IT.

NC

821. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023065412.03695.00000882@ng-ff1.aol.com>
Source record: 178117

>Meet the ENFORCER:
>
>First the enforcer sold publication rights to a series of articles containing
>material he'd previously transferred the copyright to--and no longer owned.
>
>Later, the enforcer attacked and threatened fellow hams for "fair use" of a
>portion of that material shared in the course of scientific inquiery.
>
>Now, way after the fact, the enforcer procures a copyright to the material
>and
>acts as if he'd owned it all along--presumably so he can use it as a weapon
>in
>a nuisance law suit.
>
>Finally, the enforcer complains because his actions create a PR problem that
>make him "look bad".
>
>As the monkey said when he got his tail caught in the ringer, "OUCH, that's
>quite a stretch!!!"
>
>Rick K1BQT
>

Mr, Littlefield--

It seems to me that this whole affair can be easily ended for Mr. Lewallen by producing a document showing transfer of copyright to CQ Communications. There isn't one--I told you this.

As I have told you, I never, ever, ever, transfered copyright to CQ Communications. NOR WAS I ASKED TO.

This is a lie which only fuels an irrational and mendacious diversion from the fact which is:

ROY LEWALLEN IS A PIRATE who is ILLEGALLY publishing and distributing unauthorized copyright material.

NC

822. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001023065915.03695.00000884@ng-ff1.aol.com>
Source record: 178118

>Subject: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)
>From: ryeburn@sfu.caz (David or Jo Anne Ryeburn)
>Date: 10/23/00 3:21 AM Eastern Daylight Time
>Message-id: <ryeburn-2310000021580001@a3a05603.sympatico.bconnected.net>
>
>In article <DyOI5.911$zn3.1253489@nnrp4.proxad.net>, Gilbert Mouget
><gilbert.mouget@waika9.com> wrote:
>
>> Fractanal postings from <fractenna@aol.com> are banned on NEC-LIST.
>> Never seen MI2 file on NEC-LIST. Just an off-topic post asking for
>> crackware:
>>
>> X-POP3-Rcpt: moumoug@Cyberiane
>> Message-Id: <199912210940.BAA15730@fs3.ece.ubc.ca>
>> From: Fractenna@aol.com (Chip N1IR)
>> Date: Mon, 20 Dec 1999 12:46:22 EST
>> Subject: NEC-LIST: Writing PDF File?
>> To: nec-list@ee.ubc.ca
>>
>> I would be grateful if someone could point out an easy, or cheap, way
>> of doing a PDF write. I need to upload a paper (of NEC results)into
>> PDF format . I do not have this facility here, and a search yields a
>> morass of complex info.
>
>I have no idea whether, and if so, how, this can be done inexpensively on
>a Windows machine. There is an excellent Macintosh program (by no means
>"crackware"!) which does just this. It is shareware and costs US $ 20 (and
>yes, I paid). Quoting from the file "PrintToPDF Manual.pdf" (which I would
>not be surprised to find was itself constructed using PrintToPDF):
>
>> PrintToPDF is a shareware Macintosh printer driver that creates PDF (Adobe
>> Acrobat□) files from within your application programs. You can create PDF
>> bookmarks to your section and subsection headings, and URLs will become hot
>> links. PrintToPDF is not as powerful as the full Acrobat package, but it
>> creates simple PDFs for a much lower price ($20).
>
>The program is available at
>
><http://www.jwwalker.com/>
>
>I should state that my only relationship to James W. Walker, the author,
>is that of a satisfied user.
>

>Any file belonging to an application with both Windows and Macintosh
>versions (e.g., a Microsoft Word file) should be able to use PrintToPDF.
>Move the file to a Macintosh that has the corresponding Mac version of the
>application and on which PrintToPDF has been installed. Open the file
>there, select the PrintToPDF pseudo printer driver in the Chooser
>(normally the Chooser selects among different printer drivers for
>different printers), and "print" the file. The result will be a PDF file
>representing the original document. Since PDF files are platform
>independent, once this is done the PDF file can be moved back to a Windows
>machine and used there. Be aware that PDF files are closely related to
>PostScript files and thus can be enormous (compared with their non-PDF
>ancestors).
>
>Those Macs which have floppy drives (none made in the last several years)
>can read Windows floppies, and write to them. Newer Macs without floppy
>drives can accept Windows-formatted Zip disks (if equipped with a Zip
>drive), or Windows-formatted CDs (all recent Macs have CD ROMs or DVD
>drives). Of course the quick way to exchange files is over a network, or
>over the Internet (e.g. e-mail the file as an attachment). If you do the
>latter, make sure the Macintosh user realizes that your Windows e-mail
>program likely cannot understand the BinHex encoding format most
>frequently used in the Macintosh world, but can understand AppleDouble
>(which is essentially MIME encoding) when he or she e-mails the PDF file
>back to you. In the other direction there is no problem; most Mac e-mail
>programs can deal with all sorts of encoding methods.
>
>David, ex-W8EZE
>
>--
>David or Jo Anne Ryeburn
>ryeburn@sfu.caz
>To send e-mail, remove the letter "z" from this address.
>

Excuse me;

I DO NOT USE, NOR HAVE EVER USED, pirated material.

I DID NOT REQUEST , nor did not encourage, ANY suggestioins on pirated
software.

I was, and am, happy to pay for the least expensive means to write a PDF file.

It so happens that Acrobat had a free file available, which I uploaded from
their web site shortly after that post.

I DO NOT ADVOCATE, USE, OR ENCOURAGE PIRATED SOFTWARE.

Nathan Cohen, Ph.D.

823. Re: Supprt Roy, get a great tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:00:04 UTC
From: k1bqt@aol.com
Message-ID: <20001022200004.10765.00000800@ng-fl1.aol.com>
Source record: 178082

Hi Chip--

Still wondering what you were doing selling publication rights to material you didn't own and then later attacking Roy Lewallen over material you still didn't own. I don't want to sound like Andy Rooney, but isn't that a little odd? Perhaps this is something you'd just rather ignore talking about.

Rick K1BQT

824. NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:02:05 UTC
From: fractenna@aol.com
Message-ID: <20001022200205.03863.00000860@ng-ff1.aol.com>
Source record: 178083

This constitutes a public notice that unless expressly stated as an authorized distributor, it is ILLEGAL to distribute and receive the data file constituting the MI2 antenna. At present only the http://www.fractenna.com web site is so authorized.

Roy Lewallen, W7EL has placed this file illegally on his web site. This commercial site dies not have authorization to publish nor distribute this file.

Any 'copycat' placement on other webs sites will be considered clear intents to break copyright law and will be dealt with accordingly.

Nathan Cohen, Ph.D.

825. Re: Supprt Roy, get a great tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:03:23 UTC
From: fractenna@aol.com
Message-ID: <20001022200323.03849.00000830@ng-ff1.aol.com>
Source record: 178084

>
>Hi Chip--
>
>Still wondering what you were doing selling publication rights to material
>you
>didn't own and then later attacking Roy Lewallen over material you still
>didn't
>own. I don't want to sound like Andy Rooney, but isn't that a little odd?
>Perhaps this is something you'd just rather ignore talking about.
>
>Rick K1BQT
>

What you need to do is reproduce this alleged document in which copyright was transferred as you state. You cannot, because it did NOT occur.

Nathan Cohen, Ph.D.

826. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:05:59 UTC
From: fractenna@aol.com
Message-ID: <20001022200559.03849.00000831@ng-ff1.aol.com>
Source record: 178085

>Fractenna <fractenna@aol.com> wrote:
>>>
>
>
>
>>>As for the "INDUSTRY" comment above, we all know you are Fractal Antenna
>>>Systems' CTO and probably President after Hyman passed away (sorry to hear
>>>about that).
>
>
>> That is incorrect. And if my dad were alive he'd "have your butt" as he
>used to
>> say.
>
><rest snipped>
>
>If anyone cares, go to
>http://ccfcorp.dos.state.fl.us/corpweb/inquiry/corinam.html
>and type fractal in the text box and click submit.
>
>The only officers registered with the state of Florida are Nathan Cohen
>and Russell Cohen; Nathan replaced Hyman.
>
>The only point to all this is to highlight how ludicrous Nathan sounds when
>he talks about "going to the company" for permission to do this or that
>when he is 2/3 of the company.
>
>I guess he talks to himself a lot...
>
>Jim Pennino
>

You know nothing about how companies run or how they function.

Also, you continue to promulgate a lie.

NC

827. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:09:46 UTC
From: fractenna@aol.com
Message-ID: <20001022200946.03849.00000833@ng-ff1.aol.com>
Source record: 178086

>
>Fractenna <fractenna@aol.com> wrote:
>
><snip>
>
>> You don't get it: this is a public effort to steal by Mr. Lewallen. That
>has
>> nothing to do with alleged mental deficiencies.
>
>> I will more widely promulgate the issue of Mr. Lewallen's stealing starting
>> today, and will continue until he removes the file.
>
>> Nathan Cohen, Ph.D.
>
>First you accuse Roy of copywrite violation; now its theft.
>
>What next, death threats?
>
>You are one sick individual.
>
>Jim Pennino
>

Then accept that as a 'sick individual' I have a certain focus to protect property which belongs to me, or for which I have responsibility.

I will do any and all things that are legally possible to stop Mr. Lewallen from pirating copyright material. I will , as a matter of information, continue a wide and appropriately timed public notice postings on the internet to make all who might consider downloading the file illegally to realize that they are aiding breaking the law.

If this requires a significant posting effort over a wide range of sources, then so be it. The public notice will not be isolated.

Cordially,

NC

828. Re: ONGOING Q RUN--10m FRACTAL QUAD YAGI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 00:35:58 UTC
From: fractenna@aol.com
Message-ID: <20001022203558.03723.00000956@ng-ff1.aol.com>
Source record: 178087

>
>Fractenna <fractenna@aol.com> wrote:
>> Am on 28515 with 100 watts.
>
>> 73
>> Chip n1IR
>
>Gross overkill.
>
>Was in QSO with a VE7 the other day with 25W each on PSK31; decided to
>reduce power on both ends and got down to 1W (as low as I can measure) on
>my end, 800 mW on his end.
>
>Of course it helps to have a decent antenna; I use a simple verticle....
>
>
>Jim Pennino
>

Nice job!

I am always satsified with the high performance, reliability, and just plain fun if the 10M fractal quad Yagi.

I have to continue to remind myself that hundreds and hundreds of Europeans CALL ME, when all I have up is this dinky, hi efficiency fractal antenna!

It is humbling.

73
Chip N1IR

829. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 01:10:23 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <3eMI5.347773$i5.5343930@news1.frmt1.sfba.home.com>
Source record: 178088

Hi all-

Can we hear from the Russell entity? I don't think we have met him yet.
What is his position on all these goings on?

Mike Camp KI7FQ
El Cerrito, CA.

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:lu10t8.j3k.ln@mail.specsol.com...
> Fractenna <fractenna@aol.com> wrote:
> >>Fractenna <fractenna@aol.com> wrote:
> >>>>
> >>
> >>
> >>
> >>>>As for the "INDUSTRY" comment above, we all know you are Fractal
Antenna
> >>>>Systems' CTO and probably President after Hyman passed away (sorry to
hear
> >>>>about that).
> >>
> >>
> >>> That is incorrect. And if my dad were alive he'd "have your butt" as
he
> >>used to
> >>> say.
> >>
> >><rest snipped>
> >>
> >>If anyone cares, go to
> >>http://ccfcorp.dos.state.fl.us/corpweb/inquiry/corinam.html
> >>and type fractal in the text box and click submit.
> >>
> >>The only officers registered with the state of Florida are Nathan Cohen
> >>and Russell Cohen; Nathan replaced Hyman.
> >>
> >>The only point to all this is to highlight how ludicrous Nathan sounds
when
> >>he talks about "going to the company" for permission to do this or that
> >>when he is 2/3 of the company.
> >>
> >>I guess he talks to himself a lot...
> >>
> >>Jim Pennino

> >>
>
> > You know nothing about how companies run or how they function.
>
> > Also, you continue to promulgate a lie.
>
> > NC
>
> Where's the lie other than from you?
>
> Anyone that cares can seen the scanned documents at the above link.
>
> Jim Pennino
>

830. Re: EZNEC: Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 01:20:14 UTC
From: kk5yy@arrl.net
Message-ID: <39f38f92.254915220@nntp.mindspring.com>
Source record: 178089

On 22 Oct 2000 23:07:56 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>On 22 Oct 2000 13:57:09 GMT, fractenna@aol.com (Fractsybil) wrote:
>>
>>>>On 20 October, 2000, Fractenna <fractenna@aol.com> wrote:
>>>>
>>>>>On 20 October, 2000, the copyright for MI2 was transferred back to me,
>>>>
>>>>And you post this on the same day? Why didn't you give him a bit more
>>>>time to remove it instead of committing defamation of character as you
>>>>did? Why/how did you lose copyright ownership in the first place? There
>>>>are too many details missing from your post...
>>>>
>>>>KH6O
>>>>
>>>>
>>>
>>>
>>>He has had 5 WEEKS TO REMOVE IT!!!!!!
>>
>>Woof Woof Woof
>>>
>>>No; THIS WILL BE A VERY PUBLIC LEGAL BATTLE WHICH CAN only end **now **BY
>>>LEWALLEN REMOVING THE UNAUTHORIZED COPYRIGHTED MATERIAL.
>>
>>He apparently has the authors permission. The author has stated this
>>publicly here several times. Stop slandering Mr. Lewallen.
>>>
>>>
>>>I FULLY understand that there will be those who will try to get me fired;
>>>boycott my affiliates; and so on. These individuals too will invite
>>litigation
>>>and public notice.
>>
>>No one has tried to get you fired. If you have spent all your work
>>time conducting your private business as is easily determined
>>by Deja.com records then it is YOU who tried to get YOU fired.
>>>
>>>THAT WILL NOT STOP THE ISSUE.
>>
>>There is no issue except in your paranoid delusions
>>>
>>>Roy Lewallen HAS STOLEN something that belongs to me and GIVEN IT TO OTHERS.

>>
>>Roy Lewallen was given something. something that did not belong to
>>you.
>>Stop slandering Roy he contributes to the advancement of radio science
>>while you ,on the other hand are a blood sucking parasite.
>
>
>I will include copies of this and other public correspondences in my formal
>grievance against you as a federal employee.
>
>Nathan Cohen, Ph.D.
>

I guess I better get me a federal job first. I have never said who I work for but it sure ain't the G. Are you threatening me again gosh I hate all that paper work.

As much fun as twisting your tail has been I have professional responsibilities which, unlike you, I take seriously so I'll have to bid you a fond adios for a couple of weeks. I know you will miss me but duty calls and I have a hamfest to do some forums at so I won't be free next weekend.

Don't despair folks perhaps I'll find a new and more creative way to latch on to the Chipster's tail. If I do I'll be in touch look for foreign posts.

831. Public Notices on other newsgroups

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 01:27:26 UTC
From: kk5yy@arrl.net
Message-ID: <39f492ff.255792518@nntp.mindspring.com>
Source record: 178090

Have you guys noticed the rather unfriendly reception the
"Public Notices" have received on the other RRA groups.

With all due credit to Sally Field:

They hate him; they really, really hate him.

Thanks Sally the quote was too good not to parody.

And speaking of Parody here's Chip's threat:

'You type it right here Chip'

832. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 01:43:41 UTC
From: fractenna@aol.com
Message-ID: <20001022214341.13874.00000275@ng-cu1.aol.com>
Source record: 178091

>Subject: Re: NOTICE: ENFORCEMENT OF COPYRIGHT
>From: Jim Pennino jimp@mail.specsol.com
>Date: 10/22/00 8:57 PM Eastern Daylight Time
>Message-id: <ad20t8.hik.ln@mail.specsol.com>
>
>Fractenna <fractenna@aol.com> wrote:
>> This constitutes a public notice that unless expressly stated as an
>authorized
>> distributor, it is ILLEGAL to distribute and receive the data file
>constituting
>> the MI2 antenna. At present only the http://www.fractenna.com web site is
>so
>> authorized.
>
>> Roy Lewallen, W7EL has placed this file illegally on his web site. This
>> commercial site dies not have authorization to publish nor distribute this
>> file.
>
>> Any 'copycat' placement on other webs sites will be considered clear
>intents to
>> break copyright law and will be dealt with accordingly.
>
>> Nathan Cohen, Ph.D.
>
>I've received it, what are you going to do about it?
>
>Jim Pennino
>

Pass it onto counsel as public evidence that the illegally distributed file is being received illegally and that traffic in this distribution is clear.

NC

833. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 01:44:22 UTC
From: fractenna@aol.com
Message-ID: <20001022214422.13874.00000276@ng-cu1.aol.com>
Source record: 178092

>
>Fractenna <fractenna@aol.com> wrote:
>>>Fractenna <fractenna@aol.com> wrote:
>>>>>
>>>
>>>
>>>
>>>>>As for the "INDUSTRY" comment above, we all know you are Fractal Antenna
>>>>>Systems' CTO and probably President after Hyman passed away (sorry to
>hear
>>>>>about that).
>>>
>>>
>>>> That is incorrect. And if my dad were alive he'd "have your butt" as he
>>>used to
>>>> say.
>>>
>>><rest snipped>
>>>
>>>If anyone cares, go to
>>>http://ccfcorp.dos.state.fl.us/corpweb/inquiry/corinam.html
>>>and type fractal in the text box and click submit.
>>>
>>>The only officers registered with the state of Florida are Nathan Cohen
>>>and Russell Cohen; Nathan replaced Hyman.
>>>
>>>The only point to all this is to highlight how ludicrous Nathan sounds when
>>>he talks about "going to the company" for permission to do this or that
>>>when he is 2/3 of the company.
>>>
>>>I guess he talks to himself a lot...
>>>
>>>Jim Pennino
>>>
>
>> You know nothing about how companies run or how they function.
>
>> Also, you continue to promulgate a lie.
>
>> NC
>
>Where's the lie other than from you?
>
>Anyone that cares can seen the scanned documents at the above link.

>
>Jim Pennino
>

Lie. As in prevarication.

NC

834. PIRACY BY W7EL-EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:20:13 UTC
From: fractenna@aol.com
Message-ID: <20001022222013.20675.00000972@ng-cu1.aol.com>
Source record: 178093
Body handling: HTML body converted to readable text

Nathan Cohen, Ph.D.) isn't getting any sympathy there, so I see he's taking it farther afield. Readers of that newsgroup who haven't put him into their kill files have been able to see the whole story develop, but for readers of this group who don't know the story, here's a brief synopsis.>>

Incorrect Mr. Lewallen. Remember that this public notice will be admissible in a court of law.

<>

This much is correct.

<>

That is absolutely incorrect.

Since 1996, I have provided OVER 200 copies of the MI2 file. My requirement has been that the file be for personal experimental use and not be distributed. The copyright must be used and attributed.

Here are some places I have offered and sent files in response to:

rec.radio.amateur.antenna
antennas@qth.net
NEC-LIST
fractalantenna@egroups.com

Because of the extraordinary harassment, I have , in the last six months, restricted distribution of the file to those who are members of the fractalantenna@egroups.com reflector. Anyone can join and anyone can request and receive the file--SUBJECT to the above requirement. EVEN NOW, as before, ANYONE can receive the file under the aegis of restricted distribution, copyright acknowlegdment, and the above rules.

AT NO TIME HAVE I NOT honored a request to provide the file subject to the above. AT NO TIME HAVE I IMPEDED comparison, scientific evaluation, or legitimate access to the file SUBJECT TO THE ABOVE.

<>

NOT to me!

<< which I posted as I had said I would, and with Steve's permission. (You can download them from ftp://eznec.com/pub/MI2. The file 0Notes.txt in that directory explains what each file is.) Among the files are one of the MI2 antenna which Steve created by measuring wire lengths from a picture of the antenna on Chip's web site, where he had directed challengers to look. Steve

accompanied the EZNEC files with text files (same name but .txt extension) which explain about the models. In the text file accompanying the MI2 EZNEC file, he fully credits Chip for its design.>>

THIS IS A COPYRIGHT FILE owned by me. IT IS ILLEGAL to publish, distribute and copy this FILE from the EZNEC web site.

<>

This is an illegal publication and distribution of a copyright file.

<< Chip sent me an email message requesting that I remove the file on the basis that it's infringing his copyright. I don't believe there's any possibility it's infringing any copyright so refused.>>

You are infringing on copyright Mr. Lewallen .

<>

I am not threatening, I am proceeding. The public needs to be on notice that you are a pirate who is ILLEGALLY distributing copyrighted materials for which you neither own nor have permission to distribute nor publish.

I am not a president of any company, and I know of no company named 'fractenna'.

<>

This is another extraordinary statement which will be admissible in a court of law.

I asked, and was granted, transfer of copyright. It was purely my initiative and request, with no discussion whatsoever along the lines you discuss.

<>

YOU NEED TO REMOVE THE FILE. It is illegal to distribute and publish this file by you.

<<. But I see Chip's action as nothing but bullying, and I won't be bullied. So the file remains. I encourage anyone who's interested to read Chip's "challenge", and if you have EZNEC, to download the files and decide for yourself whether he owes Steve $1000. (Sorry, the files won't run on the EZNEC demo -- the full program is required.)

I apologize for the leakage from the antenna newsgroup of this bizarre matter. It's sad enough that we have to put up with it there.

Roy Lewallen, W7EL>>

I will continue to promulgate public notices describing your piracy, as the legal affair proceeds.

Nathan Cohen, Ph.D.

Fractenna wrote:
>
> NOTICE:
>
> Roy Lewallen, W7EL, d/b/a/ 'EZNEC' is in copyright violation for unauthorized
> distribution and publication of the antenna file marked 'MI2'. Lewallen has
> publicly made and advertised this file on his http://www.eznec,com web site.
> Furthermore he has publicly advertised its availability on USENET.
>
> This MI2 file was first produced by me in 1994, with a revision in 1995.
> It's copyright was assigned to Fractal Antenna Systems, Inc. in 1995. The MI2
> file posted by Lewallen is either an exact or "substantially recognizable"
> derivative of my copyright file. Lewallen has neither sought nor received
> permission to use this file in any way.
>
> Mr. Lewallen's commercial publication and distribution of the MI2 file does
not
> constitute "fair use" and he has been so advised.
>
> On 20 October, 2000, the copyright for MI2 was transferred back to me, the
> author. I am the sole holder of said copyright and have not authorized any
> copies to be published or distributed by Mr. Lewallen. The file is not in the
> public domain.
>
> I urge fellow amateurs to actively discourage Mr. Lewallen from unuathorized
> use of copyrighted material. To do so undermines the edifice of creativity
> which much of the software used by hams is built upon. Not only is it
stealing,
> but it is an insult to those who try best to educate and help others.
>
> Mr. Lewallen has been sent a certified letter formally asking him to cease
and
> desist. If he does not remove the material he will be sued d/b/a EZNEC.
>
> Please let Lewallen know how you feel about stealing someone else's property.
> His e-mail is:
>
> w7el@eznec.com
>
> Thank you!
>
> Nathan Cohen, Ph.D. N1IR

835. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:21:00 UTC
From: fractenna@aol.com
Message-ID: <20001022222100.20675.00000973@ng-cu1.aol.com>
Source record: 178094

>
>Hi all-
>
>Can we hear from the Russell entity? I don't think we have met him yet.
>What is his position on all these goings on?
>
>Mike Camp KI7FQ
>El Cerrito, CA.
>
>"Jim Pennino" <jimp@mail.specsol.com> wrote in message
>news:lu10t8.j3k.ln@mail.specsol.com...
>> Fractenna <fractenna@aol.com> wrote:
>> >>Fractenna <fractenna@aol.com> wrote:
>> >>>>
>> >>
>> >>
>> >>
>> >>>>As for the "INDUSTRY" comment above, we all know you are Fractal
>Antenna
>> >>>>Systems' CTO and probably President after Hyman passed away (sorry to
>hear
>> >>>>about that).
>> >>
>> >>
>> >>> That is incorrect. And if my dad were alive he'd "have your butt" as
>he
>> >>used to
>> >>> say.
>> >>
>> >><rest snipped>
>> >>
>> >>If anyone cares, go to
>> >>http://ccfcorp.dos.state.fl.us/corpweb/inquiry/corinam.html
>> >>and type fractal in the text box and click submit.
>> >>
>> >>The only officers registered with the state of Florida are Nathan Cohen
>> >>and Russell Cohen; Nathan replaced Hyman.
>> >>
>> >>The only point to all this is to highlight how ludicrous Nathan sounds
>when
>> >>he talks about "going to the company" for permission to do this or that
>> >>when he is 2/3 of the company.
>> >>
>> >>I guess he talks to himself a lot...

>> >>
>> >>Jim Pennino
>> >>
>>
>> > You know nothing about how companies run or how they function.
>>
>> > Also, you continue to promulgate a lie.
>>
>> > NC
>>
>> Where's the lie other than from you?
>>
>> Anyone that cares can seen the scanned documents at the above link.
>>
>> Jim Pennino
>>

What ARE you talking about?!

NC

836. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:23:44 UTC
From: fractenna@aol.com
Message-ID: <20001022222344.20675.00000974@ng-cu1.aol.com>
Source record: 178095

>I have about 4 ft of clearance to the peak, no foil insulation and a couple
>of
>electrical runs on the floor of the attic, but the aluminum ridge vent vexes
>me
>no end on designs I've tried...at least on 6M.
>Paul N8ULS
>
>Fractenna wrote:
>
>> In the late Fall, I will put up a web page on the next fractal antenna for
>> hams. This is a low height monopole which fits in a small space, such as an
>> attic.
>>
>> Assuming a design for 20M, I would appreciate knowing what some typical
>form
>> factor restrictions are in attics/crawl spaces. For the moment I am
>assuming
>> about 3 feet of height and of order 14 by 14 feet of footprint available.
>>
>> Thanks for the fedback.
>>
>> 73
>> Chip N1IR
>

Hmmm.... I doubt that would be resonant on 20M. I;ve picked 20M because that seems to be a preferred freq or DX.

Let me try something for 20M. It will certainly scale for 6M. But I suspect you may benefit from an easier solution. Drop me some e-mail on chipn1ir@aol.com and I'll come up with something by Thanksgiving.

73
Chip N1IR

837. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:32:19 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39F3A2B8.8BD37A46@att.net>
Source record: 178096

Getting back to the original topic of this thread, I have noticed that my faithful Bird 43 is significantly in error on 20 meters. It reads 115 watts when the correct reading should be 100 watts. As far as I know, VHF and UHF operation is normal and readings are correct.

I have cleaned all the contacts and connections in the Bird that usually cause problems so I believe that the metering circuit is working properly.

I can only conclude that the 250-watt HF element is at fault.

Question: can these be calibrated in "the field" i.e., my workbench? I have never seen anything on this procedure and supposed that it was a factory-only affair. I do have an accurate r-f power source to use in a calibration procedure.

So, if anyone has any information on this, I would appreciate hearing from them. Lacking any inputs from this source, I will contact Bird although I am confident that their response will be "return it the factory."

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

838. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:49:58 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F3A734.7F8FD4C5@dvol.com>
Source record: 178097

Richard Harrison wrote:
>
.....
>

> Vertical antennas on both ends of the circuit below treetop level and
> operating below 20 MHz have a combined loss from the trees of less than
> 4 db. The loss from the trees is less when the antenna polarization is
> horizontal.

>
Roger that. Two dB per. Not exactly a signal killer. I'd love to know why.
Given my upcoming heavily forested qth I'd best rethink using verticals on
20 and above. Probably not an issue below 20m.
>

>
> Best regards, Richard Harrison, KB5WZI

>
Tnx agn.
>
w3rv

839. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:50:11 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F3A749.AE9FF797@dvol.com>
Source record: 178098

"John S. MacKay" wrote:

> One answer might be to have a self-imposed ceiling on power output on hf
> mobile. I have settled for 50w , I work only mobile to get away from tvi
> and in 6 years I have worked all continents and don't seem to have any
> ghastly tumours. VE7AFN/M.
> ian Kelly" <kelly@dvol.com> wrote in message
> news:39F23860.C327E44D@dvol.com...

>
Maybe I have it screwed up but I think at 100w out on HF there is no "official problem". As in ignorable. Supposedly gets a bit dicey if you plant a microwave rubber duckie in yer ear and I can understand that. There are "intructions" in the ARRL website about staying at least two feet away from ham power power transformers. Never mind all the welders who spent their lives hunched over hundreds of amps of AC. I had one of those, he died of orneryness at 94.
>
w3rv

840. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:50:26 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F3A757.DFB654A@dvol.com>
Source record: 178099

John Moriarity wrote:

> > Anyone know of a telescoping , non metallic mast i could use.
>
> Judd,
>
> How about a "Hot Stick"?
>
> Take a look at http://www.hfgp.com/pictures/A-1.jpg .
>
> Not cheap, but looks like a great idea.

>
Slick idea but not cool for an antenna mast, better lightning should hit
a steel mast than the vee. How much is "not cheap"?
>

> I'm waiting for my
> 30 footer to arrive. You might also check with your local
> power company to see what they do with ones that get
> "worn out". They might be cheap and repairable for our
> use.
>
> 72,
>
> John, K6QQ

>
w3rv

841. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:52:28 UTC
From: k1bqt@aol.com
Message-ID: <20001022225228.08625.00000009@ng-da1.aol.com>
Source record: 178100

Meet the ENFORCER:

First the enforcer sold publication rights to a series of articles containing material he'd previously transferred the copyright to--and no longer owned.

Later, the enforcer attacked and threatened fellow hams for "fair use" of a portion of that material shared in the course of scientific inquiery.

Now, way after the fact, the enforcer procures a copyright to the material and acts as if he'd owned it all along--presumably so he can use it as a weapon in a nuisance law suit.

Finally, the enforcer complains because his actions create a PR problem that make him "look bad".

As the monkey said when he got his tail caught in the ringer, "OUCH, that's quite a stretch!!!"

Rick K1BQT

842. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 02:54:44 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F3A859.5084AA9A@dvol.com>
Source record: 178101

Paul wrote:

> Where I live with 2M antennas below tree top level my summertime range is
> much less than half my wintertime range when the leaves are down. 6M is not
> a whole lot different.(vertical polarization).
> Paul N8ULS

>
I'd never have guessed it could be that much but it's very much in line with
the other posts. The attenuation seems to go up pretty quickly with frequency.
>
Tnx,
>
w3rv

843. Re: EZNEC: Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 03:28:37 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <8t0b91$3or$1@nnrp1.deja.com>
Source record: 178102

In article <39f44feb.238617303@nntp.mindspring.com>,
kk5yyNOSPAM@arrl.net wrote:
> "quid era demonstradum".

quod erat demonstrandum.

Just thought you'd want to know.

LRod

Sent via Deja.com http://www.deja.com/
Before you buy.

844. Re: PIRACY BY W7EL-EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 03:56:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t0ctrnpt0@208.207.71.157>
Source record: 178103
Body handling: HTML body converted to readable text

What I'm waiting for is for Gentleman Roy to get a gut full of this
crap and hit HIM where it hurts with a SERIOUS suit for libel, slander
and damage to his professional reputation among whatever else a good
torts attorney can work up from all that has gone on here.
I'd imagine he's harvesting message headers with contents as we speak
for submission for his attorney to consider. Maybe Roy will wind up the
owner of Fractalcrap, INC and then he can - I started to say he could
just burn the building, but I don't think there IS a building. He'll
just have settle for burning the company charter. In any case the world
would finally be free of fractalcrap.

Fractenna wrote:
>
> Nathan Cohen, Ph.D.) isn't getting any sympathy there, so I see he's taking it
> farther afield. Readers of that newsgroup who haven't put him into their kill
> files have been able to see the whole story develop, but for readers of this
> group who don't know the story, here's a brief synopsis.>>
>
> Incorrect Mr. Lewallen. Remember that this public notice will be admissible in
> a court of law.
>
>
> < offering $1000 for anyone who could submit a design for an antenna "which has a
> performance advantage over the MI2 fractal loop element".
>
> No. Not correct. It was for the best design submitted which produced the best
> FOM, and (presumably) better than the MI2.
>
> << He referred to his web site for an example of the MI2, and required that all
> submissions be in the form of an EZNEC file. (EZNEC is antenna modeling
> software I develop and sell.) The posting includes an equation of several terms
> defining a "figure of merit" which must be beat. You can see the original
> posting at
> http://x67.deja.com/[ST_rn=ps]/getdoc.xp?AN=657467296&CONTEXT=972215956.41
> 4253064&hitnum=17. >>
>
> This much is correct.
>
> < challengers to compare with, unless they had signed up for, and were accepted
> to, his mailing list. He has a history of refusing admission to or removing
> people from the list who have disagreed with him, so several potential
> challengers were unable to get on the list to get the file. (Actually, I don't
> know of anyone who actually did get it.) I offered to post any submitted files

> on my web site http://eznec.com as a public service, so anyone could see for
> himself how various antennas compared, since Chip hadn't come forward with an
> offer to do so.>>
>
> That is absolutely incorrect.
>
> Since 1996, I have provided OVER 200 copies of the MI2 file. My requirement has
> been that the file be for personal experimental use and not be distributed. The
> copyright must be used and attributed.
>
> Here are some places I have offered and sent files in response to:
>
> rec.radio.amateur.antenna
> antennas@qth.net
> NEC-LIST
> fractalantenna@egroups.com
>
> Because of the extraordinary harassment, I have , in the last six months,
> restricted distribution of the file to those who are members of the
> fractalantenna@egroups.com reflector. Anyone can join and anyone can request
> and receive the file--SUBJECT to the above requirement. EVEN NOW, as before,
> ANYONE can receive the file under the aegis of restricted distribution,
> copyright acknowlegdment, and the above rules.
>
> AT NO TIME HAVE I NOT honored a request to provide the file subject to the
> above. AT NO TIME HAVE I IMPEDED comparison, scientific evaluation, or
> legitimate access to the file SUBJECT TO THE ABOVE.
>
> <>
>
> NOT to me!
>
> << which I posted as I had said I would, and with Steve's permission. (You can
> download them from ftp://eznec.com/pub/MI2. The file 0Notes.txt in that
> directory explains what each file is.) Among the files are one of the MI2
> antenna which Steve created by measuring wire lengths from a picture of the
> antenna on Chip's web site, where he had directed challengers to look. Steve
> accompanied the EZNEC files with text files (same name but .txt extension)
> which explain about the models. In the text file accompanying the MI2 EZNEC
> file, he fully credits Chip for its design.>>
>
> THIS IS A COPYRIGHT FILE owned by me. IT IS ILLEGAL to publish, distribute and
> copy this FILE from the EZNEC web site.
>
> < work, or address the issues raised by this response to his
> challenge, Chip then claimed that the MI2 EZNEC file Steve created infringes
> his copyright of an EZNEC file he created years ago and which neither Steve nor
> I has ever seen. (So far, I haven't located anyone else who has, either.)>>
>
> This is an illegal publication and distribution of a copyright file.

>
> << Chip sent me an email message requesting that I remove the file on the basis
> that it's infringing his copyright. I don't believe there's any possibility
> it's infringing any copyright so refused.>>
>
> You are infringing on copyright Mr. Lewallen .
>
> < so far resulted. Fractenna (the company, of which Chip is president, which
> apparently owned the copyright until recently).>>
>
> I am not threatening, I am proceeding. The public needs to be on notice that
> you are a pirate who is ILLEGALLY distributing copyrighted materials for which
> you neither own nor have permission to distribute nor publish.
>
> I am not a president of any company, and I know of no company named
> 'fractenna'.
>
> < given the copyright to Chip. So now he's free to pursue it on his own,
> presumably with his own money.>>
>
> This is another extraordinary statement which will be admissible in a court of
> law.
>
> I asked, and was granted, transfer of copyright. It was purely my initiative
> and request, with no discussion whatsoever along the lines you discuss.
>
>
> < other people's respect for it to make my living. If I thought for a moment that
> the file on my web site was infringing anyone's copyright, I would remove it
> immediately and issue an apology>>
>
> YOU NEED TO REMOVE THE FILE. It is illegal to distribute and publish this file
> by you.
>
> <<. But I see Chip's action as nothing but bullying, and I won't be bullied. So
> the file remains. I encourage anyone who's interested to read Chip's
> "challenge", and if you have EZNEC, to download the files and decide for
> yourself whether he owes Steve $1000. (Sorry, the files won't run on the EZNEC
> demo -- the full program is required.)
>
> I apologize for the leakage from the antenna newsgroup of this bizarre matter.
> It's sad enough that we have to put up with it there.
>
> Roy Lewallen, W7EL>>
>
> I will continue to promulgate public notices describing your piracy, as the
> legal affair proceeds.
>
> Nathan Cohen, Ph.D.
>

>
> Fractenna wrote:
> >
> > NOTICE:
> >
> > Roy Lewallen, W7EL, d/b/a/ 'EZNEC' is in copyright violation for unauthorized
> > distribution and publication of the antenna file marked 'MI2'. Lewallen has
> > publicly made and advertised this file on his http://www.eznec,com web site.
> > Furthermore he has publicly advertised its availability on USENET.
> >
> > This MI2 file was first produced by me in 1994, with a revision in 1995.
> > It's copyright was assigned to Fractal Antenna Systems, Inc. in 1995. The MI2
> > file posted by Lewallen is either an exact or "substantially recognizable"
> > derivative of my copyright file. Lewallen has neither sought nor received
> > permission to use this file in any way.
> >
> > Mr. Lewallen's commercial publication and distribution of the MI2 file does
> not
> > constitute "fair use" and he has been so advised.
> >
> > On 20 October, 2000, the copyright for MI2 was transferred back to me, the
> > author. I am the sole holder of said copyright and have not authorized any
> > copies to be published or distributed by Mr. Lewallen. The file is not in the
> > public domain.
> >
> > I urge fellow amateurs to actively discourage Mr. Lewallen from unuathorized
> > use of copyrighted material. To do so undermines the edifice of creativity
> > which much of the software used by hams is built upon. Not only is it
> stealing,
> > but it is an insult to those who try best to educate and help others.
> >
> > Mr. Lewallen has been sent a certified letter formally asking him to cease
> and
> > desist. If he does not remove the material he will be sued d/b/a EZNEC.
> >
> > Please let Lewallen know how you feel about stealing someone else's property.
> > His e-mail is:
> >
> > w7el@eznec.com
> >
> > Thank you!
> >
> > Nathan Cohen, Ph.D. N1IR

845. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-23 23:18:10 UTC
From: "Dr. David Kirkby" <davek@medphys.ucl.ac.uk>
Message-ID: <39F4C732.7F174016@medphys.ucl.ac.uk>
Source record: 177994

> I would be grateful if someone could point out an easy, or cheap, way
> of doing a PDF write. I need to upload a paper (of NEC results)into
> PDF format . I do not have this facility here, and a search yields a
> morass of complex info.

I'm not sure who asked this, so please excuse me if I copied this to the wrong person. Ghostscript can be used to produce PDF files - and its free.

You can find Windows and unix versions on the web easily enough. First you must install a printer driver for a Postscript printer on your PC (you don't need to own the printer). Print your document to a Postscript file, then read the Postscript file with Ghostscript. Ghostscript has the option of printing to numerous output devices, from 9-pin dot matrix printer, so colour inkjects, PDF files etc.

My own Ph.D. thesis was written in Wordperfect for DOS 5.1. When I tried to convert to PDF files using Adobe's Distiller, I had lots of problems, with Distiller complaining about problems in the Postscript files. However, Ghostscript worked fine, as can be seen at http://www.medphys.ucl.ac.uk/~davek/phd/phd.html

Adobe's distiller does allow compression of the PDF files, which Ghostscript can't do. However, I still managed to get a 250 or so page thesis with lots of diagrammes into under 5 Mb.

--
Dr. David Kirkby Ph.D,
Senior Research Fellow,
Department of Medical Physics, University College London,
11-20 Capper St, London, WC1E 6JA.
Tel: 020 7209 6406 Fax: 020 7209 6269
email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
Amateur radio callsign: G8WRB

846. Re: PUBLIC NOTICE Nathan is DICK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39F66470.4720C482@qth.com>
Source record: 177819
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Look at this file nathan, I just pulled it the group and it struck, what a dick you are...you should have concern for you safety......some one close enough will surely KICK YOUR ASS, you f' in idiot...I will contribute to that fund...please go away...

Fractenna wrote:

> >
> >Gerald-
> >
> >I will gladly make my $100 contribution to the fund for the preservation of
> >sanity on this group.
> >
> >By the way, I think Chip is crazy, too.
> >
> >Mike Camp
> >El Cerrito, CA.
> >
> >"Gerald Schmitt" <kk5yy@arrl.net> wrote in message
> >news:39f5f55a.346520852@nntp.mindspring.com...
> >> Nathan believes in publishing email so here it is.
> >> BTW do any of you guys remember my claiming to
> >> work any particular place or in any particular field?
> >>
> >> If this ploy doesn't bring me to my knees next he is going
> >> to tell his Mommy and hold his breath until he turns blue.
> >>
> >> Since he has already slandered Roy numerous times
> >> how about setting up the Roy Lewallen Defense Fund.
> >> We all kick in $100 or so hire some gunfighter lawyer
> >> up in Massachusetts to clean Nathan's clock and
> >> bank account.
> >>
> >> As has been always been my policy I will not bother Nathan's
> >> boss but that said I have no control over what you guys might
> >> do. I don't care about Nathan's job I just like to poke fun at him
> >> when he picks on my friends.
> >>
> >> Nathan you really are an embracement to PhDs.
> >>
> >> To: kk5yy@arrl.net
> >> Subject: (no subject)
> >> From: Fractenna@aol.com
> >> Date: Mon, 23 Oct 2000 07:13:29 EDT

> >>
> >> >Nathan,
> >> >
> >> >Please consider this a formal notice to cease and desist using
> >> >the PhD after your name. You abhorrent behavior is an
> >> >embarrassment not only to Cornell and B.U but to all PhDs
> >> >everywhere.
> >> >
> >> >It is bad enough that PhDs are called cone-heads but now
> >> >the more insulting are stooping to using the term "Cohen Head".
> >> >No innocent PhD should have to endure this.
> >> >
> >> >Stop immediately or face the consequences of marsupial
> >> >justice.
> >> >
> >> >Latest survey 48 of 50 PhDs surveyed found Nathan to be an
> >> >embarrassment the other 2 had meetings and didn't answer
> >> >the survey.
> >> >
> >>
> >>
> >> Mr. Schmitt:
> >>
> >> This week I will be writing to the Director of the Los Alamos National
> >>
> >> Laboratory (Dr. John Browne), and the two senators from New Mexico
> >> detailing
> >> the harassment and libel which you have inveighed against me. These
> >> include
> >> deliberate and malicious efforts to attempt to get me terminated from
> >> my
> >> academic position, and false misinformation regarding whether I
> >> 'deserve' to
> >> have the title Ph.D. , as well as false accusations that you are the
> >> inevntor
> >> of fractal antenna technology.These will also detail the assertions
> >> you have
> >> made stating that I am mentally ill.
> >>
> >> I will describe this inappropriate behavior with the intent to ask the
> >>
> >> question why someone with such a malicious and destructive focus
> >> against an
> >> individual should be in the responsible position of being involved
> >> with
> >> nuclear detonation development.
> >>
> >> I have very serious concerns for my personal safety and that of the
> >> country
> >> if you can make false assertions freely while holding a position with

> >> severe
> >> and serious responsibility.
> >>
> >> Nathan Cohen, Ph.D.
>
> Why is enforcement of copyright law crazy?
>
> 73
> Chip N1IR

Subject: Re: EZNEC: Warning of Copyright Violation
Date: 24 Oct 2000 11:08:22 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>> Nothing will stop this short of you removing the file.
>>
>> Nathan Cohen, Ph.D.
>
>Too late, now thousands of people have the file. You have promoted EZNEC
>beyond the wildest dreams of the programmer.
>
>I'm surprised you haven't asked for a commission.

If you could kindly point some of those out, they can be supoenaed in support
of the case.

73
Chip N1IR

Subject: Re: EZNEC: Warning of Copyright Violation
Date: 24 Oct 2000 11:10:17 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>NEW problem!
>
>What to do about all those who have downloaded the file? Gonna try a
>class action suit?

As I have said, there are many who have LEGALLY downloaded the file . IT IS
AVAILABLE. But not through anyone but myself.

An injunction and suit against the SOURCE of the illegal download is the first
way to go.

73
Chip n1IR

Subject: Re: Law Suit Watch
Date: 24 Oct 2000 11:11:08 GMT

From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>Day 2 and nothing heard, come on Nathan!
>I intend to post a message everyday until served. Now bluster your way out
>of that.
>

Track your hits on your site.

NC

Subject: Re: Fractanal Farce
Date: 24 Oct 2000 11:12:43 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>He is known by many of us here in MA as the
>Belmont Bozo, or by some as "dipchip"...
>especially on the cluster....where he spots himself,
>the epitome of egomaniacal behavior....

Actually Chuck, this is not true. Most people on the cluster have known me for
26 years. Could you provide evidence of this slander and libel?

Thanks!

73
Chip N1IR

Subject: Re: PUBLIC NOTICE Nathan is a bad boy.
Date: 24 Oct 2000 11:15:24 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>Nathan believes in publishing email so here it is.
>BTW do any of you guys remember my claiming to
>work any particular place or in any particular field?
>
>If this ploy doesn't bring me to my knees next he is going
>to tell his Mommy and hold his breath until he turns blue.
>
>Since he has already slandered Roy numerous times
>how about setting up the Roy Lewallen Defense Fund.
>We all kick in $100 or so hire some gunfighter lawyer
>up in Massachusetts to clean Nathan's clock and
>bank account.
>

>As has been always been my policy I will not bother Nathan's
>boss but that said I have no control over what you guys might
>do. I don't care about Nathan's job I just like to poke fun at him
>when he picks on my friends.
>
>Nathan you really are an embracement to PhDs.
>
>To: kk5yy@arrl.net
>Subject: (no subject)
>From: Fractenna@aol.com
>Date: Mon, 23 Oct 2000 07:13:29 EDT
>
>>Nathan,
>>
>>Please consider this a formal notice to cease and desist using
>>the PhD after your name. You abhorrent behavior is an
>>embarrassment not only to Cornell and B.U but to all PhDs
>>everywhere.
>>
>>It is bad enough that PhDs are called cone-heads but now
>>the more insulting are stooping to using the term "Cohen Head".
>>No innocent PhD should have to endure this.
>>
>>Stop immediately or face the consequences of marsupial
>>justice.
>>
>>Latest survey 48 of 50 PhDs surveyed found Nathan to be an
>>embarrassment the other 2 had meetings and didn't answer
>>the survey.
>>
>
>
>Mr. Schmitt:
>
>This week I will be writing to the Director of the Los Alamos National
>
>Laboratory (Dr. John Browne), and the two senators from New Mexico
>detailing
>the harassment and libel which you have inveighed against me. These
>include
>deliberate and malicious efforts to attempt to get me terminated from
>my
>academic position, and false misinformation regarding whether I
>'deserve' to
>have the title Ph.D. , as well as false accusations that you are the
>inevntor
>of fractal antenna technology.These will also detail the assertions
>you have
>made stating that I am mentally ill.
>

>I will describe this inappropriate behavior with the intent to ask the
>
>question why someone with such a malicious and destructive focus
>against an
>individual should be in the responsible position of being involved
>with
>nuclear detonation development.
>
>I have very serious concerns for my personal safety and that of the
>country
>if you can make false assertions freely while holding a position with
>severe
>and serious responsibility.
>
>Nathan Cohen, Ph.D.
>

Mr. Schmitt has posted an accurate copy of an e-mail I sent him.

Mr. Scmitt is a a developmental engineer/scientist at the detonation branch of Los Alamos National Laboratory. He is involved with nuclear detonations, a high security clearance position..

The wheels turn.

73
Chip N1IR

Subject: Re: 2 MTR TWINLEAD J-POLE
Date: 24 Oct 2000 11:21:04 GMT
From: ke4qkn@aol.com (Texas Rangers Fan Since 1972)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>Anyone ever see one of these ? Who made it ?

I think MFJ markets one of those.....

KE4QKN
EM60

Subject: Re: Why does N1IR cancel NG postings so often?
Date: 24 Oct 2000 11:23:23 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>Hey fracky,
>
>I was refering to the fact that YOU were piss weak with the stations you
>were
>talking to, and many of them told me that I was 20 to 30 dB louder than you
>were!!

>And, I wonder how much louder I would have been if I had the amplifier
>on....
>

Do the link budget. This is only possible if you had your illegal QRO amp on
Chuck:-).

>A question for you to ponder...
>Why do you think that a "Q" rate on an open band without a contest
>represents
>any indication of your performance under the gun in a real contest???

A contest is always higherin Q rates,, because there are more stations to work;
getting a pileup on a US station without a contest is an extremely rare thing.
Can you provide any evidence to the contrary? Indeed, I will prove this by
being on the 10M Contest and beating you silly:-)

This
>is just
>more of your huffing and puffing....must be your phd disconnection with
>reality....
>

330 Q/hr is a stated fact. Hundreds if not thousands of people have heard it.
How is that huffing and puffing?

>Also:
>I never made a "date" with you...you're not my type...you would need a sex
>change
>and a brain change....
>

You are a sick fellow. I am a married monoganmous heterosexual. The date is for
the 10M Contest.

Are you divorced? Why did your marriage break up?

Just out of curiousity, do you own a toupee? Does it help for the older guys
out dating again? What about getting rid of the coke bottle glasses?

I'm just curious to know as I do have some friends out on the prowl again
looking for tips.

What works for you Chuck?

73
Chip N1IR

Subject: Re: Check out N1IR's egomaniacal ad....
Date: Tue, 24 Oct 2000 12:25:18 +0100
From: David Robbins <k1ttt@berkshire.net>
Organization: WebUseNet Corp http://www.usenetserver.com - Home of the fastest NNTP
servers on the Net.
Newsgroups: rec.radio.amateur.antenna

oh no! how could i have missed a multipage full color ad for fractal antenna products???? at least i assume that fracky wouldn't settle for anything less. its funny though, i just went through the ad sections for sept/oct/nov and see eznec, various quads, the spider ant, isotron, hosenose, and a bunch of others every month, but don't see fracky... what name did he put it under, he doesn't seem to appear in the advertiser directory under any name i recognize?

Chuck O'Neal wrote:
>
> in QST....What a pompous ass!!! Hey chip, isn't that
> inflated head too big for you? It's time QST
> and the ARRL were made aware of the fractal
> freak's antics...they canned K1MAN's ads, now
> it's time to can this idiot's BS as well....
>
> Here we go!!!!!!!!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

Subject: Re: PIRACITY BY whocare
Date: 24 Oct 2000 11:25:49 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>
> 23 Oct 2000 11:21:23 GMT dans l'article
> <20001023072123.05606.00000125@ng-cb1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:I have never, ever, ever, been banned from the NEC-LIST.
>:
>:Nathan Cohen, Ph.D.
>
>I have never said you were banned, f** word antenna posts
>from fractenna are.
>
>So you changed your screen name from "fractenna" to "Chip"
>at the end of year 1999.
>
>Anyone can check the archive.
>
>
>--
>Gilbert.
>

I have LEFT the NEC LIST for a while. No one has EVER said or implied that i am not welcome or can't come back.

I just get so MUCH e-mail--most of it from hams blaming me for the state of their world--that I have to limit the input.

later on I will probably subscribe to NEC LIST again.

Chip N1IR

Subject: Re: PIRACY BY N1IR
Date: 24 Oct 2000 11:28:02 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>There is no formal notice or even a passing mention of copyright in N1IR's
>original article describing the M12. There is no mention of a copyright
>assignment to Chip or to FAS for anything. Nor is there academic
>attribution
>crediting the origin of the "Minkowski" fractal shape. Last I knew, Chip's
>last name isn't Cohen-Minkowski, so there must be an uncredited source for
>this graphic somewhere. But, we don't know where it came from. It just
>"appeared".
>
>So, any judge will probably want to know if Chip sold first North American
>publication rights on copyrighted material and then failed to attribute that
>copyright to either FAS or to himself.

THERE WERE NO TRANSFER OF RIGHTS. Do you understand this?

CQ Communications did not request, and did not receive, transfer of copyright for ANYTHING.

The judge will want to know if Chip
>failed to state that the material was provided by him with the company's
>express permission and consent. The judge will have plenty of questions.
>

Fine; Now; look what an idiot you have made of yourself. You IGNORE the FACT .

>As Comm Quarterly readers, we don't know--nor could any reasonable person be
>expected to know--the answers to these questions. The article revealed
>nothing. Zip. Not a peep.
>
>All we know is that Chip threatened to sue Roy back in September over
>material
>that he almost certainly didn't own the rights to at the time.
>
>Rick K1BQT
>
>
>
>

>
>

Subject: Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)
Date: 24 Oct 2000 11:29:12 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

> > I would be grateful if someone could point out an easy, or cheap, way
> > of doing a PDF write. I need to upload a paper (of NEC results)into
> > PDF format . I do not have this facility here, and a search yields a
> > morass of complex info.
>
>
>I'm not sure who asked this, so please excuse me if I copied this to the
>wrong
>person. Ghostscript can be used to produce PDF files - and its free.
>
>You can find Windows and unix versions on the web easily enough. First you
>must
>install a printer driver for a Postscript printer on your PC (you don't need
>to
>own the printer). Print your document to a Postscript file, then read the
>Postscript file with Ghostscript. Ghostscript has the option of printing to
>numerous output devices, from 9-pin dot matrix printer, so colour inkjects,
>PDF
>files etc.
>
>My own Ph.D. thesis was written in Wordperfect for DOS 5.1. When I tried to
>convert to PDF files using Adobe's Distiller, I had lots of problems, with
>Distiller complaining about problems in the Postscript files. However,
>Ghostscript worked fine, as can be seen at
>http://www.medphys.ucl.ac.uk/~davek/phd/phd.html
>
>Adobe's distiller does allow compression of the PDF files, which Ghostscript
>can't do. However, I still managed to get a 250 or so page thesis with lots
>of
>diagrammes into under 5 Mb.
>
>
>--
>Dr. David Kirkby Ph.D,
>Senior Research Fellow,
>Department of Medical Physics, University College London,
>11-20 Capper St, London, WC1E 6JA.
>Tel: 020 7209 6406 Fax: 020 7209 6269
>email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
>Amateur radio callsign: G8WRB
>

It was asked elsewhere 10 months ago. Someone repeated it for no reason.

Thanks but I do not need this help and I did not solicit it here.

Chip N1IR

Subject: Re: Copyright
Date: 24 Oct 2000 11:30:31 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>I promised that I wouldn't respond to any thread that included the "F" word,
>so
>this isn't about "F" words, but about a practical side of the lawsuit
>bullshit.
>
>Whether or not a lunatic holds/doesn't hold, owns/doesn't own, once
>held/never
>held any rights to a disputed, copyrighted/not copyrighted 'intellectual'
>property is specious.
>
>The fact is that when the disputed item is valueless the purloining, theft,
>misuse, usurpation, copying, misappropriation or defacement of said valueless
>item does no financial harm to the alleged owner.
>
>No criminal act has occurred. This is a civil (legally speaking only) matter
>and there certainly wouldn't be any jail time forthcoming, so the only
>possible
>(and this is a real stretch) penalty would be the imposition of monetary
>damages
>commensurate with the financial loss to the aggrieved party. Since the
>material
>is without value there is no financial loss and therefore no damage
>
>I once created an intellectual work when I performed 'original' electrical
>measurements of a pair of parasitic suppressors as reported on my home page.
>I
>declared the material copyrighted to me but stipulated that anyone could
>freely
>use the material for non-commercial purposes. Tom Rauch honored that
>request,
>Rich Measures did not.
>
>Measures posted the material on his web site, where he was advertising and
>selling nichrome wire parasitic suppressors. I considered that to be
>commercial
>use of my material and politely asked him to remove the material.
>
>He in turn more-or-less told me to go piss up a rope and the material
>remains,

>albeit totally twisted (doesn't this sound familiar) into an endorsement of
>his
>product. The data of course do not support his claims (familiar territory
>again) but he has the temerity to claim that they do. He did add,
>"**Copyright
>1997 by W. D. Stewart, Jr" to his web page.
>
>So we have a similar (maybe) situation. I believe I have a (much) better
>claim
>of misuse but practically speaking, how have I been financially harmed. Fact
>is
>I haven't been and neither has a fruitcake. Whoops, I used an "F" word.
>
>Hypothetically speaking of course.
>
>Sorry.
>
>Wes Stewart

The copyright laws do not scale as per 'worth' especially, when the pirate--in
this case W7EL--attempts to set the price.

73
Chip N1IR

Subject: Re: EZNEC: Warning of Copyright Violation
Date: 24 Oct 2000 11:31:28 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>
>
>Fractenna wrote:
>>
>> >Are you now claiming credit for creating the file that Roy has on his
>> >site?
>> >From what I understand, these EZNEC files are essentially tables of
>> >numbers. Are the numbers in your "copyrighted" file the same as the
>> >numbers in the file on Roy's site? If not, your copyright would not
>> >apply to that file, and it is not your IP.
>> >
>>
>> I am stating as a fact that I am the author and copyright holder of the
>> original work of which this derivative is "substantially the same".
>
>> Yes.
>
>So your claim is that it is a violation of copyright to produce a table
>of numbers which represent the dimensions of an antenna that is in the

>public domain, and for which radio amateurs and others have been
>publicly invited to build? Sounds like a weak case to me.

You are absolutely right--a weak case indeed! Unfortunately the other stuff
you state is wrong.

NC

Subject: Re: EZNEC: Warning of Copyright Violation
Date: 24 Oct 2000 11:32:48 GMT
From: fractenna@aol.com (Fractenna)
Organization: AOL http://www.aol.com
Newsgroups: rec.radio.amateur.antenna

>
>
>Fractenna wrote:
> >
>> >Fractenna wrote:
>> >> I hold the copyright on MI2. I created it; and now I own it. Its
>> >distribution
>> >> and publication, BY LAW, is under my control.
>> >
>> >Which of the following best describes the MI2?
>> >
>> >a. a literary work
>> >b. a musical work
>> >c. an artistic work
>
>> Which best describes EZNEC?
>
>For the purpose of this discussion, EZNEC is best described as an
>intellectual property that you do not own.
>
>Do you still claim to have a copyright on an antenna, as you did above?
>

You take more quick turns than a UFO!

You asked me a question; I asked you the answer. So, which category of
copyright does EZNEC fall into?

Or is it not covered by copyright and is thus in the public domain?

73
Chip N1IR

[One or more binary attachments are retained only in the source text.]

847. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39F63C3C.FD58CC7B@dialpoint.net>
Source record: 177820

It is under the cover on the slug. You will probably destroy the cover
getting it off the slug (probably why they recommend returning it to the
factory). I think it must be glued on. I have seen a few at hamfests
that have had small holes over the screw. They were probably made by
very carefully probing with a sharp object and finding where to enlarge
a pinhole.

"George, W5YR" wrote:
>
> Folks, I hate to appear totally "dumb," but *where* is this calibration
> adjustment that everyone mentions?
>
> I can find nothing on the case proper to adjust other than the meter
> zero-adjustment screw. The only other possibility that I can see would
> be the thin metal cover over the front of each slug. It appears to have
> been seated with a blow with a centerpunch (to account for that mark in
> the center of the arrow). This cover does not want to come off "readily"
> but I have not really been very aggressive in trying to remove one.
>
>

848. Re: Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39f652c3_4@news3.prserv.net>
Source record: 177821

Wayne:
The difficulty in giving a direct answer lies in whether there is any unexpected RF on the outside of the coax braid. In the case where a balun is effectively used, then it makes no difference, and the closer to ground the better. Let me rephrase that. The least inductance in the grounding path the better the protection. All the RF is supposed to be inside the coax, or on the antenna wire, so whatever you do to the outside of the braid should have no effect on the system. Unless there is RF on the outside of the braid, coupled there by the antenna. If the coax happens to be a half wave long between the feed point and the ground, it may become an excellent vertical antenna. If it is a quarter wave, it should decouple from the antenna. And so on for other lengths.
--
Crazy George

Wayne Jones <wrjones1@home.com> wrote in message
news:SVjJ5.162465$i5.6243885@news1.rdc2.on.home.com...
> Does it matter where along the length of the coax feed line that the outer
> braid is grounded for lightening protection?
> Can I ground both the metal mast and feedline right at the antenna? (The
> antenna is an inverted V.)
> or
> If it's a wooden mast can I ground the braid at some point closest to the
> ground rod which may be 1/2 way to the transceiver?
>
>
> Wayne
> ve3 gqx
>
>
>
>

849. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F65AD4.E0DF686A@bigfoot.com>
Source record: 177822

Ian Jackson wrote:
> If the load placed on the transmitter output is more than 50 ohms, the
> main thing that you will notice will be less power out. If the load is
> somewhat less than 50 ohms, you will almost certainly get MORE power
> out, but you will start to overload the transmitter, and this will show
> up as an increase of distortion.

My IC-706 outputs maximum power into 50 ohms. Its power output
falls off on each side of 50 ohms.
--
http://www.mindspring.com/~w6rca

850. More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F66BDC.89C72504@eznec.com>
Source record: 177823

More MI2 'challenge' files have been uploaded to my site. They are
random4.EZ, random4.txt, random5.EZ, and random5.txt, all submitted by
Steve Best, VE9SRB. You can get them from ftp://eznec.com/pub/MI2/, or
you can go to http://eznec.com and click the "FTP Site" link. The text
files give more information about the corresponding .EZ files, and the
0Notes.txt file at the same URL has more information about all files.
All files submitted to date are compressed into MI2.ZIP.

More information about the purpose of these files and why they're posted
can be found at the deja.com archive at
http://x76.deja.com/[ST_rn=ps]/getdoc.xp?AN=673944577&CONTEXT=972449784.1468334083&hitnum=
11.
Chip's original "Challenge" posting is archived at
http://x67.deja.com/[ST_rn=ps]/getdoc.xp?AN=657467296&CONTEXT=972215956.414253064&hitnum=1
7.

Caution: If you click either of the above links while viewing with your
browser, it might not take you to the desired location if the displayed
link is wrapped onto more than one line.

Although the 'challenge' officially ended on September 30, the questions
it raises are still relevant to the subject of this newsgroup.

Roy Lewallen, W7EL

851. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39F66F4A.CB1495BC@wb6hqk.ampr.org>
Source record: 177824

"Dr. David Kirkby" wrote:
>
> I have written some software of my own to model Yagi antennas. It does not run
> on a Windows PC, but on a unix workstation (PC with linux is okay). See
>
> http://www.medphys.ucl.ac.uk/~davek/ham/yagi/index.html
>
> (Note the message on my web site about a bug in gcc's optimiser under linux,
> which means the programme must be compiled with the optimiser off under linux on
> a PC. This is not necessary on my Sun SPARCstation using gcc-2.85.2, nor was it
> on older versions of gcc on a PC).
>

Hi David,

The entire package configures, makes, runs, and produces what appear to
be reasonable results in my FreeBSD box without any massaging
whatsoever! I look forward to perusing the source.

Thanks!

bart
wb6hqk

852. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: paceral@aol.com
Message-ID: <20001024144019.03629.00001317@ng-ff1.aol.com>
Source record: 177869

w7el gives some design choices for >"to prevent the outside of the coax from becoming part of the
antenna<". If there a reference for determining the number of turns and dia of turns to use cable as choke?

853. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a0dd680.690838092@news.seanet.com>
Source record: 177870

On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001024130121.19548.00001926@ng-fi1.aol.com...
>>
>> PLEASE talk to your attorney about this: It will have grave consequences
>for
>> you at a later time to have made such misleading public statements.
>>
>> Nathan Cohen, Ph.D.
>
>Specifically, what did I say that was incorrect or misleading? If anything
>I said was incorrect, then I would be happy to correct.
>
>Steve
>

Hi Steve,

It appears that your #1 point negates all other claims of copyright protection when those figures became part of public domain - again.

Absolutely ever other work is derivative and as the courts have adjudicated: data lists do not constitute copyrightable content. As EZNEC is based on a list of parameters, EZNEC files in and of themselves do not carry copyright protection. (They may contain trade secrets - but that cat is out of the bag.)

If we were to allow the argument for arguments sake, then the complainant would risk being sued by Roy for copyright violation. The reductio ad absurdum is that there were EZNEC files in existence long before the content that is found to be contentious. Hence that same contentious content necessarily contains copies of those earlier files and to claim copyright violation necessarily constitutes an acknowledged prior copyright violation of those same previous files.

The comedy of the absurd is not foreign to these topics though.

73's
Richard Clark, KB7QHC

854. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8t4vh6$sg0$1@nnrp1.deja.com>
Source record: 177871

Try this:
7.000 to 7.150 is the CW portion of the band
7.000 to 7.060 - lots of CW
7.150 to 7.300 is the SSB portion of the band
there are a couple of nets
7.235 HHH net starts at 0700 utc
7.2385 another net in the evenings
Or, just tune around. :-)

Also pick up a copy of Monitoring Times that lists the english
broadcasts of various stations.
GL & 73

In article <8t2ker$7bt$1@nntp.Stanford.EDU>,
Robert Joshua Chen <rjchen@Stanford.EDU> wrote:
> I just installed a 40m antenna and would like to get a feel for the
> band. Anybody have any recommendations about which freqs to listen to
at
> what times (i.e., nets, rag-chewing get-togethers, etc.)?
>
> Thanks,
> -Robert
>
> --
>

Sent via Deja.com http://www.deja.com/
Before you buy.

855. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024145117.13329.00002431@ng-md1.aol.com>
Source record: 177872

>
>On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
>wrote:
>
>>
>>"Fractenna" <fractenna@aol.com> wrote in message
>>news:20001024130121.19548.00001926@ng-fi1.aol.com...
>>>
>>> PLEASE talk to your attorney about this: It will have grave consequences
>>for
>>> you at a later time to have made such misleading public statements.
>>>
>>> Nathan Cohen, Ph.D.
>>
>>Specifically, what did I say that was incorrect or misleading? If anything
>>I said was incorrect, then I would be happy to correct.
>>
>>Steve
>>
>
>Hi Steve,
>
>It appears that your #1 point negates all other claims of copyright
>protection when those figures became part of public domain - again.
>
>Absolutely ever other work is derivative and as the courts have
>adjudicated: data lists do not constitute copyrightable content. As
>EZNEC is based on a list of parameters, EZNEC files in and of
>themselves do not carry copyright protection. (They may contain trade
>secrets - but that cat is out of the bag.)
>
>If we were to allow the argument for arguments sake, then the
>complainant would risk being sued by Roy for copyright violation. The
>reductio ad absurdum is that there were EZNEC files in existence long
>before the content that is found to be contentious. Hence that same
>contentious content necessarily contains copies of those earlier files
>and to claim copyright violation necessarily constitutes an
>acknowledged prior copyright violation of those same previous files.
>
>The comedy of the absurd is not foreign to these topics though.
>
>73's
>Richard Clark, KB7QHC

Does ANYONE understand this person??

NC

856. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39F5CF7C.27766210@berkshire.net>
Source record: 177873

Fractenna wrote:
>
> >
> >On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
> >wrote:
> >
> >>
> >>"Fractenna" <fractenna@aol.com> wrote in message
> >>news:20001024130121.19548.00001926@ng-fi1.aol.com...
> >>>
> >>> PLEASE talk to your attorney about this: It will have grave consequences
> >>for
> >>> you at a later time to have made such misleading public statements.
> >>>
> >>> Nathan Cohen, Ph.D.
> >>
> >>Specifically, what did I say that was incorrect or misleading? If anything
> >>I said was incorrect, then I would be happy to correct.
> >>
> >>Steve
> >>
> >
> >Hi Steve,
> >
> >It appears that your #1 point negates all other claims of copyright
> >protection when those figures became part of public domain - again.
> >
> >Absolutely ever other work is derivative and as the courts have
> >adjudicated: data lists do not constitute copyrightable content. As
> >EZNEC is based on a list of parameters, EZNEC files in and of
> >themselves do not carry copyright protection. (They may contain trade
> >secrets - but that cat is out of the bag.)
> >
> >If we were to allow the argument for arguments sake, then the
> >complainant would risk being sued by Roy for copyright violation. The
> >reductio ad absurdum is that there were EZNEC files in existence long
> >before the content that is found to be contentious. Hence that same
> >contentious content necessarily contains copies of those earlier files
> >and to claim copyright violation necessarily constitutes an
> >acknowledged prior copyright violation of those same previous files.
> >
> >The comedy of the absurd is not foreign to these topics though.
> >
> >73's

> >Richard Clark, KB7QHC
>
> Does ANYONE understand this person??
>
> NC

Dose ANYONE understand this person??

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

857. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F5E002.DAB524FF@eznec.com>
Source record: 177874

Yes, you can find it in both the ARRL Antenna Book and the ARRL
Handbook.

Roy Lewallen, W7EL

PacerAl wrote:
>
> w7el gives some design choices for >"to prevent the outside of the coax from
> becoming part of the
> antenna<". If there a reference for determining the number of turns and dia of
> turns to use cable as choke?

858. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F5E14F.869EE69B@oio.net>
Source record: 177875

Jim,
That's an expensive way to use ladder-line. If the distance
to the 'outside' is fairly short (<10-15 feet), I'd run coax
outside to a good balun, then ladder-line to the antenna...
'Doc

859. Re: A different sort of fractal challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F5E200.DECFFB6A@oio.net>
Source record: 177876

jimmy john,
It will be a challenge, and sometimes even as bad as
cafeen(sp) withdraw'l, but I'll try it. I'll miss "poking
that stick" at ol'Frac, though...
'Doc

860. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39F5D4E3.64C43FC0@berkshire.net>
Source record: 177877

Fractenna wrote:
>
> >
> >On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
> >wrote:
> >
> >>
> >>"Fractenna" <fractenna@aol.com> wrote in message
> >>news:20001024130121.19548.00001926@ng-fi1.aol.com...
> >>>
> >>> PLEASE talk to your attorney about this: It will have grave consequences
> >>for
> >>> you at a later time to have made such misleading public statements.
> >>>
> >>> Nathan Cohen, Ph.D.
> >>
> >>Specifically, what did I say that was incorrect or misleading? If anything
> >>I said was incorrect, then I would be happy to correct.
> >>
> >>Steve
> >>
> >
> >Hi Steve,
> >
> >It appears that your #1 point negates all other claims of copyright
> >protection when those figures became part of public domain - again.
> >
> >Absolutely ever other work is derivative and as the courts have
> >adjudicated: data lists do not constitute copyrightable content. As
> >EZNEC is based on a list of parameters, EZNEC files in and of
> >themselves do not carry copyright protection. (They may contain trade
> >secrets - but that cat is out of the bag.)
> >
> >If we were to allow the argument for arguments sake, then the
> >complainant would risk being sued by Roy for copyright violation. The
> >reductio ad absurdum is that there were EZNEC files in existence long
> >before the content that is found to be contentious. Hence that same
> >contentious content necessarily contains copies of those earlier files
> >and to claim copyright violation necessarily constitutes an
> >acknowledged prior copyright violation of those same previous files.
> >
> >The comedy of the absurd is not foreign to these topics though.
> >
> >73's

> >Richard Clark, KB7QHC
>
> Does ANYONE understand this person??
>
> NC

Does ANYONE understand this person??

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

861. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F5E278.7CFA579C@hiwaay.net>
Source record: 177878

Actually, Chip, how would you know?- you seem to have problems recognizing great insults when you see them. "Fractanal Farter" ranks with "DipChip" (rhymes with DipS**t"). Your juvenile exchanges on the Attic antenna subject are typical- Chip is starting to sound like Phil, where the immature responses were once reserved for that entity.

But---I digress, but, that seems to be the norm where the chipster is involved.

Hope this helps- Have a good day- Bill-W4BSG

Fractenna wrote:
>
> >
> >He is known by many of us here in MA as the
> >Belmont Bozo, or by some as "dipchip"...
> >especially on the cluster....where he spots himself,
> >the epitome of egomaniacal behavior....
>
> Actually Chuck, this is not true. Most people on the cluster have known me for
> 26 years. Could you provide evidence of this slander and libel?
>
> Thanks!
>
> 73
> Chip N1IR

862. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F5E07C.D4706109@oio.net>
Source record: 177879

Philip de Cadanet wrote:
>
> When using a solid state transceiver without external atu is it
> advisable to use 52 or 75 ohm coax to feed a mono band HF dipole
> antenna?
>
> Many thanks.
>
> Phil G4ZOW

Phil,
Between the two, it would make more sense to use the 50 ohm
coax. That assumes that the transmitter's output is 50 ohms,
and the antenna input is close to 50 ohms. If the antenna and
transmitter are really close to 50 ohms, using 75 ohms coax
would mean something on the order of 1.5:1 SWR. I think it
would probably come down to the quality of the coax, and the
co$t...
'Doc

863. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <vBIJ5.5222$UL.334382@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177880

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024135952.10564.00000946@ng-cg1.aol.com...
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001024130121.19548.00001926@ng-fi1.aol.com...
> >>
> >> PLEASE talk to your attorney about this: It will have grave
consequences
> >for
> >> you at a later time to have made such misleading public statements.
> >>
> >> Nathan Cohen, Ph.D.
> >
> >Specifically, what did I say that was incorrect or misleading? If
anything
> >I said was incorrect, then I would be happy to correct.
> >
> >Steve
>
>
> The issue is the MI2 file you produced as a derivative work under "fair
use".
> Explain how your allusions have ANY reference to this.
>
> NC

Thank you for publicly acknowledging the fact that the MI2 EZNEC file I produced was done so as a derivative work under "fair use". As such, the file itself belongs to me. I would agree that the IP belongs to you and I would in no way ever infringe upon your ownership or rights in that regard.

You personally make the design freely available to hams for general use and evaluation anyway, so I'm having a real hard time understanding how you can claim any damages against Roy. The patents that you were given publicly disseminate the IP. As a result, the MI2 design, graphical depictions, drawings, etc. are all public domain. That's why patents provide you with protection against infringement of your IP rights. In my opinion, "copyrights" on the MI2 design as they would exist in an independently produced EZNEC file are long gone. You might have a case if someone were to directly reproduce one of your figures or the actual file that you created.

In any event, the Minkowski Island Loop (MI2) has been depicted in other publicly available works, the copyright to which you have no claim (at least it would seem). Namely, the US Government patent document (checked with an attorney on that one - infringement is the issue there, not copyright) and the UCLA Master's Thesis. Any EZNEC file created from the figures in the

UCLA thesis would have nothing to do with any copyrighted figures you created of the MI2 loop. In my opinion, you would have no copyright claim in the event someone created an EZNEC file from this document and then subsequently distributed it over the Internet. IP would clearly be a different issue and you need to start with UCLA to clear that up.

Steve

864. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F5E87B.51A97C3F@bellatlantic.net>
Source record: 177881

The antenna is also written up in 73 magazine, October 1999.

VE9SRB wrote:

> Just as a matter of record, "depictions" of the MI2 Loop antenna
> sufficiently detailed to measure relative dimensions and create ones own NEC
> or EZNEC model can be found in the following sources (others may exist).
>
> 1) US Patent 6,104,349. A US Patent is not a "copyrightable" document and
> the US Patent office has all rights to reproduce and distribute the
> document. It is legal and fair derivative use of the patent to use the
> figures or any other information in the patent to verify patent claims,
> model the patented antenna's performance with EZNEC etc, so long as one does
> not infringe on the claims of the patent.
>
> 2) Communications Quarterly published articles as follows (copyright not
> clearly claimed nor indicated). Direct Reproduction of the article would
> require the publisher's permission. All IP belongs to the author.
> Direction reproduction of a specific figure would require author's
> permission. Measuring relative dimensions of the antenna from a figure to
> create ones own NEC or EZNEC model to verify antenna performance might be
> considered fair and derivative use. The created EZNEC model would then
> belong to the creator of said model.
> - Fractal Antennas Part 1 - Nathan Cohen, Summer 1995
> - Fractal Antennas Part 2 - Nathan Cohen, Summer 1996
> - Fractal Loops and the Small Loop Approximation - Nathan Cohen, Winter
> 1996
>
> 3) Radiokit - elettronica, October 2000. Two figures of the MI2 are
> presented. One has dimensions and is clearly marked (c) 1999 Fractal
> Antenna Systems. The other figure has no clear copyright indication.
>
> 4) www.luminet.net/~wenonah/cfa/fractal.htm Figure of MI2 loop marked
> courtesy of RadioWorld Magazine
>
> 5) RadioWorld Magazine - September 1, 1999
>
> 6) Fractal Antennas - Design, Characterization and Applications. A Masters
> Thesis from UCLA (c) John Gianvittorio 2000. This was made publically
> available in March 2000 and the copyright for the images in the document
> apparently belongs to John Gianvittorio not FAS or Nathan Cohen???

865. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F5E9CB.20BE39E3@uci.edu>
Source record: 177882

Fractenna wrote:
> You asked me a question; I asked you the answer. So, which category of
> copyright does EZNEC fall into?

The program EZNEC is covered by copyrights. Do you think that Roy's
copyrights cover your antenna?

866. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <tco4t8.a9o.ln@mail.specsol.com>
Source record: 177883

CAM <cam2338@bigfoot.com> wrote:

<snip>

> The SGC is inherently an unbalanced device. Will you use a balun? If
> so, you will have problems trying to design a balun to feed all those
> high-resistance/high-reactance loades.

Forgot that part; nope, want to avoid baluns.

> I have used an SGC-230 to feed a 32ft tall vertical and it worked well
> on 40m-17m. It even worked to a certain extent on 75m - lots better than
> most 75m mobiles.
>

This may be better. I do have a 1/4 wave 40M vertical in the back yard.

>> FWIW, the antenna at the end of the twin lead would look electrically about
>> the same as a G5RV.

> In that case, it will work well on some bands and not so well on others.
> --
> http://www.mindspring.com/~w6rca

Thanks,

Jim Pennino

867. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9lo4t8.a9o.ln@mail.specsol.com>
Source record: 177884

Fractenna <fractenna@aol.com> wrote:
>>

<snip>

>>
>>Hi Steve,
>>
>>It appears that your #1 point negates all other claims of copyright
>>protection when those figures became part of public domain - again.
>>
>>Absolutely ever other work is derivative and as the courts have
>>adjudicated: data lists do not constitute copyrightable content. As
>>EZNEC is based on a list of parameters, EZNEC files in and of
>>themselves do not carry copyright protection. (They may contain trade
>>secrets - but that cat is out of the bag.)
>>
>>If we were to allow the argument for arguments sake, then the
>>complainant would risk being sued by Roy for copyright violation. The
>>reductio ad absurdum is that there were EZNEC files in existence long
>>before the content that is found to be contentious. Hence that same
>>contentious content necessarily contains copies of those earlier files
>>and to claim copyright violation necessarily constitutes an
>>acknowledged prior copyright violation of those same previous files.
>>
>>The comedy of the absurd is not foreign to these topics though.
>>
>>73's
>>Richard Clark, KB7QHC

> Does ANYONE understand this person??

> NC

Sure, it is a simple, logical examination of your "infringement" claim.

Bottom line; you are a joke.

Jim Pennino

868. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F5E9A5.BDE05109@hiwaay.net>
Source record: 177885

I understand what he, and Steve, are saying- the problem is that THe Chipster does not understand either plain English, or straight-forward descriptive language. Richard was VERY clear. A thumb-nail summary is, 1. you have no case, and 2, you are absurd.

Is that any clearer?

Hope this helps- Bill

Fractenna wrote:
>
> >
> >On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
> >wrote:
> >
> >>
> >>"Fractenna" <fractenna@aol.com> wrote in message
> >>news:20001024130121.19548.00001926@ng-fi1.aol.com...
> >>>
> >>> PLEASE talk to your attorney about this: It will have grave consequences
> >>for
> >>> you at a later time to have made such misleading public statements.
> >>>
> >>> Nathan Cohen, Ph.D.
> >>
> >>Specifically, what did I say that was incorrect or misleading? If anything
> >>I said was incorrect, then I would be happy to correct.
> >>
> >>Steve
> >>
> >
> >Hi Steve,
> >
> >It appears that your #1 point negates all other claims of copyright
> >protection when those figures became part of public domain - again.
> >
> >Absolutely ever other work is derivative and as the courts have
> >adjudicated: data lists do not constitute copyrightable content. As
> >EZNEC is based on a list of parameters, EZNEC files in and of
> >themselves do not carry copyright protection. (They may contain trade
> >secrets - but that cat is out of the bag.)
> >
> >If we were to allow the argument for arguments sake, then the
> >complainant would risk being sued by Roy for copyright violation. The
> >reductio ad absurdum is that there were EZNEC files in existence long

> >before the content that is found to be contentious. Hence that same
> >contentious content necessarily contains copies of those earlier files
> >and to claim copyright violation necessarily constitutes an
> >acknowledged prior copyright violation of those same previous files.
> >
> >The comedy of the absurd is not foreign to these topics though.
> >
> >73's
> >Richard Clark, KB7QHC
>
> Does ANYONE understand this person??
>
> NC

869. Re: A different sort of fractal challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F5EA0C.68BBB27F@hiwaay.net>
Source record: 177886

I'll try

Bill-W4BSG

jimmy john wrote:
>
> I'd like to challenge everyone in this NG to completely ignore, not reply,
> not post, not acknowledge in any way, shape or form - ANYTHING related to
> fractal ANYTHING for 1 solid week. No exceptions. No matter how much
> goading, boasting, bragging or harassment anyone dishes out. Probably
> harder than quitting smoking or going to that first AA meeting.
>
> I bet the cycle would be broken and this NG would return to relevant and
> useful discussions. Or maybe the goings-on ARE considered as relevant and
> useful and I just don't "get it".
>
> Please start.... now. (including this message).
>
> thanks all.

870. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22626-39F5EA49-6@storefull-115.iap.bryant.webtv.net>
Source record: 177887

Philip de Cadanet wrote:
"---use 52 ohm or 75 ohm coax to feed a monoband HF dipole antenna?"

Depends on the height above the ground because the antenna`s impedance rises with the height up to about 0.4 wavelength. At 1/4 wavelength height to 1/2 wavelength height, 75 ohms is probably closer to the impedance the dipole presents to the coax. At antenna heights most often used by hams (significantly less than 1/4 wavelength) 50 ohms is usually closer to the impedance presented by the dipole.

Best regards, Richard Harrison, KB5WZI

871. Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <R6mJ5.5238$UL.334510@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177888

Although there is no dispute that the MI2 Fractal Loop performs or works as claimed and offers this performance in a reduced aperture, it is evident that the Fractal nature of the antenna geometry is not the significant factor in determining the antenna's performance. To verify this, an EZNEC model of the MI2 antenna was created as a method to determine the baseline performance of the MI2. The baseline MI2 performance at first resonance is as follows:

Fr = 15.155 MHz
Resistance = 28.4 ohms
Gain = 1.83 dBi
2:1 SWR bandwidth wrt 50 ohms = 1.05%

These results are very consistent with the claimed performance of the antenna as presented by the MI2 antenna designer.

About a month ago, several arbitrarily shaped antennas were designed (about 5-10 minutes of effort in each case) occupying the same physical aperture as the MI2. These antennas performed as well as and in some cases, better than the MI2. The EZNEC files and results for these antennas can be found at www.eznec.com under the FTP site.

To further prove that the Fractal geometry is not the significant factor is achieving performance, yet another arbitrarily shaped design was created and modeled in EZNEC. This antenna has a slightly smaller aperture size and shorter total wire length than the MI2. It is not a "meander" design (as defined by the MI2 designer) like two of the previous antennas that were subsequently dismissed by the designer of the MI2 antenna as not being able to work. This new design is simply an arbitrary, yet symmetrical, rearrangement of wire shape in the same aperture. This new design took about 6.7 minutes to create. Performance of the new design at first resonance is as follows:

Fr = 16.06 MHz
Resistance = 32.8 ohms
Gain = 1.91 dBi
2:1 SWR bandwidth wrt 50 ohms = 1.62%

Clearly, if a simple rearrangement of the wire into a non-fractal shape can result in similar or better performance, the Fractal geometry is not the significant factor in determining antenna performance. Although the antenna geometry will impact antenna performance, factors such as feed point location, total wire length, and aperture size are as and in many cases, more significant than the geometry itself. Models of this new antenna can be found at www.eznec.com in the FTP site (MI2 Folder) under the name of random4.ez.

Steve, VE9SRB

"You always get back what you give"

872. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F5F196.88164E4B@bigfoot.com>
Source record: 177889

'Doc wrote:

> That's an expensive way to use ladder-line. If the distance
> to the 'outside' is fairly short (<10-15 feet), I'd run coax
> outside to a good balun, then ladder-line to the antenna...

What range of impedances will the balun see?
--
http://www.mindspring.com/~w6rca

873. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F5F30C.19FD5790@bigfoot.com>
Source record: 177890

'Doc wrote:
> Between the two, it would make more sense to use the 50 ohm
> coax. That assumes that the transmitter's output is 50 ohms,
> and the antenna input is close to 50 ohms. If the antenna and
> transmitter are really close to 50 ohms, using 75 ohms coax
> would mean something on the order of 1.5:1 SWR.

OTOH, if the antenna impedance is close to 75 ohms, ...
--
http://www.mindspring.com/~w6rca

874. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F5F38D.93B0B122@bellatlantic.net>
Source record: 177891

Thanks! I've been brewing a 3 element 6 meter beam that
gives me only 50 to 50.9 at the 1:5 to 1 points. I wanted
a valid comparison. Interesting - I get 3 MHZ at the 1.5
points down around 43 MHZ. Scratching my head on this...
I've taken the antenna and tripod to a friends house 30
miles away. Got the same readings using his coax, his
return loss bridge & generator as I get using the MFJ 259
and my coax. Tried different lengths of coax, and different
distances between elements - all to no avail. We've
temporarily concluded something must be wrong with
the gamm match. I'm using 7/8" tubing, so I ought to
get at least as much bandwidth as you saw with the Arrow.
It's good to have confirmation that I'm not on a wild goose
chase!

N8wwm wrote:

> It is well past 51mhz...let me check....hang on.. SWR on the 4 element Arrow 6
> meter beam, mounted on 35ft of tower...just a couple feet from the neck, does
> not exceed 1.5:1until 52.8 mhz.<mounted horizontally>
> 73
> Doug
>
> >Subject: Re: Where to start on 6M/HF?
> >From: ehsjr@bellatlantic.net
> >Date: 10/23/2000 11:07 PM Eastern Daylight Time
> >Message-id: <39F4FDD6.7E9C8AF7@bellatlantic.net>
> >
> >Doug,
> >
> >What is the 1.5:1 SWR bandwidth of that antenna?
> >
> >N8wwm wrote:
> >
> >> For 6 meter SSB I would reccomend Arrow's 4 element yagi.
> >>
> >> It fetures ease of assembly and very good workmanship.
> >>
> >> It turns with a light rotator and performs pretty well. I just got one and
> >am
> >> quite happy with it.
> >>
> >> 73 Doug
> >
> >

> >
> >
> >
> >
> >

875. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024170341.09991.00002566@ng-cg1.aol.com>
Source record: 177892

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001024135952.10564.00000946@ng-cg1.aol.com...
>> >"Fractenna" <fractenna@aol.com> wrote in message
>> >news:20001024130121.19548.00001926@ng-fi1.aol.com...
>> >>
>> >> PLEASE talk to your attorney about this: It will have grave
>consequences
>> >for
>> >> you at a later time to have made such misleading public statements.
>> >>
>> >> Nathan Cohen, Ph.D.
>> >
>> >Specifically, what did I say that was incorrect or misleading? If
>anything
>> >I said was incorrect, then I would be happy to correct.
>> >
>> >Steve
>>
>>
>> The issue is the MI2 file you produced as a derivative work under "fair
>use".
>> Explain how your allusions have ANY reference to this.
>>
>> NC
>
>Thank you for publicly acknowledging the fact that the MI2 EZNEC file I
>produced was done so as a derivative work under "fair use". As such, the
>file itself belongs to me. I would agree that the IP belongs to you and I
>would in no way ever infringe upon your ownership or rights in that regard.
>
>You personally make the design freely available to hams for general use and
>evaluation anyway, so I'm having a real hard time understanding how you can
>claim any damages against Roy. The patents that you were given publicly
>disseminate the IP. As a result, the MI2 design, graphical depictions,
>drawings, etc. are all public domain. That's why patents provide you with
>protection against infringement of your IP rights. In my opinion,
>"copyrights" on the MI2 design as they would exist in an independently
>produced EZNEC file are long gone. You might have a case if someone were to
>directly reproduce one of your figures or the actual file that you created.
>
>In any event, the Minkowski Island Loop (MI2) has been depicted in other
>publicly available works, the copyright to which you have no claim (at least

>it would seem). Namely, the US Government patent document (checked with an
>attorney on that one - infringement is the issue there, not copyright) and
>the UCLA Master's Thesis. Any EZNEC file created from the figures in the
>UCLA thesis would have nothing to do with any copyrighted figures you
>created of the MI2 loop. In my opinion, you would have no copyright claim
>in the event someone created an EZNEC file from this document and then
>subsequently distributed it over the Internet. IP would clearly be a
>different issue and you need to start with UCLA to clear that up.
>
>Steve

This is not a fine-distinction. If someone makes a derivative copy for personal scholarly use that is under the category of "fair use".

HOWEVER--

Roy Lewallen has published and distributed this file on a COMMERCIAL WEB SITE without authorization; indeed, in DEFIANCE of the notification that he is breaking copyright law.

That is NOT FAIR USE and is pirating.

He MUST remove the file from his web site.

Now: I don't want lectures on this. I am well-versed in copyright matters. I have been involved with copyrights for 19 years and hold several hundred. I am versed in the law. I am further guided by IP attorneys who affirm my understanding of the law. The law is clear and unambiguous.

This is NOT some game. Before the first of the month, Roy Lewallen will received a registered letter demanding that he remove the MI2 file.

If he does not , then legal action WILL--repeat WILL be taken. This will be a costly and losing battle for him and it is unfoirtunate that he confuses COPYRIGHT law and OWNERSHIP with --as he says--"bullying".

It is NOT bullying. It is enforcing a RIGHT OF OWNERSHIP.

NC

876. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024165627.09991.00002562@ng-cg1.aol.com>
Source record: 177893

>
>Although there is no dispute that the MI2 Fractal Loop performs or works as
>claimed and offers this performance in a reduced aperture, it is evident
>that the Fractal nature of the antenna geometry is not the significant
>factor in determining the antenna's performance. To verify this, an EZNEC
>model of the MI2 antenna was created as a method to determine the baseline
>performance of the MI2. The baseline MI2 performance at first resonance is
>as follows:
>
>Fr = 15.155 MHz
>Resistance = 28.4 ohms
>Gain = 1.83 dBi
>2:1 SWR bandwidth wrt 50 ohms = 1.05%
>
>These results are very consistent with the claimed performance of the
>antenna as presented by the MI2 antenna designer.
>
>About a month ago, several arbitrarily shaped antennas were designed (about
>5-10 minutes of effort in each case) occupying the same physical aperture as
>the MI2. These antennas performed as well as and in some cases, better than
>the MI2. The EZNEC files and results for these antennas can be found at
>www.eznec.com under the FTP site.
>
>To further prove that the Fractal geometry is not the significant factor is
>achieving performance, yet another arbitrarily shaped design was created and
>modeled in EZNEC. This antenna has a slightly smaller aperture size and
>shorter total wire length than the MI2. It is not a "meander" design (as
>defined by the MI2 designer) like two of the previous antennas that were
>subsequently dismissed by the designer of the MI2 antenna as not being able
>to work. This new design is simply an arbitrary, yet symmetrical,
>rearrangement of wire shape in the same aperture. This new design took
>about 6.7 minutes to create. Performance of the new design at first
>resonance is as follows:
>
>Fr = 16.06 MHz
>Resistance = 32.8 ohms
>Gain = 1.91 dBi
>2:1 SWR bandwidth wrt 50 ohms = 1.62%
>
>Clearly, if a simple rearrangement of the wire into a non-fractal shape can
>result in similar or better performance, the Fractal geometry is not the
>significant factor in determining antenna performance. Although the antenna
>geometry will impact antenna performance, factors such as feed point
>location, total wire length, and aperture size are as and in many cases,

>more significant than the geometry itself. Models of this new antenna can
>be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
>random4.ez.
>
>Steve, VE9SRB
>
>"You always get back what you give"

Unfortunately you have given nothing.

First, the random1.ez file is a FRACTAL. Thus your point has no relevance here.

Second, random2.ez and random3.ez are concatenated end load MEANDERS which do not model accurately under EZNEC. Please show us the data which confirms, for example, the behavior of random3.ez as a REAL ANTENNA. You will find that the reactance and gain are very much different from the EZNEC model, as you have chosen very close-spaced meanders.

Next, you have, as you claim, done a "throw away" on random4.ez. Fine; I will look at it and get back in about a week with my comments on it.

The bottom line is you have made a scientifically untenable statement. Your assertion that fractal geometry has no significance is against well-known and well-documented peer-reviewed publications.

Just alluding to the random fractals, it is extremely well known, and well accepted within the scholarly and professional antenna community, that Landstorfer and Sacher, and Linden/Altschuler antennas are optimized forms within the a priori FOM's so chosen. Their optimization schemes made no ad hoc assumptions about antenna 'shape' and fully allowed for more conventional--and as you say--arbitrarily shaped-- antennas.

Those other antennas were losers.

What I can see is that you are TRYING to say is that the MI2 that you modeled--under "fair use" for your personal scholarly purposes-- does not produce as high an FOM as two models which you spent a considerable amount of time modeling and 'discovering'. In fact, as I mentioned two months ago, meanders are inferior to fractal end loads, a result published in 1997, and also reported at ACES and APS meeting that year. I have several fractal end load loops which easily have better FOM's than the MI2 file..

Even other MI2's--THINK ABOUT WHAT THE TERM MI2 MEANS before anyone makes ignorant comments please; it is NOT ONE ANTENNA, but is a FAMILY of ISLAND antennas incorporating rectangular motifs of second iteration--are better than the MI2 file which you reproduced. They most certainly have excellent bandwidths. The 10M one has a 2:1 SWR of about 1.5 MHz to a 50 ohm feed.

I will be happy to forward a picture and an SWR plot from a REAL MI2 being used by an N3.

Just send to chipn1ir@aol.com and title:

" MI2 / SWR PIXS"

In other words, I don't know what you are driving at. You seem to want to make some scientific statement, and yet your comments , being both profoundly ignorant in the use of proper wording, and the results, don't support anything.

Why don't you write up your stuff and have it peer reviewed? You may benefit from additional professional comments on a subject in which you are, at best, a beginner at this time.

In the meantime, have Roy Lewallen remove the copyright MI2 file; it is an unathorized and illegal publication and distribution from a commercial web site. No permission has been granted in this case.

73
Chip N1IR

877. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024170610.09991.00002567@ng-cg1.aol.com>
Source record: 177894

>
>Fractenna <fractenna@aol.com> wrote:
>>>
>
><snip>
>
>>>
>>>Hi Steve,
>>>
>>>It appears that your #1 point negates all other claims of copyright
>>>protection when those figures became part of public domain - again.
>>>
>>>Absolutely ever other work is derivative and as the courts have
>>>adjudicated: data lists do not constitute copyrightable content. As
>>>EZNEC is based on a list of parameters, EZNEC files in and of
>>>themselves do not carry copyright protection. (They may contain trade
>>>secrets - but that cat is out of the bag.)
>>>
>>>If we were to allow the argument for arguments sake, then the
>>>complainant would risk being sued by Roy for copyright violation. The
>>>reductio ad absurdum is that there were EZNEC files in existence long
>>>before the content that is found to be contentious. Hence that same
>>>contentious content necessarily contains copies of those earlier files
>>>and to claim copyright violation necessarily constitutes an
>>>acknowledged prior copyright violation of those same previous files.
>>>
>>>The comedy of the absurd is not foreign to these topics though.
>>>
>>>73's
>>>Richard Clark, KB7QHC
>
>
>> Does ANYONE understand this person??
>
>> NC
>
>Sure, it is a simple, logical examination of your "infringement" claim.
>
>Bottom line; you are a joke.
>
>Jim Pennino
>
>

I have received many e-mails saying what an evil person I am for damaging Roy Lewallen.

Let me put it this way: whatever I am DOING, I will DO until--and on a grander scale of notification--Lewallen stops pirating my property.

Easy.

NC

878. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024165715.09991.00002563@ng-cg1.aol.com>
Source record: 177895

>The antenna is also written up in 73 magazine, October 1999.
>
>VE9SRB wrote:
>
>> Just as a matter of record, "depictions" of the MI2 Loop antenna
>> sufficiently detailed to measure relative dimensions and create ones own
>NEC
>> or EZNEC model can be found in the following sources (others may exist).
>>
>> 1) US Patent 6,104,349. A US Patent is not a "copyrightable" document and
>> the US Patent office has all rights to reproduce and distribute the
>> document. It is legal and fair derivative use of the patent to use the
>> figures or any other information in the patent to verify patent claims,
>> model the patented antenna's performance with EZNEC etc, so long as one
>does
>> not infringe on the claims of the patent.
>>
>> 2) Communications Quarterly published articles as follows (copyright not
>> clearly claimed nor indicated). Direct Reproduction of the article would
>> require the publisher's permission. All IP belongs to the author.
>> Direction reproduction of a specific figure would require author's
>> permission. Measuring relative dimensions of the antenna from a figure to
>> create ones own NEC or EZNEC model to verify antenna performance might be
>> considered fair and derivative use. The created EZNEC model would then
>> belong to the creator of said model.
>> - Fractal Antennas Part 1 - Nathan Cohen, Summer 1995
>> - Fractal Antennas Part 2 - Nathan Cohen, Summer 1996
>> - Fractal Loops and the Small Loop Approximation - Nathan Cohen, Winter
>> 1996
>>
>> 3) Radiokit - elettronica, October 2000. Two figures of the MI2 are
>> presented. One has dimensions and is clearly marked (c) 1999 Fractal
>> Antenna Systems. The other figure has no clear copyright indication.
>>
>> 4) www.luminet.net/~wenonah/cfa/fractal.htm Figure of MI2 loop marked
>> courtesy of RadioWorld Magazine
>>
>> 5) RadioWorld Magazine - September 1, 1999
>>
>> 6) Fractal Antennas - Design, Characterization and Applications. A
>Masters
>> Thesis from UCLA (c) John Gianvittorio 2000. This was made publically
>> available in March 2000 and the copyright for the images in the document
>> apparently belongs to John Gianvittorio not FAS or Nathan Cohen???

>

I see; its "non sequitar" time. OK; here;s one.

The red and yellow leaves sure are pretty!

Chip N1IR

879. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F5F811.BBFE755@bellatlantic.net>
Source record: 177896

That's another $100 dollars you owe to K1BQT.

Fractenna wrote:

> Fine; Now; look what an idiot you have made of yourself. You IGNORE the FACT .

880. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_3nJ5.5284$UL.337954@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177897

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024165627.09991.00002562@ng-cg1.aol.com...

>
> First, the random1.ez file is a FRACTAL. Thus your point has no relevance
here.
>

Convenient that you simply declare all antennas as fractals.

> Second, random2.ez and random3.ez are concatenated end load MEANDERS which
do
> not model accurately under EZNEC. Please show us the data which confirms,
for
> example, the behavior of random3.ez as a REAL ANTENNA. You will find that
the
> reactance and gain are very much different from the EZNEC model, as you
have
> chosen very close-spaced meanders.
>

Measurements underway!

> Next, you have, as you claim, done a "throw away" on random4.ez. Fine; I
will
> look at it and get back in about a week with my comments on it.
>

You're just going to call it a Fractal too, so what's the point?

> The bottom line is you have made a scientifically untenable statement.
Your
> assertion that fractal geometry has no significance is against well-known
and
> well-documented peer-reviewed publications.
>

What I have made is a statement that you don't like and can't deal with. My conclusions are based on principles as scientifically sound, in fact more so than the scientific principles you use to describe the performance of your designs. At least I went through the effort of comparing the MI2 antenna against non-fractal designs occupying the same aperture and having similar wire length.

The publications and articles that I have read simply describe the performance of Fractal antennas and various Fractal designs. The only comparison with other designs that I am aware of is against the "full size"

designs. I have yet to see detailed comparisons against non-fractal designs
of the same aperture size, having similar wire lengths, etc. etc.

> Just alluding to the random fractals, it is extremely well known, and well
> accepted within the scholarly and professional antenna community, that
> Landstorfer and Sacher, and Linden/Altschuler antennas are optimized
forms
> within the a priori FOM's so chosen. Their optimization schemes made no ad
hoc
> assumptions about antenna 'shape' and fully allowed for more
conventional--and
> as you say--arbitrarily shaped-- antennas.
>
> Those other antennas were losers.
>
> What I can see is that you are TRYING to say is that the MI2 that you
> modeled--under "fair use" for your personal scholarly purposes-- does not
> produce as high an FOM as two models which you spent a considerable amount
of
> time modeling and 'discovering'.

Considerable time? How about 5-10 minutes each. I can do another one
tonight. In fact, I will. Look for random5.ez tomorrow.

>In fact, as I mentioned two months ago,
> meanders are inferior to fractal end loads, a result published in 1997,
and
> also reported at ACES and APS meeting that year. I have several fractal
end
> load loops which easily have better FOM's than the MI2 file..
>

What's the point to this statement? I already know that other designs
perform better than the MI2.

> Even other MI2's--THINK ABOUT WHAT THE TERM MI2 MEANS before anyone makes
> ignorant comments please; it is NOT ONE ANTENNA, but is a FAMILY of ISLAND
> antennas incorporating rectangular motifs of second iteration--are better
than
> the MI2 file which you reproduced. They most certainly have excellent
> bandwidths. The 10M one has a 2:1 SWR of about 1.5 MHz to a 50 ohm feed.
>

In and of itself, this example is meaningless. Please provide all details
of the antenna construction. How high was the antenna mounted above
ground?. How was it was fed? Is this a feed point measurement? Etc. Etc.

If you provide a file I can check it out and then come up with a non-fractal
design offering similar or better performance.

> I will be happy to forward a picture and an SWR plot from a REAL MI2 being
used
> by an N3.

>
> Just send to chipn1ir@aol.com and title:
>
> " MI2 / SWR PIXS"
>

Sounds like you are going to send it to yourself???

> In other words, I don't know what you are driving at. You seem to want to
make
> some scientific statement, and yet your comments , being both profoundly
> ignorant in the use of proper wording, and the results, don't support
anything.
>
> Why don't you write up your stuff and have it peer reviewed? You may
benefit
> from additional professional comments on a subject in which you are, at
best, a
> beginner at this time.
>

Good idea. I think I will. Hey, how come I have not seen any of your articles in the IEEE A&P journal? Oh, I forgot, they make you sign over the copyrights.

>
> In the meantime, have Roy Lewallen remove the copyright MI2 file; it is an
> unathorized and illegal publication and distribution from a commercial web
> site. No permission has been granted in this case.
>

I have no authority over Roy. Besides, its not your file.

> 73
> Chip N1IR

881. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22624-39F5F3BF-32@storefull-115.iap.bryant.webtv.net>
Source record: 177898

Phil, G4ZOW wrote:
"---use 52 or 75 ohm coax to feed a mono band HF dipole antenna?"

50-ohm coax carries power at lower peak voltage than 75-ohm coax, and carries more before breaking down. 30-ohm coax would or could be the most capable of carrying maximum power were it available.

75-ohm coax carries power at lower current than 50-ohm coax, and thus has less loss. 77-ohm coax would be the least lossy were it available.

Best regards, Richard Harrison, KB5WZI

882. Fractenna shut your ugly face

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: AntiMackey <reg@pdq.com>
Message-ID: <39F607A0.DB72BE38@pdq.com>
Source record: 177899

We are all completely sick and tired of hearing from you.

883. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39F5FDEB.946624B0@west.raytheon.com>
Source record: 177900

Roy Lewallen wrote:
>
> No, the rod functions as both an AM and FM antenna. It's very
> inefficient on AM, but that's made up for by a large amount of receiver
> gain. The capacitance of the coax acts as part of a voltage divider
> which reduces the AM signal from the rod. It's specially made to have as
> little capacitance as possible to minimize this attenuation. Someone
> with more experience can correct me on this, but I don't think a typical
> ferrite rod antenna will receive as much signal as a typical whip of
> half meter or so length.

I think the output of a short monopole and typical loopstick are often comparable. The loopstick is preferred for portable applications because of better compactness and greatly reduced sensitivity to detuning from nearby objects which would require an additional manual control. Let's take a look at some hypothetical numbers:

Assume:

F = 1 MHz // operating frequency
E = 0.001 V/m // RF electric field strength, assumed vertically polarized

The effective height of a short monopole (without a top hat) operating against a ground image is one half it's physical height. Therefore the effective height of a monopole 1/2 m high is 1/4m. The voltage induced at the base of the monopole is the electric field strength times the effective height.

Vmonopole = 0.001 (V/m) * 0.25 (m) = 250 * 10^-6.

The antenna looks like a 250 uV source in series with a very large (>10,000 ohms) capacitive reactance. The antenna could directly drive a high impedance RF amplifier but is usually resonated with an inductor to provide front end selectivity and some voltage gain.

The magnetic field, H (A/m) is equal to the electric field divided by the characteristic impedance of free space, 120 * pi (ohms).

H = 0.001 (V/m) / (120*pi) = 2.7 * 10^-6 (A/m)

Assume the ferrite loopstick is 1/2 inch (12.7 mm) in diameter and long enough to achieve an effective permeability of 50 compared to free space. The permeability of free space = 4*pi*10^-7 Henry/m.

The peak magnetic flux density in the loopstick is the magnetic field strength times the effective permeability.

Bpeak = 2.7 * 10^-6 (A/m) * 4*pi*10^-7 (H/m) * 50 = 170 * 10^-12 (Wb/m^2)

The peak magnetic flux through the coil, PHIpeak, is approximately equal to the peak magnetic flux density, B, times the cross sectional area containing the flux.

PHIpeak (Wb) = 170 * 10^-12 (Wb/m^2) * pi/4 * (0.0127 (m))^2 = 21.5 * 10^-15 (Wb)

The voltage induced is equal to the number of turns times the time rate of change of magnetic flux in the loopstick. Assume N = 100 turns.

Vloopstick = N * 2*pi*F * PHIpeak = 100 * 6.28*10^6 (radians/sec) * 21.5 * 10^-15 (Wb) = 13.5 * 10^-6 (V).

The open circuit voltage across the loopstick is only 13.5/250 = 5.4% open circuit voltage at the base of the 1/2m monopole. In practice, the loopstick is almost always resonated with a capacitor which provides a voltage gain (proportional to the loaded Q of the resonant circuit) of between 10 and 50. The higher impedance of the short monopole makes achieving a loaded Q of much more than 20 problematical.

In the end, the monopole wins by between 10 and 20 dB as long as there is negligible capacitance between the base of the monopole and ground. As little as 100 pF of shunt capacitance to ground can completely negate the monopole's advantage. Of course in this day and age, low noise gain is so cheap that a few dB is of little practical consequence.

bart
wb6hqk

884. 6m Beam or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Peter <ve9ptr@hotmail.com>
Message-ID: <6_nJ5.3490$iY1.77529@sodalite.nbnet.nb.ca>
Source record: 177901
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Which is the best way to go? I'd like to operate FM and SSB....

885. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29976-39F60413-61@storefull-118.iap.bryant.webtv.net>
Source record: 177902

Reg wrote:
"I am presently taking an interest in the sort of errors which may occur when using SWR meters in general, either due to the instrument itself or to assumptions commonly made about the system it is used with."

Contact Bird. It seems they are allowed to export now that the "Cold War" is over.

A German firm would probably respond with an engineer and a device at your door. A French firm probably would not respond at all. But, from the American firm, you will probably get requested literature and a catalog.

There is a chapter (No.10) in the Evans & Jessop VHF-UHF Manual published by the RSGB which covers reflectometers fairly well. The Bird`s accuracy easily surpasses expectations of the authors of Chapter No.10.

Best regards, Richard Harrison, KB5WZI

886. wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: "Andrew J. O'Brien" <obrienaj@netsync.net>
Message-ID: <svc4cs9fbf9ae1@corp.supernews.com>
Source record: 177903

I was thinking about building a simple , short spaced (8 foot), two element beam for 20M made from wire as opposed to aluminum tubing. I have a design in mind that will use supports to get it up around 30 feet. My question is about feed method and matching. I was thinking about a reflector and a driven element fed as a dipole, I assume that will work. I am planning to fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or 1:1? I am confused because I have seen two differing articles and one says 4:1 and the other 1:1 . I assume that the center of the dipole would be close to 50 ohms and that 1:1 would be suffice ?

Also, I think I can get the two wire elements fairly close to be aligned with each other, but some sag might exist. How critical is the alignment before it adversely affects the performace, and my Yagi becomes Yagi-less.?

Andy KB2EOQ

887. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F6101F.6890FC11@uci.edu>
Source record: 177904

Fractenna wrote:
> Roy Lewallen has published and distributed this file on a COMMERCIAL WEB SITE
> without authorization; indeed, in DEFIANCE of the notification that he is
> breaking copyright law.

How can you claim ownership of a file that you did not create? It's
easily arguable that fair use was made of publicly available
information. You've barely a leg to stand on here, Chip.

888. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001024184917.09846.00000036@ng-fl1.aol.com>
Source record: 177905

> look what an idiot you have made of yourself.<

Oh oh, I smell a personal attack.

>THERE WERE NO TRANSFER OF RIGHTS.<

What are first North American Publication Rights if not rights? Bananas? Tacos? You sold 'em Chip. You sold them to CQ Communications Inc. CQ even (eventually) paid you. Was that a 1099 you got, or was CQ just sending out recycled government paper for the hell of it?

Now, when that article containing the MI2 went into editorial production, who owned the copyright on the matierals you provided? I know you're not an idiot and I know you are an educator, so (unlike me) I know you'll answer the question honestly, fully, and candidly.

Rick K1BQT

889. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39F61201.16AC4BAC@GTE.net>
Source record: 177906

VE9SRB wrote:

> Although there is no dispute that the MI2 Fractal Loop performs or works as
> claimed and offers this performance in a reduced aperture, it is evident
> that the Fractal nature of the antenna geometry is not the significant
> factor in determining the antenna's performance. To verify this, an EZNEC
> model of the MI2 antenna was created as a method to determine the baseline
> performance of the MI2. The baseline MI2 performance at first resonance is
> as follows:
>
> Fr = 15.155 MHz
> Resistance = 28.4 ohms
> Gain = 1.83 dBi
> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
>
> These results are very consistent with the claimed performance of the
> antenna as presented by the MI2 antenna designer.
>
> About a month ago, several arbitrarily shaped antennas were designed (about
> 5-10 minutes of effort in each case) occupying the same physical aperture as
> the MI2. These antennas performed as well as and in some cases, better than
> the MI2. The EZNEC files and results for these antennas can be found at
> www.eznec.com under the FTP site.
>
> To further prove that the Fractal geometry is not the significant factor is
> achieving performance, yet another arbitrarily shaped design was created and
> modeled in EZNEC. This antenna has a slightly smaller aperture size and
> shorter total wire length than the MI2. It is not a "meander" design (as
> defined by the MI2 designer) like two of the previous antennas that were
> subsequently dismissed by the designer of the MI2 antenna as not being able
> to work. This new design is simply an arbitrary, yet symmetrical,
> rearrangement of wire shape in the same aperture. This new design took
> about 6.7 minutes to create. Performance of the new design at first
> resonance is as follows:
>
> Fr = 16.06 MHz
> Resistance = 32.8 ohms
> Gain = 1.91 dBi
> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
>
> Clearly, if a simple rearrangement of the wire into a non-fractal shape can
> result in similar or better performance, the Fractal geometry is not the
> significant factor in determining antenna performance. Although the antenna
> geometry will impact antenna performance, factors such as feed point

> location, total wire length, and aperture size are as and in many cases,
> more significant than the geometry itself. Models of this new antenna can
> be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
> random4.ez.
>
> Steve, VE9SRB
>
> "You always get back what you give"

Thanks for the insightful post Steve. This is what I (many) have long suspected-
appreciate you doing the "brain work".

Dale W4OP

890. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F615F0.E424013B@eznec.com>
Source record: 177907

Fractenna wrote:

> . . .

> This is NOT some game. Before the first of the month, Roy Lewallen will
> received a registered letter demanding that he remove the MI2 file.

> . . .

On September 29, Chip said that a formal letter "would be sent" to me. On September 30, that it "is being sent". On October 21, he said that "shortly Mr. Lewallen will receive" it.

I'm sure that everyone will breathe a sigh of relief when I finally am sued, so that the matter can be determined in the courts, as they should be, rather than by unfounded -- and slanderous -- ranting and raving. I certainly will.

Chip: Mail sometimes takes as long as a week to get from one coast to the other, so I recommend mailing it no later than tomorrow if it's to get here by the first. That is, assuming you mean the first of November. If not, what date should I mark on my calendar?

Roy Lewallen, W7EL

891. Re: Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <20001024192912.10865.00001151@ng-df1.aol.com>
Source record: 177908

>No need to, as here in Day 3 of Suit watch I expect Ed McMahon to arrive
>before your process server.
>

Hilarious! I come down here to read the bear-baiting more than the antenna
stuff!

Kï¿½MB
(can I be sued for laffing?)

892. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F61B32.4E3A@wt.net>
Source record: 177909

Jim Kelley wrote:

>
> So your claim is that it is a violation of copyright to produce a table
> of numbers which represent the dimensions of an antenna that is in the
> public domain, and for which radio amateurs and others have been
> publicly invited to build? Sounds like a weak case to me.

I'm scratching my head. Frac says yep, he agree's , it's a weak case,
but that everything else you said is wrong. Ok, lets review the
question.:

"So your claim is that it is a violation of copyright to produce a table
> of numbers which represent the dimensions of an antenna that is in the
> public domain, and for which radio amateurs and others have been
> publicly invited to build? "

Ok, we know hams were invited to build this, and compete against it. I
don't see how he can disagree with this statement. Which leaves the
first, where you ask him if his claim is that it is a violation of
copyright to produce a table of numbers which represent the dimensions
of an antenna that is in the public domain is true. He disagrees with
that. So that means he really agrees that it is legal to do this. If he
agrees this is legal, why does he keep pressing this? He's a confused
puppy. MK

--
http://web.wt.net/~nm5k

893. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F61F0F.28E7DCFC@eznec.com>
Source record: 177910

I recommend that you download the free EZNEC demo program from http://eznec.com. With it, you'll be able to model the antenna, and determine the wire lengths you need and the pattern you'll get. It'll also show you the feedpoint impedance. The impedance at resonance will almost certainly be less than 50 ohms. If it's less than about 25, you'd get the lowest SWR by using a 4:1 balun, connected with the low-Z side toward the antenna. Otherwise, a 1:1 balun would be best. I definitely recommend using a balun. Radiation from the feedline might otherwise degrade your front/back ratio.

Another option you might consider if the feedpoint impedance is too low is to use a folded dipole as the driven element. You can make this from TV twinlead. Unfortunately, EZNEC won't be able to give you a precisely accurate feedpoint impedance because of the dielectric, so you'd have to cut and try a bit. However, you could still design the antenna with EZNEC using a single wire driven element, then assume that the impedance using a folded dipole driven element would be 4 times higher when adjusted to resonance. Adjusting the driven element length to get the best match won't have much of an effect on antenna performance, so the EZNEC gain, front/back, and pattern results would be valid.

Roy Lewallen, W7EL

"Andrew J. O'Brien" wrote:
>
> I was thinking about building a simple , short spaced (8 foot), two element
> beam for 20M made from wire as opposed to aluminum tubing. I have a design
> in mind that will use supports to get it up around 30 feet. My question is
> about feed method and matching. I was thinking about a reflector and a
> driven element fed as a dipole, I assume that will work. I am planning to
> fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or
> 1:1? I am confused because I have seen two differing articles and one
> says 4:1 and the other 1:1 . I assume that the center of the dipole would
> be close to 50 ohms and that 1:1 would be suffice ?
>
> Also, I think I can get the two wire elements fairly close to be aligned
> with each other, but some sag might exist. How critical is the alignment
> before it adversely affects the performace, and my Yagi becomes Yagi-less.?
>
> Andy KB2EOQ

894. Re: 6m Beam or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39F61C5D.6A113077@dialpoint.net>
Source record: 177911
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

You will probably need two beams. Most of them will not cover the wide frequency range. SSB is usually horizontal and usually below 50.300. FM is above 52 mhz and vertical.

Peter wrote:
>
> Which is the best way to go? I'd like to operate FM and SSB....

895. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F62B30.CC7FB1EC@uci.edu>
Source record: 177912

Mark Keith wrote:
> I'm scratching my head. Frac says yep, he agree's , it's a weak case,
> but that everything else you said is wrong. Ok, lets review the
> question.:
>
> "So your claim is that it is a violation of copyright to produce a table
> > of numbers which represent the dimensions of an antenna that is in the
> > public domain, and for which radio amateurs and others have been
> > publicly invited to build? "
>
> Ok, we know hams were invited to build this, and compete against it. I
> don't see how he can disagree with this statement. Which leaves the
> first, where you ask him if his claim is that it is a violation of
> copyright to produce a table of numbers which represent the dimensions
> of an antenna that is in the public domain is true. He disagrees with
> that. So that means he really agrees that it is legal to do this. If he
> agrees this is legal, why does he keep pressing this? He's a confused
> puppy. MK

Thank you. Yes, what Dr. Cohen is essentially saying is that if he
draws a picture of of the Statue of Liberty and copyrights it, then his
copyright applies to any picture that I might subsequently draw of the
Statue of Liberty by claiming that mine is a derivitive work.

896. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39f6335b$0$12855$45beb828@newscene.com>
Source record: 177913

Nighthawks, 7-9 east coast time, 7255, LSB.

--jeffrey

In article <8t2ker$7bt$1@nntp.Stanford.EDU>, rjchen@Stanford.EDU says...
>
>I just installed a 40m antenna and would like to get a feel for the
>band. Anybody have any recommendations about which freqs to listen to at
>what times (i.e., nets, rag-chewing get-togethers, etc.)?
>
>Thanks,
>-Robert
>
>--

897. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <20384-39F6329E-20@storefull-111.iap.bryant.webtv.net>
Source record: 177914

Bart, WB6HQK wrote:
"In the end the monopole wins by between 10 and 20 dB as long as there is negligible capacitance between the base of the monopole and ground."

Why then does the ferrite loop stick seem to work so well by comparison with a few feet of wire?

Bart may not have included the enormous loss in coupling an antenna so short in terms of wavelength. All signal transfer schemes will prove very lossy in the usual receiver. The monopole will be a high capacitive reactance in series with a tiny radiation resistance. Not easy to couple efficiently into a receiver.

Best regards, Richard Harrison, KB5WZI

898. Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Heath <radiovintage@hotmail.com>
Message-ID: <RxqJ5.18547$Xc.956073@nntp2.onemain.com>
Source record: 177915

URGENT NEWS FLASH !!!!

Fractenna has now made the ultimate move to silence all of the people
with half a brain by now posting his crap to the C.B. newsgroup.
Expected results and reports are as follows:
(1)YOU'RE WALL TO WALL AND TREETOP TALL(technical fractal lingo for I can
hear you across the street as well as with your $5 Wal Mart antenna.)
(2)YOU'RE HITTING ME WITH 40 POUNDS(technical fractal lingo for you are just
as loud as when on your dummy load.)
(3) JUST WAIT TILL I GET THIS THING 100 FEET IN THE AIR.(That will of
course have to wait till I can get my anechoic chamber up there too)(hmmm
Chip never told me if I needed to run a feedline too)
(4)THE REAL TEST WILL BE TO SEE HOW MUCH POWER IT CAN HANDLE BEFORE
MELTING.(after all if Chip is legal he can not even begin to approach the
output power of a C.B. station.)
(5) Chip publishes all of thes words and descriptions about it but I have
never once read what the overpass clearance is for it on an 18 wheeler.
Get real and live in the real world fella.Ten meters is a band any jerk
can work the world on with 50 watts and a $5 mobile antenna from Wal Mart
when the band is in.He can also be the loudest or even the only station
being heard due to propagation.
Put your antenna against the ones on 2 meters and above in real world
conditions day in and day out when the propagation is more reliable for
making such tests and claims.Put it on the antenna range at the VHF
conferences and show us some real world results that are of more substance
than theory and then I will be interested.If you are not willing to do that
then please don't waste the time of honest intelligent people who are here
to learn and help others in the spirit of amateur radio.

899. Re: ONGOING Q RUN--10m FRACTAL QUAD YAGI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ifb5t8.bte.ln@mail.specsol.com>
Source record: 177916

W.G. Ewald <wgewald@att.net> wrote:
> x-no-archive:yes
> On Sun, 22 Oct 2000 17:02:41 -0700, Jim Pennino
> <jimp@mail.specsol.com> wrote:

>>
>>Gross overkill.
>>
>>Was in QSO with a VE7 the other day with 25W each on PSK31; decided to
>>reduce power on both ends and got down to 1W (as low as I can measure) on
>>my end, 800 mW on his end.
>>
>>Of course it helps to have a decent antenna; I use a simple verticle....
>>
>>
>>Jim Pennino

> That's vertical, Jim. :->

> Now, is it fracticle or fractical?

Sorry; was inverted when I wrote that...

Last year it was fractal after a wind storm, but I repaired it and it is
straight vertical again.

Jim Pennino

900. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <20382-39F63CA1-91@storefull-111.iap.bryant.webtv.net>
Source record: 177917

George, W5YR wrote:
"This cover does not want to come off "readily" but I nave not really been aggressive in trying to remove one."

Bird intended to discourage tinkering. I`d return my slug to Bird for checking and calibration.

Best regards, Richard Harrison, KB5WZI

901. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <20383-39F63F2E-43@storefull-111.iap.bryant.webtv.net>
Source record: 177918

Reg wrote:
"---connect some coax of any Zo to the dipole centre, fire up the Tx,
and yak-yak into the microphone."

Almost impeccable advice!

Best regards, Richard Harrison, KB5WZI

902. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t3ifp$i4f$1@plutonium.btinternet.com>
Source record: 178013

Yes. They also cause acid rain. Chop 'em all down. ;o)

903. Re: The Boy Genius

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <sval6gc1iu9ba7@corp.supernews.com>
Source record: 178014

When you find a "moral lawyer", let me know.....

"Dean Arthur" <dearthur@silverstar.com> wrote in message
news:39F51914.65A9@silverstar.com...
> Would a moral lawyer condescend to be a party to Cohen-head's fantasies?
>
>

904. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024070353.23687.00000420@ng-ff1.aol.com>
Source record: 178015

>
>I've definitely got to stop responding to this hogwash. Much like
>jammers, he gets off on his postings. If everyone turned a deaf
>ear/blind eye to his rants, he'd have to go somewhere else to start
>another brush fire to feed his ego.
>
>Let's leave him to his own sandbox and not join in - unless you enjoy
>dropping down to his level.

I am obigated to make public notice of Roy Lewallen's piracy with respect to his illegal use of my copyright maetrial. If that does not interest you thgen I heartily recommend skipping the post.

If you look at what was 'joined in' it constitutes comments wishing for my death; fraud;prevarications about ownership of copyright; etc.

Sort of the very best that some hams have to give it would appear.

For the sake of all your suggestion about not responding makes perfect sense.

73
Chip N1IR

905. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024070659.23687.00000421@ng-ff1.aol.com>
Source record: 178016

>
>APPLICABLE AFTER DATE OF PUBLICATION ONLY...
>
>...This constitutes a public notice that unless expressly stated as an
>authorized distributor, it is ILLEGAL to distribute and receive the data
>file constituting the MI2 antenna.
>
>READ IT AND WEEP, AIRHEAD. GUESS HOW MANY OF US ALREADY DOWNLOADED IT
>PRIOR TO YOUR IDIOTIC ANNOUNCEMENT?
>
>How do you propose to track down individual downloads?

An announcement was made on 9/30. I would appreciate knowing just how
widespread this illegal downloading is. Your comments supports punitive damages
against W7EL as indicative of deliberate intent.

My attorney may need to contact you as support that illegal copyright sownlaod
is widespread from the W7EL site.

Hope this helps!

73
Chip N1IR

906. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024070822.23687.00000422@ng-ff1.aol.com>
Source record: 178017

>> Nothing will stop this short of you removing the file.
>>
>> Nathan Cohen, Ph.D.
>
>Too late, now thousands of people have the file. You have promoted EZNEC
>beyond the wildest dreams of the programmer.
>
>I'm surprised you haven't asked for a commission.

If you could kindly point some of those out, they can be supoenaed in support
of the case.

73
Chip N1IR

907. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024071017.23687.00000423@ng-ff1.aol.com>
Source record: 178018

>NEW problem!
>
>What to do about all those who have downloaded the file? Gonna try a
>class action suit?

As I have said, there are many who have LEGALLY downloaded the file . IT IS AVAILABLE. But not through anyone but myself.

An injunction and suit against the SOURCE of the illegal download is the first way to go.

73
Chip n1IR

908. Re: Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024071108.23687.00000424@ng-ff1.aol.com>
Source record: 178019

>Day 2 and nothing heard, come on Nathan!
>I intend to post a message everyday until served. Now bluster your way out
>of that.
>

Track your hits on your site.

NC

909. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024071243.23687.00000425@ng-ff1.aol.com>
Source record: 178020

>
>He is known by many of us here in MA as the
>Belmont Bozo, or by some as "dipchip"...
>especially on the cluster....where he spots himself,
>the epitome of egomaniacal behavior....

Actually Chuck, this is not true. Most people on the cluster have known me for
26 years. Could you provide evidence of this slander and libel?

Thanks!

73
Chip N1IR

910. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39F58BE9.F9EF4DA1@qth.com>
Source record: 178021
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Robert, depending on whether you can hear Texas and the southwest....7.235 and 7.245 are active here througout the day but mostly 9-11 centaral am and after 330 pm....but action everywhere on 4 00 especially in drive time and evening time...enjoy...73 Murray K5MDM....PS as nite good Dx when you can find a hole without a broadcast station..7.244 or 45......7.262...7.235....

Robert Joshua Chen wrote:

> I just installed a 40m antenna and would like to get a feel for the
> band. Anybody have any recommendations about which freqs to listen to at
> what times (i.e., nets, rag-chewing get-togethers, etc.)?
>
> Thanks,
> -Robert
>
> --

[One or more binary attachments are retained only in the source text.]

911. Re: PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024071524.23687.00000426@ng-ff1.aol.com>
Source record: 178022

>
>Nathan believes in publishing email so here it is.
>BTW do any of you guys remember my claiming to
>work any particular place or in any particular field?
>
>If this ploy doesn't bring me to my knees next he is going
>to tell his Mommy and hold his breath until he turns blue.
>
>Since he has already slandered Roy numerous times
>how about setting up the Roy Lewallen Defense Fund.
>We all kick in $100 or so hire some gunfighter lawyer
>up in Massachusetts to clean Nathan's clock and
>bank account.
>
>As has been always been my policy I will not bother Nathan's
>boss but that said I have no control over what you guys might
>do. I don't care about Nathan's job I just like to poke fun at him
>when he picks on my friends.
>
>Nathan you really are an embracement to PhDs.
>
>To: kk5yy@arrl.net
>Subject: (no subject)
>From: Fractenna@aol.com
>Date: Mon, 23 Oct 2000 07:13:29 EDT
>
>>Nathan,
>>
>>Please consider this a formal notice to cease and desist using
>>the PhD after your name. You abhorrent behavior is an
>>embarrassment not only to Cornell and B.U but to all PhDs
>>everywhere.
>>
>>It is bad enough that PhDs are called cone-heads but now
>>the more insulting are stooping to using the term "Cohen Head".
>>No innocent PhD should have to endure this.
>>
>>Stop immediately or face the consequences of marsupial
>>justice.
>>
>>Latest survey 48 of 50 PhDs surveyed found Nathan to be an
>>embarrassment the other 2 had meetings and didn't answer
>>the survey.
>>

>
>
>Mr. Schmitt:
>
>This week I will be writing to the Director of the Los Alamos National
>
>Laboratory (Dr. John Browne), and the two senators from New Mexico
>detailing
>the harassment and libel which you have inveighed against me. These
>include
>deliberate and malicious efforts to attempt to get me terminated from
>my
>academic position, and false misinformation regarding whether I
>'deserve' to
>have the title Ph.D. , as well as false accusations that you are the
>inevntor
>of fractal antenna technology.These will also detail the assertions
>you have
>made stating that I am mentally ill.
>
>I will describe this inappropriate behavior with the intent to ask the
>
>question why someone with such a malicious and destructive focus
>against an
>individual should be in the responsible position of being involved
>with
>nuclear detonation development.
>
>I have very serious concerns for my personal safety and that of the
>country
>if you can make false assertions freely while holding a position with
>severe
>and serious responsibility.
>
>Nathan Cohen, Ph.D.
>

Mr. Schmitt has posted an accurate copy of an e-mail I sent him.

Mr. Scmitt is a a developmental engineer/scientist at the detonation branch of Los Alamos National Laboratory. He is involved with nuclear detonations, a high security clearance position..

The wheels turn.

73
Chip N1IR

912. Re: 2 MTR TWINLEAD J-POLE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: ke4qkn@aol.com
Message-ID: <20001024072104.19584.00001811@ng-fi1.aol.com>
Source record: 178023

>Anyone ever see one of these ? Who made it ?

I think MFJ markets one of those.....

KE4QKN
EM60

913. Re: Why does N1IR cancel NG postings so often?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024072323.23687.00000428@ng-ff1.aol.com>
Source record: 178024

>Hey fracky,
>
>I was refering to the fact that YOU were piss weak with the stations you
>were
>talking to, and many of them told me that I was 20 to 30 dB louder than you
>were!!
>And, I wonder how much louder I would have been if I had the amplifier
>on....
>

Do the link budget. This is only possible if you had your illegal QRO amp on
Chuck:-).

>A question for you to ponder...
>Why do you think that a "Q" rate on an open band without a contest
>represents
>any indication of your performance under the gun in a real contest???

A contest is always higherin Q rates,, because there are more stations to work;
getting a pileup on a US station without a contest is an extremely rare thing.
Can you provide any evidence to the contrary? Indeed, I will prove this by
being on the 10M Contest and beating you silly:-)

This
>is just
>more of your huffing and puffing....must be your phd disconnection with
>reality....
>

330 Q/hr is a stated fact. Hundreds if not thousands of people have heard it.
How is that huffing and puffing?

>Also:
>I never made a "date" with you...you're not my type...you would need a sex
>change
>and a brain change....
>

You are a sick fellow. I am a married monoganmous heterosexual. The date is for
the 10M Contest.

Are you divorced? Why did your marriage break up?

Just out of curiousity, do you own a toupee? Does it help for the older guys
out dating again? What about getting rid of the coke bottle glasses?

I'm just curious to know as I do have some friends out on the prowl again looking for tips.

What works for you Chuck?

73
Chip N1IR

914. Re: PIRACITY BY whocare

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024072549.23687.00000429@ng-ff1.aol.com>
Source record: 178025

```
>
>
> 23 Oct 2000 11:21:23 GMT dans l'article
> <20001023072123.05606.00000125@ng-cb1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:I have never, ever, ever, been banned from the NEC-LIST.
>:
>:Nathan Cohen, Ph.D.
>
>I have never said you were banned, f** word antenna posts
>from fractenna are.
>
>So you changed your screen name from "fractenna" to "Chip"
>at the end of year 1999.
>
>Anyone can check the archive.
>
>
>--
>Gilbert.
>
```

I have LEFT the NEC LIST for a while. No one has EVER said or implied that i am not welcome or can't come back.

I just get so MUCH e-mail--most of it from hams blaming me for the state of their world--that I have to limit the input.

later on I will probably subscribe to NEC LIST again.

Chip N1IR

915. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024072802.23687.00000431@ng-ff1.aol.com>
Source record: 178026

>There is no formal notice or even a passing mention of copyright in N1IR's
>original article describing the M12. There is no mention of a copyright
>assignment to Chip or to FAS for anything. Nor is there academic
>attribution
>crediting the origin of the "Minkowski" fractal shape. Last I knew, Chip's
>last name isn't Cohen-Minkowski, so there must be an uncredited source for
>this graphic somewhere. But, we don't know where it came from. It just
>"appeared".
>
>So, any judge will probably want to know if Chip sold first North American
>publication rights on copyrighted material and then failed to attribute that
>copyright to either FAS or to himself.

THERE WERE NO TRANSFER OF RIGHTS. Do you understand this?

CQ Communications did not request, and did not receive, transfer of copyright
for ANYTHING.

The judge will want to know if Chip
>failed to state that the material was provided by him with the company's
>express permission and consent. The judge will have plenty of questions.
>

Fine; Now; look what an idiot you have made of yourself. You IGNORE the FACT .

>As Comm Quarterly readers, we don't know--nor could any reasonable person be
>expected to know--the answers to these questions. The article revealed
>nothing. Zip. Not a peep.
>
>All we know is that Chip threatened to sue Roy back in September over
>material
>that he almost certainly didn't own the rights to at the time.
>
>Rick K1BQT
>
>
>
>
>
>

916. Re: Inexpensive PDF file application (was: Re: PIRACY BY N1IR)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024072912.23687.00000432@ng-ff1.aol.com>
Source record: 178027

> > I would be grateful if someone could point out an easy, or cheap, way
> > of doing a PDF write. I need to upload a paper (of NEC results)into
> > PDF format . I do not have this facility here, and a search yields a
> > morass of complex info.
>
>
>I'm not sure who asked this, so please excuse me if I copied this to the
>wrong
>person. Ghostscript can be used to produce PDF files - and its free.
>
>You can find Windows and unix versions on the web easily enough. First you
>must
>install a printer driver for a Postscript printer on your PC (you don't need
>to
>own the printer). Print your document to a Postscript file, then read the
>Postscript file with Ghostscript. Ghostscript has the option of printing to
>numerous output devices, from 9-pin dot matrix printer, so colour inkjects,
>PDF
>files etc.
>
>My own Ph.D. thesis was written in Wordperfect for DOS 5.1. When I tried to
>convert to PDF files using Adobe's Distiller, I had lots of problems, with
>Distiller complaining about problems in the Postscript files. However,
>Ghostscript worked fine, as can be seen at
>http://www.medphys.ucl.ac.uk/~davek/phd/phd.html
>
>Adobe's distiller does allow compression of the PDF files, which Ghostscript
>can't do. However, I still managed to get a 250 or so page thesis with lots
>of
>diagrammes into under 5 Mb.
>
>
>--
>Dr. David Kirkby Ph.D,
>Senior Research Fellow,
>Department of Medical Physics, University College London,
>11-20 Capper St, London, WC1E 6JA.
>Tel: 020 7209 6406 Fax: 020 7209 6269
>email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
>Amateur radio callsign: G8WRB
>

It was asked elsewhere 10 months ago. Someone repeated it for no reason.

Thanks but I do not need this help and I did not solicit it here.

Chip N1IR

917. Re: Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024073031.23687.00000433@ng-ff1.aol.com>
Source record: 178028

>
>I promised that I wouldn't respond to any thread that included the "F" word,
>so
>this isn't about "F" words, but about a practical side of the lawsuit
>bullshit.
>
>Whether or not a lunatic holds/doesn't hold, owns/doesn't own, once
>held/never
>held any rights to a disputed, copyrighted/not copyrighted 'intellectual'
>property is specious.
>
>The fact is that when the disputed item is valueless the purloining, theft,
>misuse, usurpation, copying, misappropriation or defacement of said valueless
>item does no financial harm to the alleged owner.
>
>No criminal act has occurred. This is a civil (legally speaking only) matter
>and there certainly wouldn't be any jail time forthcoming, so the only
>possible
>(and this is a real stretch) penalty would be the imposition of monetary
>damages
>commensurate with the financial loss to the aggrieved party. Since the
>material
>is without value there is no financial loss and therefore no damage
>
>I once created an intellectual work when I performed 'original' electrical
>measurements of a pair of parasitic suppressors as reported on my home page.
>I
>declared the material copyrighted to me but stipulated that anyone could
>freely
>use the material for non-commercial purposes. Tom Rauch honored that
>request,
>Rich Measures did not.
>
>Measures posted the material on his web site, where he was advertising and
>selling nichrome wire parasitic suppressors. I considered that to be
>commercial
>use of my material and politely asked him to remove the material.
>
>He in turn more-or-less told me to go piss up a rope and the material
>remains,
>albeit totally twisted (doesn't this sound familiar) into an endorsement of
>his
>product. The data of course do not support his claims (familiar territory
>again) but he has the temerity to claim that they do. He did add,

>"**Copyright
>1997 by W. D. Stewart, Jr" to his web page.
>
>So we have a similar (maybe) situation. I believe I have a (much) better
>claim
>of misuse but practically speaking, how have I been financially harmed. Fact
>is
>I haven't been and neither has a fruitcake. Whoops, I used an "F" word.
>
>Hypothetically speaking of course.
>
>Sorry.
>
>Wes Stewart

The copyright laws do not scale as per 'worth' especially, when the pirate--in this case W7EL--attempts to set the price.

73
Chip N1IR

918. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024073128.23687.00000434@ng-ff1.aol.com>
Source record: 178029

>
>
>
>Fractenna wrote:
>>
>> >Are you now claiming credit for creating the file that Roy has on his
>> >site?
>> >From what I understand, these EZNEC files are essentially tables of
>> >numbers. Are the numbers in your "copyrighted" file the same as the
>> >numbers in the file on Roy's site? If not, your copyright would not
>> >apply to that file, and it is not your IP.
>> >
>>
>> I am stating as a fact that I am the author and copyright holder of the
>> original work of which this derivative is "substantially the same".
>
>> Yes.
>
>So your claim is that it is a violation of copyright to produce a table
>of numbers which represent the dimensions of an antenna that is in the
>public domain, and for which radio amateurs and others have been
>publicly invited to build? Sounds like a weak case to me.

You are absolutely right--a weak case indeed! Unfortunately the other stuff
you state is wrong.

NC

919. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024073248.23687.00000435@ng-ff1.aol.com>
Source record: 178030

>
>
>Fractenna wrote:
> >
>> >Fractenna wrote:
>> >> I hold the copyright on MI2. I created it; and now I own it. Its
>> >distribution
>> >> and publication, BY LAW, is under my control.
>> >
>> >Which of the following best describes the MI2?
>> >
>> >a. a literary work
>> >b. a musical work
>> >c. an artistic work
>
>> Which best describes EZNEC?
>
>For the purpose of this discussion, EZNEC is best described as an
>intellectual property that you do not own.
>
>Do you still claim to have a copyright on an antenna, as you did above?
>

You take more quick turns than a UFO!

You asked me a question; I asked you the answer. So, which category of copyright does EZNEC fall into?

Or is it not covered by copyright and is thus in the public domain?

73
Chip N1IR

920. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <24140-39F57925-1@storefull-114.iap.bryant.webtv.net>
Source record: 178031

It appears that Reg wrote:
(on a flat line with no reflections) "The forward power measured at any point along the line is identical to the power delivered by the generator regardless of the generator`s internal impedance. Pl does not exceed Pg."

Exactly. There is no reflected power to subtract, and there is no other source of power in the system. The load power is always nearly equal to the generator power when the line is nearly lossless, and the power delivered to the load is always the difference between the forward power and the reflected power.

Best regards, Richard Harrison, KB5WZI

921. Re: Check out N1IR's egomaniacal ad....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39F5719E.65FB7D3E@berkshire.net>
Source record: 178032

oh no! how could i have missed a multipage full color ad for fractal antenna products???? at least i assume that fracky wouldn't settle for anything less. its funny though, i just went through the ad sections for sept/oct/nov and see eznec, various quads, the spider ant, isotron, hosenose, and a bunch of others every month, but don't see fracky... what name did he put it under, he doesn't seem to appear in the advertiser directory under any name i recognize?

Chuck O'Neal wrote:
>
> in QST....What a pompous ass!!! Hey chip, isn't that
> inflated head too big for you? It's time QST
> and the ARRL were made aware of the fractal
> freak's antics...they canned K1MAN's ads, now
> it's time to can this idiot's BS as well....
>
> Here we go!!!!!!!!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

922. Re: 20 hours in a chair kills!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <39F5800E.64791DFC@NO.excite.SPAM.com>
Source record: 178033

Yes, but we keep our blood thinned with alcohol.

Time for my medicine, pass me another beer!

Yuri Blanarovich wrote:

> And you worry about RF exposure? Maybe FCC will now establish "Contester
> Operating Hours" law?
> Woman sat in a chair for "whole" 20 hours, we sit for 48 and so far not known
> case of contester going SK during the contest. Another proof that RF has
> therapeutic effect and the FCC "RF exposure regulations" are pure bunk!
> Is Chipster endangering himself by trying to operate contests?
>
> 73 and CU all on 10m with verticals on the beach as N2EE from Cape Hatteras!
>
> Yuri, K3BU
>
> >>A young British woman died minutes after a long-haul flight from Australia
> when she developed a blood clot.
>
> It has been reported that Emma Christoffersen collapsed and died after sitting
> in a cramped seat for 20 hours.
>
> The 28-year-old bride-to-be is one of the youngest victims of deep veined
> thrombosis, which is thought to affect dozens of passengers every year.
>
> The condition, which has been nicknamed "economy class syndrome", struck after
> the 10,000 mile fight to Heathrow had ended, according to The Sun.
>
> Miss Christoffersen's mother, Ruth, 54, from Newport, South Wales, told the
> newspaper: "We were told she died from sitting on the jet for such a long time.
>
> "I'd never heard of the condition before but apparently passengers on long
> flights suffer from reduced circulation and that can cause the blood to clot."
>
> etc.
> <<
>
> from:
> http://www.itn.co.uk/news/20001023/britain/06planedeath.shtml

923. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024082834.28331.00000592@ng-mg1.aol.com>
Source record: 178034

>> An antenna cannot be copyrighted.

Who did THAT?? Do you REALLY think this? What will it take to get you to seek an attorney's counsel Mr. Lewellan??

Features about it can be patented,
>> but to my knowledge, no one has a patent which prevents anyone from
>> making, using, or selling the MI2.
>>
>> Roy Lewallen, W7EL

Again, you are choosing to be ignorant. Mr. Lewallen--GET AN ATTORNEY! YOU NEED HIS ADVICE!

NC

924. Re: PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024082914.28331.00000593@ng-mg1.aol.com>
Source record: 178035

>
>Gerald-
>
>I will gladly make my $100 contribution to the fund for the preservation of
>sanity on this group.
>
>By the way, I think Chip is crazy, too.
>
>Mike Camp
>El Cerrito, CA.
>
>"Gerald Schmitt" <kk5yy@arrl.net> wrote in message
>news:39f5f55a.346520852@nntp.mindspring.com...
>> Nathan believes in publishing email so here it is.
>> BTW do any of you guys remember my claiming to
>> work any particular place or in any particular field?
>>
>> If this ploy doesn't bring me to my knees next he is going
>> to tell his Mommy and hold his breath until he turns blue.
>>
>> Since he has already slandered Roy numerous times
>> how about setting up the Roy Lewallen Defense Fund.
>> We all kick in $100 or so hire some gunfighter lawyer
>> up in Massachusetts to clean Nathan's clock and
>> bank account.
>>
>> As has been always been my policy I will not bother Nathan's
>> boss but that said I have no control over what you guys might
>> do. I don't care about Nathan's job I just like to poke fun at him
>> when he picks on my friends.
>>
>> Nathan you really are an embracement to PhDs.
>>
>> To: kk5yy@arrl.net
>> Subject: (no subject)
>> From: Fractenna@aol.com
>> Date: Mon, 23 Oct 2000 07:13:29 EDT
>>
>> >Nathan,
>> >
>> >Please consider this a formal notice to cease and desist using
>> >the PhD after your name. You abhorrent behavior is an
>> >embarrassment not only to Cornell and B.U but to all PhDs
>> >everywhere.

>> >
>> >It is bad enough that PhDs are called cone-heads but now
>> >the more insulting are stooping to using the term "Cohen Head".
>> >No innocent PhD should have to endure this.
>> >
>> >Stop immediately or face the consequences of marsupial
>> >justice.
>> >
>> >Latest survey 48 of 50 PhDs surveyed found Nathan to be an
>> >embarrassment the other 2 had meetings and didn't answer
>> >the survey.
>> >
>>
>>
>> Mr. Schmitt:
>>
>> This week I will be writing to the Director of the Los Alamos National
>>
>> Laboratory (Dr. John Browne), and the two senators from New Mexico
>> detailing
>> the harassment and libel which you have inveighed against me. These
>> include
>> deliberate and malicious efforts to attempt to get me terminated from
>> my
>> academic position, and false misinformation regarding whether I
>> 'deserve' to
>> have the title Ph.D. , as well as false accusations that you are the
>> inevntor
>> of fractal antenna technology.These will also detail the assertions
>> you have
>> made stating that I am mentally ill.
>>
>> I will describe this inappropriate behavior with the intent to ask the
>>
>> question why someone with such a malicious and destructive focus
>> against an
>> individual should be in the responsible position of being involved
>> with
>> nuclear detonation development.
>>
>> I have very serious concerns for my personal safety and that of the
>> country
>> if you can make false assertions freely while holding a position with
>> severe
>> and serious responsibility.
>>
>> Nathan Cohen, Ph.D.

Why is enforcement of copyright law crazy?

73
Chip N1IR

925. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F58A00.5F3E4D08@hiwaay.net>
Source record: 178036

Dear Frac-
Please note- I have several files describing the so-called MI2 antenna geometry. NONE of these came from either your site, your controlled lists, or ** from Roy Lewallen, W7EL **.

These files were not from you, and are all a little different. They describe a cute little toy antenna, of limited performance. I have compared them to publicly posted descriptions of your antenna (from your web site). Note- I do not have, in current existence, a copy of any EZNEC file from you. THe file I got is non-EZNEC, and was for only a quarter of the set needed for analysis. pretty primitive, really.

THe question is- if I publish these in print media or on the net, showing that they, individually, are NOT what you claim is copyrighted, am I going to be sued? I hope that is the case, because I could use some of the $$ I could then expect to get from a counter suit.

This brings up another point- just what is the item that you have copyrighted?- Is there a registered copy, at a safe, neutral location, that can be shown to pre-exist any file you claim is a violation? How are we, (or a judge) to know that a file you claim is piracy is the same as yours, and therefore a violation?

An irritated, inquiring mind wants to know.

Hope this helps- have a good day.- Bill

Fractenna wrote:
>
> >
> >APPLICABLE AFTER DATE OF PUBLICATION ONLY...
> >
> >...This constitutes a public notice that unless expressly stated as an
> >authorized distributor, it is ILLEGAL to distribute and receive the data
> >file constituting the MI2 antenna.
> >
> >READ IT AND WEEP, AIRHEAD. GUESS HOW MANY OF US ALREADY DOWNLOADED IT
> >PRIOR TO YOUR IDIOTIC ANNOUNCEMENT?
> >
> >How do you propose to track down individual downloads?
>
> An announcement was made on 9/30. I would appreciate knowing just how
> widespread this illegal downloading is. Your comments supports punitive damages
> against W7EL as indicative of deliberate intent.
>
> My attorney may need to contact you as support that illegal copyright sownlaod

> is widespread from the W7EL site.
>
> Hope this helps!
>
> 73
> Chip N1IR

926. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22624-39F586EC-9@storefull-115.iap.bryant.webtv.net>
Source record: 178037

Roy wrote:
"The capacitance of the coax acts as part of a voltage divider which reduces the AM signal from the rod. It`s specially made to have as little capacitance as possible to minimize this attenuation."

Right, except "coax" may not be the correct name for the high impedance cable. It typically has no supports to keep the center conductor concentric. Supports might increase shunting effects, so the very thin wire is free to flop around inside the insulated outer shield.

Best regards, Richard Harrison, KB5WZI

927. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001024092708.03790.00000752@ng-fd1.aol.com>
Source record: 178038

>GET AN ATTORNEY! YOU NEED
>HIS ADVICE!
>
>NC
>
>

Get professional medical help and get the FRUCK outta here Mï¿½RON!!!

928. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <D431OdC2qYhDD=7W1j1wC6NBvrwW@4ax.com>
Source record: 178039

Bill Aycock <baycock@hiwaay.net> wrote:

>This brings up another point- just what is the item that you have
>copyrighted?- Is there a registered copy, at a safe, neutral location,
>that can be shown to pre-exist any file you claim is a violation? How
>are we, (or a judge) to know that a file you claim is piracy is the same
>as yours, and therefore a violation?

Unless he has filed for copyright with the Library of Congress, and
has a dated confirmation, or he has mailed himself the information in
a sealed envelope that has a dated cancellation, he really has no way
of proving his information has been protected since any particular
date. Any nitwit can put a little "c" in a circle on a piece of paper,
but the trick is to prove the date.

Bob
k5qwg
>
>An irritated, inquiring mind wants to know.
>
>Hope this helps- have a good day.- Bill
>

929. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001024093621.03790.00000753@ng-fd1.aol.com>
Source record: 178040

>
>If you look at what was 'joined in' it constitutes comments wishing for my
>death; fraud;prevarications about ownership of copyright; etc.
>wrote Chirpy, ID1OT

The whole Internet has a copy of "your" file, start collecting addresses and
sue'em!
Copyright (or left) yourself, get a life, professional help and get the FRUCK
outta here!!!
Troll, troll, troll

930. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22627-39F58CDA-2@storefull-115.iap.bryant.webtv.net>
Source record: 178041

Gary Coffman wrote:
"You don`t want to twiddle this (calibration adjustment) unless you`re
100% absolutely sure that it is the problem."

Yes. The Bird wattmeter is a very reliable instrument which tolerates
many excesses, but not all. It can be overloaded beyond its yield point.
It may also have some late appearing defect. So, readjustment may make
it read right at one point only to be off the mark at other levels.

Best regards, Richard Harrisomn, KB5WZI

931. Re: PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t44nijfv0@208.207.71.148>
Source record: 178042

Fractenna wrote:
>
>
> Mr. Schmitt has posted an accurate copy of an e-mail I sent him.
>
> Mr. Scmitt is a a developmental engineer/scientist at the detonation branch of
> Los Alamos National Laboratory. He is involved with nuclear detonations, a high
> security clearance position..
>
> The wheels turn.
>
> 73
> Chip N1IR

We3l, good for him. But simply put Dok, what has that to do with you
or your nonsensical ramblings? Looks as though he'd be in a very good
position to be very knowledgable regarding patents copyrights and such,
thus to shoot holes in your fake balloons.

932. Re: Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t461fjfv1@208.207.71.148>
Source record: 178043

Fractenna wrote:
>
> The copyright laws do not scale as per 'worth' especially, when the pirate--in
> this case W7EL--attempts to set the price.
>
> 73
> Chip N1IR

Ah, so you're a law expert, as well as an antenna 'expert'! We see.
Evidently your skills in each area are equivalent.

Maybe you'll set new legal prcedent-where the plaintiff winds up owing
damages to the defendant. Without having to countersue for them. As a
juror on the case I'd vote for that.

933. Siltronix Frequency Counter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CJ Jeff <z71@stones.comREMOVE>
Message-ID: <JkhJ5.511513$8u4.6471620@news1.rdc1.bc.home.com>
Source record: 178044

Anyone have a Siltronix PDC-156 Freq. counter they would like to part with ?
Thanks

Jeff VE7GMX

934. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001024105646.05370.00001260@ng-cb1.aol.com>
Source record: 178045

It is well past 51mhz...let me check....hang on.. SWR on the 4 element Arrow 6 meter beam, mounted on 35ft of tower...just a couple feet from the neck, does not exceed 1.5:1until 52.8 mhz.<mounted horizontally>
73
Doug

>Subject: Re: Where to start on 6M/HF?
>From: ehsjr@bellatlantic.net
>Date: 10/23/2000 11:07 PM Eastern Daylight Time
>Message-id: <39F4FDD6.7E9C8AF7@bellatlantic.net>
>
>Doug,
>
>What is the 1.5:1 SWR bandwidth of that antenna?
>
>N8wwm wrote:
>
>> For 6 meter SSB I would reccomend Arrow's 4 element yagi.
>>
>> It fetures ease of assembly and very good workmanship.
>>
>> It turns with a light rotator and performs pretty well. I just got one and
>am
>> quite happy with it.
>>
>> 73 Doug
>
>
>
>
>
>
>

935. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F5A85B.FF9AB73A@hiwaay.net>
Source record: 178046

Bob- Your conclusion is the normal one, but- we are not dealing with a normal individual. What I expect could happen is that he will copy someones file to his site (they only differ a little) and claim identity. This would be easy for him to do, since he controls the site. We know that there would be no legal standing to such an act, but he does not want legal standing, he wants "Uproar".

This would be in keeping with previous activities of the multi-lobed persona usually signing at Fractenna, whether it be N.C., Nathan Cohen, PhD, Chip, Phil, or N1IR. He lies, distorts, and eats flames like his mothers milk.

Hope this helps- Bill-W4BSG

Bob Miller wrote:
>
> Bill Aycock <baycock@hiwaay.net> wrote:
>
> >This brings up another point- just what is the item that you have
> >copyrighted?- Is there a registered copy, at a safe, neutral location,
> >that can be shown to pre-exist any file you claim is a violation? How
> >are we, (or a judge) to know that a file you claim is piracy is the same
> >as yours, and therefore a violation?
>
> Unless he has filed for copyright with the Library of Congress, and
> has a dated confirmation, or he has mailed himself the information in
> a sealed envelope that has a dated cancellation, he really has no way
> of proving his information has been protected since any particular
> date. Any nitwit can put a little "c" in a circle on a piece of paper,
> but the trick is to prove the date.
>
> Bob
> k5qwg
> >
> >An irritated, inquiring mind wants to know.
> >
> >Hope this helps- have a good day.- Bill
> >

936. Re: Why does N1IR cancel NG postings so often?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <svba3ern31fa65@corp.supernews.com>
Source record: 178047

In <20001024072323.23687.00000428@ng-ff1.aol.com>, fractenna@aol.com (Fractenna) writes:

Chip, that's not

>A contest is always higherin Q rates,, because there are more stations to work;
>getting a pileup on a US station without a contest is an extremely rare thing.

necessarily true.

>73
>Chip N1IR

A very well done gain antenna installation on 40/80/160 here in the USA can and does provide 'pileups' or runs on USA stations for the USA station with one. That happens more often than what most folks would call extremely rare occaisions. I assure you these are generally *NOT* single element antennas, although a nearer coast-line site, especially one with salt-water ocean 'view' aperature in the desired direction has an enormous advantage.

By way of example, but, by far, not the only example of well done low band installations, is the W8JI site. I'll note that his site produces many instances of good runs on 80 CW, for example. In over 40 years of listening on the low bands, I can cite many others, such as the beautifully done site at W3TUP just West of Erie. His beautifully hand-tuned three element full sized four element 40 metter rotary array up over the 100 foot mark is well capable of producing beautiful examples of 'pileups' on 40. So does his 80 meter four square.

Another more exquisite, but now defunct antenna installation that did so for many years was the largest 40 meter array operation I've ever been able to document. The old W5RR installation on Collins Avenue in Richardson, Texas had four 150 foot towers with two three element 40 meter rotary arrays ring-rotated on each self-supporting pipe tower stand. All of them could be properly phase fed, step switched with coax delay segments around the circle, with the entire total of 8 rotary arrays syncronized and firing in echelon. I've heard that site generate many, many, 'pileups' from both European paths, as well as Asian paths, in non-contest events. For your note, in competition with it less than 200 miles away from it here in Texas, the difference in how you stack up against it in single band work with my puny four element phased vertical array on 40 is the difference of about three to four slots in the published rankings in the single-band CQ WW. Not much difference, in the long run, between the then cost of over a quarter of a million dollars for his array versus less than a thousand for mine, but .. sigh!

Another beautiful example of an internal land-mass site that is perfectly capable of generating huge (for that band!) 'pileups' on non-contest days on 80 meters is the magnificnt full sized three element rotary of Gerald Williams at K5GW, near Greenville, Texas. His labor of love, yes, love for the honor of it, if you happen to know the inside construction story if that array, is probably twice as effective 180-odd miles North, as is my 4 element phased array on 80 meters here.

I can cite many, many more of these low band efforts.

None of them are fractal in design.

They never will be.

Nor, will any other low band sites, that ever really compete with them, be fractal antenna based.

Even if there was a performance advantage - design model for design model - normal layout vs. fractal layout, the sheer physical cost of construction and maintenance of what you advocate, could never justify the use of the technique on the low bands - for competitive purposes.

As the frequency goes down, the cost to support your suggestions rises horribly. It's bad enough to do the job straight forward! Grin!

I assure you .. that simply exquisite 60 acres of rhombics down in Irene, near Jo-burg, South Africa put up by Dave Larson, and all those like it, could never have been done in a practical fractal design. Score for score, performance for the owner seen day in and day out, no low band antenna ever built fractally, will ever show up in the low band circuits, that will ever compete with any of these and many, many similar sites.

In essence .. lightning is self supporting! I remember, and share the humor of your response to me that it's the ultimate fractal! Chuckle

Man-made elements, the more convulsive they are .. are not!

Perhaps you might care to offer a thesis on where the cost of contsruction vs. the proposed performance rate of return has a second DV min-max turning point for your suggestions? At what frequency should we all not have to consider your suggestion as a worthwhile endeavor, cost come to shove?

GDRFC ..

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

937. Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2j94t8.v79.ln@mail.specsol.com>
Source record: 178048

For a whole lot of reasons it would be a great pain to run twin lead into the house without doing everything you're not supposed to do to twin lead several times over.

One thought I had was to put an autotuner, such as an SGC, outside and run coax into the house.

Anyone actually done such a thing and have anything to say about pluses and minuses?

FWIW, the antenna at the end of the twin lead would look electrically about the same as a G5RV.

Jim Pennino

938. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F5ADAE.C06BEA50@dvol.com>
Source record: 178049

Reg Edwards wrote:

> Yes. They also cause acid rain. Chop 'em all down. ;o)

>
I'll take the acid rain vs. chopping down my towers!
>
w3rv

939. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F5B253.EF9C5CF8@bigfoot.com>
Source record: 178050

Reg Edwards wrote:
> Cec, just out of curiosity, how does your IC-706 behave at
> about 10 or 20 watts output versus changes in load.

For what it's worth, here's the meter readings from my MFJ-949E.

Forward Reflected
20 0
16.5 0.75
15 1.6

100 0
95 5
88 12
60 12

At full power it appears that the transmitter generates enough
power to keep the sum of forward and reflected power equal to
100w until the SWR reaches 2.5:1 after which it generates only
enough power to limit the reflected power to 12 watts.
--
http://www.mindspring.com/~w6rca

940. Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <5BiJ5.8131$xJ4.259539@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178051

Just as a matter of record, "depictions" of the MI2 Loop antenna sufficiently detailed to measure relative dimensions and create ones own NEC or EZNEC model can be found in the following sources (others may exist).

1) US Patent 6,104,349. A US Patent is not a "copyrightable" document and the US Patent office has all rights to reproduce and distribute the document. It is legal and fair derivative use of the patent to use the figures or any other information in the patent to verify patent claims, model the patented antenna's performance with EZNEC etc, so long as one does not infringe on the claims of the patent.

2) Communications Quarterly published articles as follows (copyright not clearly claimed nor indicated). Direct Reproduction of the article would require the publisher's permission. All IP belongs to the author. Direction reproduction of a specific figure would require author's permission. Measuring relative dimensions of the antenna from a figure to create ones own NEC or EZNEC model to verify antenna performance might be considered fair and derivative use. The created EZNEC model would then belong to the creator of said model.
- Fractal Antennas Part 1 - Nathan Cohen, Summer 1995
- Fractal Antennas Part 2 - Nathan Cohen, Summer 1996
- Fractal Loops and the Small Loop Approximation - Nathan Cohen, Winter 1996

3) Radiokit - elettronica, October 2000. Two figures of the MI2 are presented. One has dimensions and is clearly marked (c) 1999 Fractal Antenna Systems. The other figure has no clear copyright indication.

4) www.luminet.net/~wenonah/cfa/fractal.htm Figure of MI2 loop marked courtesy of RadioWorld Magazine

5) RadioWorld Magazine - September 1, 1999

6) Fractal Antennas - Design, Characterization and Applications. A Masters Thesis from UCLA (c) John Gianvittorio 2000. This was made publically available in March 2000 and the copyright for the images in the document apparently belongs to John Gianvittorio not FAS or Nathan Cohen???

941. 20 hours in a chair kills!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <39F5B53D.C628F092@tri.net>
Source record: 178052

Off subject: Drink plenty of fluids. Women are known to have too large bladders. Men naturally get up for a walk. Take Aspirin to cut down on clots. Get up and stretch.

N0UU

942. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F5B471.2D7C41E6@bigfoot.com>
Source record: 178053

Jim Pennino wrote:
>
> For a whole lot of reasons it would be a great pain to run twin lead into
> the house without doing everything you're not supposed to do to twin lead
> several times over.
>
> One thought I had was to put an autotuner, such as an SGC, outside and run
> coax into the house.
>
> Anyone actually done such a thing and have anything to say about pluses
> and minuses?

The SGC is inherently an unbalanced device. Will you use a balun? If
so, you will have problems trying to design a balun to feed all those
high-resistance/high-reactance loades.

I have used an SGC-230 to feed a 32ft tall vertical and it worked well
on 40m-17m. It even worked to a certain extent on 75m - lots better than
most 75m mobiles.

> FWIW, the antenna at the end of the twin lead would look electrically about
> the same as a G5RV.

In that case, it will work well on some bands and not so well on others.
--
http://www.mindspring.com/~w6rca

943. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <39F5BD30.5941FFF5@ix.netcom.com>
Source record: 178054

Robert Joshua Chen wrote:

> I just installed a 40m antenna and would like to get a feel for the
> band. Anybody have any recommendations about which freqs to listen to at
> what times (i.e., nets, rag-chewing get-togethers, etc.)?
>
> Thanks,
> -Robert
>
> --

=======
Robert -- try these URL's:
Calling Frequencies - http://ac6v.com/pagecall.html
HF Nets - http://ac6v.com/pagep.html
The "Considerate Operator's Frequency Guide" --
http://www.primechoice.com/w7pxl/freq.html
ARRL Net Search --- http://www.arrl.org/field/nets/client/index.html
NETS TO YOU! -- http://www.angelfire.com/ok/worldofradio/nets2you.html

HF NETS AND FREQUENCIES ON THE AMATEUR/HAM RADIO BANDS --
http://pw1.netcom.com/~tofull/hfnets.htm

Good Luck weeding thru the BC Stations

--
73 From Rod In Oceanside, CA
Amateur Radio & DX Reference Guide
Featuring 100+ Pages, 750 Indexed Topics & 6000 Links
http://ac6v.com/
Over 850,000 Hits On The Counter

944. Re: Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t4f79$p5a$1@iac5.navix.net>
Source record: 178055

No need to, as here in Day 3 of Suit watch I expect Ed McMahon to arrive before your process server.

http://w4jle.com

"Fractenna" <fractenna@aol.com> wrote in message news:20001024071108.23687.00000424@ng-ff1.aol.com...
> >Day 2 and nothing heard, come on Nathan!
> >I intend to post a message everyday until served. Now bluster your way out
> >of that.
> >
>
>
> Track your hits on your site.
>
> NC

945. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024130121.19548.00001926@ng-fi1.aol.com>
Source record: 178056

>Just as a matter of record, "depictions" of the MI2 Loop antenna
>sufficiently detailed to measure relative dimensions and create ones own NEC
>or EZNEC model can be found in the following sources (others may exist).
>
>1) US Patent 6,104,349. A US Patent is not a "copyrightable" document and
>the US Patent office has all rights to reproduce and distribute the
>document. It is legal and fair derivative use of the patent to use the
>figures or any other information in the patent to verify patent claims,
>model the patented antenna's performance with EZNEC etc, so long as one does
>not infringe on the claims of the patent.
>
>2) Communications Quarterly published articles as follows (copyright not
>clearly claimed nor indicated). Direct Reproduction of the article would
>require the publisher's permission. All IP belongs to the author.
>Direction reproduction of a specific figure would require author's
>permission. Measuring relative dimensions of the antenna from a figure to
>create ones own NEC or EZNEC model to verify antenna performance might be
>considered fair and derivative use. The created EZNEC model would then
>belong to the creator of said model.
>- Fractal Antennas Part 1 - Nathan Cohen, Summer 1995
>- Fractal Antennas Part 2 - Nathan Cohen, Summer 1996
>- Fractal Loops and the Small Loop Approximation - Nathan Cohen, Winter
>1996
>
>3) Radiokit - elettronica, October 2000. Two figures of the MI2 are
>presented. One has dimensions and is clearly marked (c) 1999 Fractal
>Antenna Systems. The other figure has no clear copyright indication.
>
>4) www.luminet.net/~wenonah/cfa/fractal.htm Figure of MI2 loop marked
>courtesy of RadioWorld Magazine
>
>5) RadioWorld Magazine - September 1, 1999
>
>6) Fractal Antennas - Design, Characterization and Applications. A Masters
>Thesis from UCLA (c) John Gianvittorio 2000. This was made publically
>available in March 2000 and the copyright for the images in the document
>apparently belongs to John Gianvittorio not FAS or Nathan Cohen???
>
>
>

Mr. Best:

The MI2 EZNEC file is copyright and held by me.

W7EL d/b/a EZNEC are under copyright violation in the publication and distribution of the file.

PLEASE talk to your attorney about this: It will have grave consequences for you at a later time to have made such misleading public statements.

Nathan Cohen, Ph.D.

946. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <%ojJ5.8176$xJ4.262571@bgtnsc06-news.ops.worldnet.att.net>
Source record: 178057

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024130121.19548.00001926@ng-fi1.aol.com...
>
> PLEASE talk to your attorney about this: It will have grave consequences
for
> you at a later time to have made such misleading public statements.
>
> Nathan Cohen, Ph.D.

Specifically, what did I say that was incorrect or misleading? If anything
I said was incorrect, then I would be happy to correct.

Steve

947. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024132315.23222.00002446@ng-ch1.aol.com>
Source record: 178058

>In another desperate attempt to get attention, the fractal freak
>has managed to secure two responses to this inane post....
>
>Let's wait and see how he manages the next attempt at
>an antenna description where he will want you make
>it, but WILL SUE YOU if you analyze it!!! and post it....
>
>
>
>

Mr. O'Neal has well ovr 100 foot towers. THus it makes sense that he cannot relate to the plight of those of us who want good performing, efficient small antennas that our neighbors can't see.

Ask yourself: what right does someone with such a grotesque--in your face --antenna set up have to categorize attempts at making a useful attic antenna "inane"?

73
Chip N1IR

948. 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <a7iC5RA3Mc95Ew1e@invest.fsbusiness.co.uk>
Source record: 178059

When using a solid state transceiver without external atu is it advisable to use 52 or 75 ohm coax to feed a mono band HF dipole antenna?

Many thanks.

Phil G4ZOW

949. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8t4gv4$pe6$1@news.tribune.com>
Source record: 178060

I have an ALINCO remote automatic tuner. I look like an SGC with some of the brains removed. I had it in my shack for 18 mos, and used twin lead from there to my loop antenna outside. Last year I moved it to the garage. I have coax to the tuner, then twinlead to the antenna. Some people worry about the "unbalanced tuner" to a balanced feed line, I don't . It is important to use the ground lug on the tuner, and not depend on the frame or the coax to provide the safety and rf ground. The only difference I can tell from having it inside vs outside is that when it is colder than 0 F outside it may have to be left on a while before it will tune properly. I assume it has a bad joint that is cold sensitive.
KA9CAR

Jim Pennino <jimp@mail.specsol.com> wrote in message
news:2j94t8.v79.ln@mail.specsol.com...
> For a whole lot of reasons it would be a great pain to run twin lead into
> the house without doing everything you're not supposed to do to twin lead
> several times over.
>
> One thought I had was to put an autotuner, such as an SGC, outside and run
> coax into the house.
>
> Anyone actually done such a thing and have anything to say about pluses
> and minuses?
>
> FWIW, the antenna at the end of the twin lead would look electrically
about
> the same as a G5RV.
>
> Jim Pennino
>

950. Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <SVjJ5.162465$i5.6243885@news1.rdc2.on.home.com>
Source record: 178061

Does it matter where along the length of the coax feed line that the outer braid is grounded for lightening protection?
Can I ground both the metal mast and feedline right at the antenna? (The antenna is an inverted V.)
or
If it's a wooden mast can I ground the braid at some point closest to the ground rod which may be 1/2 way to the transceiver?

Wayne
ve3 gqx

951. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001024135952.10564.00000946@ng-cg1.aol.com>
Source record: 178062

>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001024130121.19548.00001926@ng-fi1.aol.com...
>>
>> PLEASE talk to your attorney about this: It will have grave consequences
>for
>> you at a later time to have made such misleading public statements.
>>
>> Nathan Cohen, Ph.D.
>
>Specifically, what did I say that was incorrect or misleading? If anything
>I said was incorrect, then I would be happy to correct.
>
>Steve

The issue is the MI2 file you produced as a derivative work under "fair use".
Explain how your allusions have ANY reference to this.

NC

952. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F5CE9A.4201@wt.net>
Source record: 178063

Dean Arthur wrote:
>
> Reminds me of a line Robin williams said in good morning vietnam.
>
> "You're more in need of a b--w job than any white man in history!"

Yep, you guessed the correct line. You win a free frectal oven mitt.
>
>
> Course he may only be qualified to receive since he surely can't give.

Only Phil knows for sure. MK

--
http://web.wt.net/~nm5k

953. Re: The Boy Genius

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F5CFB7.23DB@wt.net>
Source record: 178064

Dean Arthur wrote:
>
> Would a moral lawyer condescend to be a party to Cohen-head's fantasies?

An easy answer to that. Have we seen any communication from any lawyers?
Of course not. They have more important goofballs to represent. MK
--
http://web.wt.net/~nm5k

954. A different sort of fractal challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80515D028@www.indianarep.com>
Source record: 178065

I'd like to challenge everyone in this NG to completely ignore, not reply, not post, not acknowledge in any way, shape or form - ANYTHING related to fractal ANYTHING for 1 solid week. No exceptions. No matter how much goading, boasting, bragging or harassment anyone dishes out. Probably harder than quitting smoking or going to that first AA meeting.

I bet the cycle would be broken and this NG would return to relevant and useful discussions. Or maybe the goings-on ARE considered as relevant and useful and I just don't "get it".

Please start.... now. (including this message).

thanks all.

955. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F5CE2F.1BF7@wt.net>
Source record: 178066

Dean Arthur wrote:
>
> Reminds me of a line Robin williams said in good morning vietnam.
>
> "You're more in need of a b--w job than any white man in history!"

Yep, you guessed the correct line. You win a free frectal oven mitt.
>
> Course he may only be qualified to receive since he surely can't give.

Only Phil know for sure. MK

--
http://web.wt.net/~nm5k

956. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F5D515.63C2208F@eznec.com>
Source record: 178067

I've always used 52 or 75 ohm coax to feed mono band HF dipoles. Although coax has a somewhat higher loss than dry twinlead or ladder line, its loss is considerably lower than those lines when wet. (This is an important consideration in England and here in Oregon.) Unless the antenna is very far from the rig (well over 100 feet), the loss in properly selected coax line will be negligible. Coax can also be laid on the ground, coiled, run through wet foliage, and otherwise routed and handled without concern. If operated some distance from resonance, added loss due to SWR is unlikely to be significant over the range of SWR your rig will accept.

I recommend the use of a "current" or "choke" balun at the antenna feedpoint to prevent the outside of the coax from becoming part of the antenna. There are a number of designs which work equally well on a single band, including the W2DU type balun (a sizeable number of ferrite cores strung along the outside of the coax), one made by winding several turns of coax or other two-conductor wire on a single ferrite toroidal or rod core, or one made by making some coax into a self-resonant coil.

Roy Lewallen, W7EL

Philip de Cadanet wrote:
>
> When using a solid state transceiver without external atu is it
> advisable to use 52 or 75 ohm coax to feed a mono band HF dipole
> antenna?
>
> Many thanks.
>
> Phil G4ZOW

957. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F5D41F.942D462B@bigfoot.com>
Source record: 178068

KA9CAR John Dewey wrote:
>
> I look like an SGC with some of the brains removed.

Wow! You must be a really wierd looking dude! :-)
--
http://www.mindspring.com/~w6rca

958. 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:17:31 UTC
From: Robert Joshua Chen <rjchen@Stanford.EDU>
Message-ID: <8t2ker$7bt$1@nntp.Stanford.EDU>
Source record: 177995

I just installed a 40m antenna and would like to get a feel for the band. Anybody have any recommendations about which freqs to listen to at what times (i.e., nets, rag-chewing get-togethers, etc.)?

Thanks,
-Robert

--

959. Re: US-AZ-Director RF Engineer/RF Cellular Antenna Sales(URGENTREQUIREMENT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 00:53:43 UTC
From: k3bu@aol.com
Message-ID: <20001023205343.05984.00000019@ng-fe1.aol.com>
Source record: 177996

>
>> URGENT REQUIREMENT - For Senior Team Member with Experience in the
>Cellular
>> Industry as RF Engineer working with Antenna design or Sales.
>>
>> The company is willing to relocate candidates but, will give a preference
>> for Phoenix, Arizona based candidates.
>>

Now with internet and remote computing, this should be available to me working from my office and telecommuting to AZ.
Proof of my qualifications and resume is that I have nothing to do with Fractal antennas. Designed most gain producing antenna per boomlength (Razor Beams). If you are interested, please contact me about my fee/salary and other arrangements.
No job description necessary, tell me what you need, I will do it (or not).

Regards, Yuri, K3BU, VE3BMV
http://members.aol.com/ve3bmv/

960. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 01:00:06 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F4DEE1.783C0A22@dvol.com>
Source record: 177997

Robert Joshua Chen wrote:

> I just installed a 40m antenna and would like to get a feel for the
> band. Anybody have any recommendations about which freqs to listen to at
> what times (i.e., nets, rag-chewing get-togethers, etc.)?
>
> Thanks,
> -Robert

>
40m is not in the least bit "channelized" or "scheduled" or "organized". The
cw starts at 7.0005 and goes up, the digital modes are generally found at
7.050 and up, Stateside ssb is further up the band. 40m cooks between
sundown and sunup, hook that new antenna to a decent radio, tune, tune,
tune, LEARN and enjoy.
>
w3rv

961. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 01:48:01 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <IT5J5.350218$i5.5416534@news1.frmt1.sfba.home.com>
Source record: 177998

Pirate?? Like with an eye patch, parrot on the shoulder, and a wooden leg?
"Avast, ye lubbers!!"?

My god, I never thought he would look like that...

How can he operate his keyboard with only a hook?

73, Mike Camp KI7FQ
El Cerrito, CA.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001023065032.03695.00000878@ng-ff1.aol.com...
> >
> >Fractenna <fractenna@aol.com> wrote:
> >>>Subject: Re: NOTICE: ENFORCEMENT OF COPYRIGHT
> >>>From: Jim Pennino jimp@mail.specsol.com
> >>>Date: 10/22/00 8:57 PM Eastern Daylight Time
> >>>Message-id: <ad20t8.hik.ln@mail.specsol.com>
> >>>
> >
> ><snip>
> >
> >>>I've received it, what are you going to do about it?
> >>>
> >>>Jim Pennino
> >>>
> >
> >> Pass it onto counsel as public evidence that the illegally distributed
> >file is
> >> being received illegally and that traffic in this distribution is
clear.
> >
> >> NC
> >
> >Since you've publicly called me a liar, that should make good evidence.
> >
> >BTW, have you drawn enough attention to yourself to satisfy your ego yet?
> >
> >Jim Pennino
> >
>
>
> This is an issue of ownership and piracy.
>
> If I make a million enemies it will not change the fact that Roy Lwallen

has
> broken the law; That Roy Lewallen is acting in the capacity of a pirate.
>
> Please; several people have been trying to apply 'peer pressure' to say
how
> horrible I look in this.
>
> This is not a beauty contest. Lewallen is prating something that belongs
to me.
> No one will dissuade me from this course; I find it offensive that some
will
> try.
>
> READ THOSE WORDS CAREFULLY
>
> Please: if you are uncomfortable with that then sever contact with me. I,
> personally, cannot maintain friendship with those who advocate piracy,
given my
> history of creative output and the fact that this is a legacy for my son,
and I
> will not be here forever..
>
> Mr. lewallen is a pirate. His commercial site contains unuathorized
copyright
> material. HE MUST REMOVE IT.
>
> NC

962. Re: need some mast ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 01:51:07 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F4EAD9.A24B0DD0@dvol.com>
Source record: 177999

John Moriarity wrote:

> "Brian Kelly" <kelly@dvol.com> wrote in message
> news:39F3A757.DFB654A@dvol.com...
> >
>
> New, about $250 for a 30 footer. As I said, not cheap!
> But that's for a *very* sturdy pole.

You got me to thinking a bit more. They gotta be out there used for cheaper. So say ya need, for instance, a really decent quick-erect portable vertical. One of these poles could very easily be the next step up from a w6mmr Saint Looie Special. I just ran an analysis on how one of these poles might work on 3.5Mhz as a coax-fed wire-wrapped center-loaded vertical. The numbers come up quite decent. Needs radials of course. Pull it down, short the coil and it's a classic 1/4 wave 40m GP. Bag the coax and feed it with a real tuner and it would become a voltage-fed gain half-wave vertical dx killer on 20m.
>
I think you hit on something really useful John.
>
Now all I gotta do is work out how Cecil can install one of these on his rear bumper for his next shootout and we'll make some ham radio history.Or at least we should be able to wrap some S-meter needles around the right pin a few times.
>
>73,

>
> John, K6QQ

>
w3rv

963. Re: Which antenna is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 02:20:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F4F1AE.A98F37B9@dvol.com>
Source record: 178000

jimmy john wrote:

> I recommend the old standby, the "CanTenna" for all 11 meter work - 1:1 SWR
> and no tuning required - ever! And its only 8.5 inches high so it fits just
> about anywhere.
>

>
. . . . my kinda CB aerial . . HAR!
>
w3rv

964. Your Password for OVER MARKET Share Pricing Exchange!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 02:27:05 UTC
From: info@innercircleinvestors.COM
Message-ID: <200010240226.WAA11336@server3.mooresolutions.com>
Source record: 178001

You are receiving this Special Membership Opportunity because of your interest in ADC Telecommunications and/or other traded securities. You may be entitled to participate in an OVER MARKET Share Pricing Exchange. Click here to see if you qualify fo a password for this limited time offer. www.smartstocksdirect.com

965. PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 02:56:30 UTC
From: kk5yy@arrl.net
Message-ID: <39f5f55a.346520852@nntp.mindspring.com>
Source record: 178002

Nathan believes in publishing email so here it is.
BTW do any of you guys remember my claiming to
work any particular place or in any particular field?

If this ploy doesn't bring me to my knees next he is going
to tell his Mommy and hold his breath until he turns blue.

Since he has already slandered Roy numerous times
how about setting up the Roy Lewallen Defense Fund.
We all kick in $100 or so hire some gunfighter lawyer
up in Massachusetts to clean Nathan's clock and
bank account.

As has been always been my policy I will not bother Nathan's
boss but that said I have no control over what you guys might
do. I don't care about Nathan's job I just like to poke fun at him
when he picks on my friends.

Nathan you really are an embracement to PhDs.

To: kk5yy@arrl.net
Subject: (no subject)
From: Fractenna@aol.com
Date: Mon, 23 Oct 2000 07:13:29 EDT

>Nathan,
>
>Please consider this a formal notice to cease and desist using
>the PhD after your name. You abhorrent behavior is an
>embarrassment not only to Cornell and B.U but to all PhDs
>everywhere.
>
>It is bad enough that PhDs are called cone-heads but now
>the more insulting are stooping to using the term "Cohen Head".
>No innocent PhD should have to endure this.
>
>Stop immediately or face the consequences of marsupial
>justice.
>
>Latest survey 48 of 50 PhDs surveyed found Nathan to be an
>embarrassment the other 2 had meetings and didn't answer
>the survey.
>

Mr. Schmitt:

This week I will be writing to the Director of the Los Alamos National

Laboratory (Dr. John Browne), and the two senators from New Mexico detailing
the harassment and libel which you have inveighed against me. These include
deliberate and malicious efforts to attempt to get me terminated from my
academic position, and false misinformation regarding whether I 'deserve' to
have the title Ph.D. , as well as false accusations that you are the inevntor
of fractal antenna technology.These will also detail the assertions you have
made stating that I am mentally ill.

I will describe this inappropriate behavior with the intent to ask the

question why someone with such a malicious and destructive focus against an
individual should be in the responsible position of being involved with
nuclear detonation development.

I have very serious concerns for my personal safety and that of the country
if you can make false assertions freely while holding a position with severe
and serious responsibility.

Nathan Cohen, Ph.D.

966. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 03:07:52 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F4FDD6.7E9C8AF7@bellatlantic.net>
Source record: 178003

Doug,

What is the 1.5:1 SWR bandwidth of that antenna?

N8wwm wrote:

> For 6 meter SSB I would reccomend Arrow's 4 element yagi.
>
> It fetures ease of assembly and very good workmanship.
>
> It turns with a light rotator and performs pretty well. I just got one and am
> quite happy with it.
>
> 73 Doug

967. Re: PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 03:18:43 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <nc7J5.350420$i5.5427735@news1.frmt1.sfba.home.com>
Source record: 178004

Gerald-

I will gladly make my $100 contribution to the fund for the preservation of sanity on this group.

By the way, I think Chip is crazy, too.

Mike Camp
El Cerrito, CA.

"Gerald Schmitt" <kk5yy@arrl.net> wrote in message
news:39f5f55a.346520852@nntp.mindspring.com...
> Nathan believes in publishing email so here it is.
> BTW do any of you guys remember my claiming to
> work any particular place or in any particular field?
>
> If this ploy doesn't bring me to my knees next he is going
> to tell his Mommy and hold his breath until he turns blue.
>
> Since he has already slandered Roy numerous times
> how about setting up the Roy Lewallen Defense Fund.
> We all kick in $100 or so hire some gunfighter lawyer
> up in Massachusetts to clean Nathan's clock and
> bank account.
>
> As has been always been my policy I will not bother Nathan's
> boss but that said I have no control over what you guys might
> do. I don't care about Nathan's job I just like to poke fun at him
> when he picks on my friends.
>
> Nathan you really are an embracement to PhDs.
>
> To: kk5yy@arrl.net
> Subject: (no subject)
> From: Fractenna@aol.com
> Date: Mon, 23 Oct 2000 07:13:29 EDT
>
> >Nathan,
> >
> >Please consider this a formal notice to cease and desist using
> >the PhD after your name. You abhorrent behavior is an
> >embarrassment not only to Cornell and B.U but to all PhDs
> >everywhere.
> >
> >It is bad enough that PhDs are called cone-heads but now

> >the more insulting are stooping to using the term "Cohen Head".
> >No innocent PhD should have to endure this.
> >
> >Stop immediately or face the consequences of marsupial
> >justice.
> >
> >Latest survey 48 of 50 PhDs surveyed found Nathan to be an
> >embarrassment the other 2 had meetings and didn't answer
> >the survey.
> >
>
>
> Mr. Schmitt:
>
> This week I will be writing to the Director of the Los Alamos National
>
> Laboratory (Dr. John Browne), and the two senators from New Mexico
> detailing
> the harassment and libel which you have inveighed against me. These
> include
> deliberate and malicious efforts to attempt to get me terminated from
> my
> academic position, and false misinformation regarding whether I
> 'deserve' to
> have the title Ph.D. , as well as false accusations that you are the
> inevntor
> of fractal antenna technology.These will also detail the assertions
> you have
> made stating that I am mentally ill.
>
> I will describe this inappropriate behavior with the intent to ask the
>
> question why someone with such a malicious and destructive focus
> against an
> individual should be in the responsible position of being involved
> with
> nuclear detonation development.
>
> I have very serious concerns for my personal safety and that of the
> country
> if you can make false assertions freely while holding a position with
> severe
> and serious responsibility.
>
> Nathan Cohen, Ph.D.

968. Re: PUBLIC NOTICE Nathan is a bad boy.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 03:25:16 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <wi7J5.350434$i5.5428995@news1.frmt1.sfba.home.com>
Source record: 178005

Sorry, forgot the address so the process server doesn't have to waste gas
driving around:

Mike Camp
7029 Stockton Ave.
El Cerrito, CA 94530

Corner of Stockton and Ashbury - across the street from the 7-11 store.

Hope this helps.

"Mike Camp" <mikerobin@home.com> wrote in message
news:nc7J5.350420$i5.5427735@news1.frmt1.sfba.home.com...
> Gerald-
>
> I will gladly make my $100 contribution to the fund for the preservation
of
> sanity on this group.
>
> By the way, I think Chip is crazy, too.
>
> Mike Camp
> El Cerrito, CA.
>
> "Gerald Schmitt" <kk5yy@arrl.net> wrote in message
> news:39f5f55a.346520852@nntp.mindspring.com...
> > Nathan believes in publishing email so here it is.
> > BTW do any of you guys remember my claiming to
> > work any particular place or in any particular field?
> >
> > If this ploy doesn't bring me to my knees next he is going
> > to tell his Mommy and hold his breath until he turns blue.
> >
> > Since he has already slandered Roy numerous times
> > how about setting up the Roy Lewallen Defense Fund.
> > We all kick in $100 or so hire some gunfighter lawyer
> > up in Massachusetts to clean Nathan's clock and
> > bank account.
> >
> > As has been always been my policy I will not bother Nathan's
> > boss but that said I have no control over what you guys might
> > do. I don't care about Nathan's job I just like to poke fun at him
> > when he picks on my friends.
> >
> > Nathan you really are an embracement to PhDs.

> >
> > To: kk5yy@arrl.net
> > Subject: (no subject)
> > From: Fractenna@aol.com
> > Date: Mon, 23 Oct 2000 07:13:29 EDT
> >
> > >Nathan,
> > >
> > >Please consider this a formal notice to cease and desist using
> > >the PhD after your name. You abhorrent behavior is an
> > >embarrassment not only to Cornell and B.U but to all PhDs
> > >everywhere.
> > >
> > >It is bad enough that PhDs are called cone-heads but now
> > >the more insulting are stooping to using the term "Cohen Head".
> > >No innocent PhD should have to endure this.
> > >
> > >Stop immediately or face the consequences of marsupial
> > >justice.
> > >
> > >Latest survey 48 of 50 PhDs surveyed found Nathan to be an
> > >embarrassment the other 2 had meetings and didn't answer
> > >the survey.
> > >
> >
> >
> > Mr. Schmitt:
> >
> > This week I will be writing to the Director of the Los Alamos National
> >
> > Laboratory (Dr. John Browne), and the two senators from New Mexico
> > detailing
> > the harassment and libel which you have inveighed against me. These
> > include
> > deliberate and malicious efforts to attempt to get me terminated from
> > my
> > academic position, and false misinformation regarding whether I
> > 'deserve' to
> > have the title Ph.D. , as well as false accusations that you are the
> > inevntor
> > of fractal antenna technology.These will also detail the assertions
> > you have
> > made stating that I am mentally ill.
> >
> > I will describe this inappropriate behavior with the intent to ask the
> >
> > question why someone with such a malicious and destructive focus
> > against an
> > individual should be in the responsible position of being involved
> > with

> > nuclear detonation development.
> >
> > I have very serious concerns for my personal safety and that of the
> > country
> > if you can make false assertions freely while holding a position with
> > severe
> > and serious responsibility.
> >
> > Nathan Cohen, Ph.D.
>
>

969. Gap tilt-over bracket for ground mounted verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 04:02:27 UTC
From: Pete <Pete@xyz.com>
Message-ID: <nR7J5.8637$bj.768542@news1.rdc1.il.home.com>
Source record: 178006

Have any of you had any experience with Gap's tilt-over bracket for ground mounted verticals? I just bought a Butternut HV9V and was thinking about getting one to use on my vertical and would like your opinions on it.
Thanks

970. Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 04:12:26 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t32a1$7ca$1@iac5.navix.net>
Source record: 178007

Day 2 and nothing heard, come on Nathan!
I intend to post a message everyday until served. Now bluster your way out
of that.

971. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 05:23:17 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8t36bj$n7m$1@bob.news.rcn.net>
Source record: 178008

He is known by many of us here in MA as the
Belmont Bozo, or by some as "dipchip"...
especially on the cluster....where he spots himself,
the epitome of egomaniacal behavior....

972. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 05:42:34 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8t37foscr1@bob.news.rcn.net>
Source record: 178009

In another desperate attempt to get attention, the fractal freak
has managed to secure two responses to this inane post....

Let's wait and see how he manages the next attempt at
an antenna description where he will want you make
it, but WILL SUE YOU if you analyze it!!! and post it....

973. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 05:52:38 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F52388.8C6CC7C@dvol.com>
Source record: 178010

"Curt M. Breneman" wrote:

> Unfortunately, most of the "cooking" is being done by SW
> broadcasters... It's a really different band than it was in the 70's
> when I first got started in ham radio! I'm told that some good
> filtering or DSP will help to make "nighttime-40" worth trying, but I
> don't have that on my Yaesu FTDX 560....so I mostly avoid it and stick
> to the lower part of 20m SSB in the evenings.

>
The guy asked about 40m so I limited my response to his query to 40m. Sure, 40 is a qrm "challenge", but it's also a great "boot camp" for a newbie. If he can handle 40 he can handle any band. Except maybe 160 and 80. I've run 40 with everthing from a Heath AT-1 with one crystal for 7.060 and a Hallicrafters S-40B back when to my current whizzy TS-940SAT xcvr and JRC NRD-545 100% DSP rcvr. But I'm not at all convinced that I'm having more fun now than I did back when despite the big-bucks gear. Being a cw op I'm pretty much unaffected by BC stations, I work right thru 'em. Personal perspectives and prefences get into the mix and it sometimes gets kinda difficult to put yerself in the other guy's shoes, etc.
>
>Curt Breneman

> RPI Chemistry
> KC2EBP

>
w3rv

974. Re: 40m listening freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 05:54:09 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F523E5.89E7DF40@dvol.com>
Source record: 178011

Jim Pennino wrote:

>
> Try PSK31 at 7070; not a lot of stations yet, but sometimes....

>
. . . gonna happen . . !
>

>
>
> Jim Pennino

>
w3rv

975. Check out N1IR's egomaniacal ad....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 06:01:57 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8t38k3$4ng$1@bob.news.rcn.net>
Source record: 178012

in QST....What a pompous ass!!! Hey chip, isn't that
inflated head too big for you? It's time QST
and the ARRL were made aware of the fractal
freak's antics...they canned K1MAN's ads, now
it's time to can this idiot's BS as well....

Here we go!!!!!!!!

976. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 23:19:19 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <kyI5hIA3jh95EwDS@g3ohx.demon.co.uk>
Source record: 177825

In article <39F5E07C.D4706109@oio.net>, 'Doc <w5lz@oio.net> writes
>
>
>Philip de Cadanet wrote:
>>
>> When using a solid state transceiver without external atu is it
>> advisable to use 52 or 75 ohm coax to feed a mono band HF dipole
>> antenna?
>>
>> Many thanks.
>>
>> Phil G4ZOW
>
>Phil,
> Between the two, it would make more sense to use the 50 ohm
>coax. That assumes that the transmitter's output is 50 ohms,
>and the antenna input is close to 50 ohms. If the antenna and
>transmitter are really close to 50 ohms, using 75 ohms coax
>would mean something on the order of 1.5:1 SWR. I think it
>would probably come down to the quality of the coax, and the
>co$t...
> 'Doc

Don't forget that the 'transmitter's output' is NOT really 50 ohms (ie 50 ohms output impedance). It is more correct to say that the transmitter is designed to feed into a 50 ohm impedance (more correctly, 'resistance'). The true 'output impedance' of the transmitter will be quite a bit lower than 50 ohms.

If the load placed on the transmitter output is more than 50 ohms, the main thing that you will notice will be less power out. If the load is somewhat less than 50 ohms, you will almost certainly get MORE power out, but you will start to overload the transmitter, and this will show up as an increase of distortion. The difference between a 50 ohm load and a 75 ohm load is only a dB or so - so I wouldn't worry about it!

If you are offered a hundred foot 'off-cut' of really low-loss 75 ohm coax from your local friendly cable TV company, take it (and buy the offerer a beer!).

73,
Ian.

977. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-24 23:44:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t56nl$b24$1@neptunium.btinternet.com>
Source record: 177826

Hi Phil,

From one G to another it won't make a scrap of difference between 50 or 75 ohms. Just get the thing erected and call CQ.

If you are VERY pernicketty you still don't need a commercial tuner. Assuming the transceiver has an internal SWR meter, for one-band operation all you MIGHT need is a few turns of 18 gauge wire wound on a used toilet roll cardboard tube, and/or a 300 pF variable capacitor.

Fine details depend on frequency, could be anywhere between 1.8 and 30 MHz, which you didn't state.

But my advice remains the same. Just erect the 1/2-wave dipole as high above ground as you can manage, connect some coax of any Zo to the dipole centre, fire up the Tx and yak-yak into the microphone.

And disregard any unwarranted warnings you may receive about precautions to prevent a teeny bit of radiation from the coax feedline itself. Isn't radiation exactly what you intended to achieve? Who cares from what part of the station it is radiated from ?
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Philip de Cadanet <phil@invest.fsbusiness.co.uk> wrote in message news:a7iC5RA3Mc95Ew1e@invest.fsbusiness.co.uk...
> When using a solid state transceiver without external atu is it
> advisable to use 52 or 75 ohm coax to feed a mono band HF dipole
> antenna?
>
> Many thanks.
>
> Phil G4ZOW

978. Re: 6m Beam or Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Chris <n8cop@home.com>
Message-ID: <0JAJ5.61385$hD4.13997084@news1.rdc1.mi.home.com>
Source record: 177719
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Peter" <ve9ptr@hotmail.com> wrote in message
news:6_nJ5.3490$iY1.77529@sodalite.nbnet.nb.ca...
> Which is the best way to go? I'd like to operate FM and SSB....

Hello Peter. Your best bet would be to have a dedicated 6m vertical antenna and a 6m beam. You can run both antennas to a two position switch in your shack, which will let you toggle between them as needed. SSB needs horizontal polarization for the most part, but when the bands are up, anything will work for DX !! I have been using a Comet GP-15 tri-band vertical for 6 FM and have a 5 element M squared beam for 6 SSB. With my 100 watt rig, I have been able to snag over 150 grids and several European countries.

Good luck and 73,

Chris

979. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <39f6da65.470710472@nntp.mindspring.com>
Source record: 177720

On 25 Oct 2000 07:36:33 GMT, fractenna@aol.com (Fractenna) wrote:

>>>Why should anyone care what you think about this?<
>>
>>A therapist might reply, "Chip, can you say why YOU might not care about what
>>Rick thinks about this----and allow others to ponder the issue for
>>themselves?"
>>
>>Personally, I want to know more about Mr. Minkowski--that's far more
>>interesting to me than your runs or mine. Give us some historical
>>perspective
>>on this bit of geometry.
>>
>>Rick K1BQT
>>
>
>
>Read Mandelbrot's book.
>
>The MI geometries wre not around until I made them.
>
>NC

Buzz, wrong. Not only were similar concepts explored years
earlier it now appears that the use of the term "fractal" used in
association with antennas predates any of Fractenna's efforts.

980. PUBLIC NOTICE Fractenna flauts Federal Law

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <39f7dcb0.471297347@nntp.mindspring.com>
Source record: 177721

In the furtherance of his Jihad against Roy Lewallen some person using the Fractenna@aol email address has violated the CFRs by knowingly publishing Official Use Only information in a general news area of usenet. The page that contains this information is clearly labled prohibiting use of any of the information for any non-official purpose as well as the appropriate CFR citation.

It is highly unlikely that any legal action will be taken in this case

but this behavior does speak clearly to the moral climate at Fractenna.

To paraphrase George Orwell in 'Animal Farm' ,"All the animals in this newsgroup are equal some are just more equal." Since Chip will undoubtedly try to twist this let me interpret for his edification. What I mean exactly is, that while trying to enforce pseudoleagal bafflegab against any and all who do not worship at the alter of the Fractal God Chip feels no obligation to follow either the law of the land or the standards of decent human behavior.

Having had significant dealings with small children I am familiar with

Chip's behavior but my kids outgrew it by their 4th birthday it would seem that the Cohen's kids did not, at least in Nathan's case.

When a grown man acts in public like a spoiled 3-year-old I don't think it unreasonable to call in to question his metal state. This type of constant addictive need for attention is not a usual or common thing and my understanding of common usage American English the term for this is abnormal.

Please spare us the tirade about trying to protect your copyright. This has nothing to do with your copyright it everything to do with your abnormal, unnatural need for attention and acceptance. Get some professional help I'm worried about you. If you lived closer and/or had any history of doing more than blustering I would be worried about me.

981. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <39F6E5C0.95AD2184@sccoast.net>
Source record: 177722

Ted W2ICV wrote:
>
> Reg,
>
> Shotgun weddings??? I lived in England
> for a bit, but I never knew that there
> was an "Ozarkshire"!

There isn't. It only exists in the minds of people who think they're superior enough to make jokes about the several million residents of the Ozark Plateau.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

982. Thanks fior the email and information

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <39f8e4e3.473397267@nntp.mindspring.com>
Source record: 177723

Several folks wrote with the following information:

Did you forward Chip's email to John Ebersole
<jeber@bu.edu>, the Dean of Metropolitan College of
Boston University?

Thanks all, I will forwarder it to John's crank letter folks
so they can get the junk mail stopped if they wish.

983. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t6pbp$q7j$0@208.207.71.152>
Source record: 177724

Fractenna wrote:
>
> >Fractenna wrote:
> >>
> >> >> An antenna cannot be copyrighted.
> >>
> >> Who did THAT?? Do you REALLY think this? What will it take to get you to
> >seek
> >> an attorney's counsel Mr. Lewellan??
> >>
> >> Features about it can be patented,
> >> >> but to my knowledge, no one has a patent which prevents anyone from
> >> >> making, using, or selling the MI2.
> >> >>
> >> >> Roy Lewallen, W7EL
> >>
> >> Again, you are choosing to be ignorant. Mr. Lewallen--GET AN ATTORNEY! YOU
> >NEED
> >> HIS ADVICE!
> >>
> >>
> >>
> > MR COHEN! GET A PSYCHIATRIST! YOU NEED HIS ADVICE!
> >>
> >>
>
> Mr. Carroll!
>
> Get a priest of a pastor! Ask him what the Bible says about what you are trying
> to do to me!
>

Not surprising. Fracky can only understand one thing. That is NOT an
effort to help. Perhaps he realizes that just because one is paranoid
doesn't mean that they're not out to get you. Follows right along with
the rest of his selfdelusions.

984. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t6qss$t3u$1@plutonium.btinternet.com>
Source record: 177725

CAM wrote
> Reg Edwards wrote:
> > Cec, just out of curiosity, how does your IC-706 behave
at
> > about 10 or 20 watts output versus changes in load.
>
> For what it's worth, here's the meter readings from my
MFJ-949E.
>
> Forward Reflected
> 20 0
> 16.5 0.75
> 15 1.6
>
> 100 0
> 95 5
> 88 12
> 60 12
==========

Completing the table by calculation we obtain -

Fwd Refl Load Refl.
Watts Watts Watts Coeff.
SWR
------- ------- ------- -------
----
20 0 20 0
1.0
16.5 0.75 15.7 0.213
1.54
15 1.6 13.4 0.327
1.97
---
100 0 100 0
1.0
95 5 90 0.229
1.59
88 12 76 0.369
2.17
60 12 48 0.447
2.60

Whatever the internal impedance of the generator, there is no error when the reflection coefficient and SWR are calculated from the forward and reflected watts.

This enables the accuracy of another in line meter, which indicates SWR and RC directly, to be checked.

It would appear you detuned the antenna system to give SWR's of 1.5, 2 and 2.5 But in which direction and angle the system input impedance departed from 50 ohms the measurements give no indication. In another direction for the same SWR's a different set of figures might be obtained.

Upsetting the SWR by varying Tx frequency is another way of doing it.

Thanks for the figures.

Reg.

985. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39F6F06C.86BBD3BB@wb6hqk.ampr.org>
Source record: 177726

"Dr. David Kirkby" wrote:
>
> I'm glad it compiles and runs okay on Free BSD. There seems however to
> be a problem with gcc-2.95.2 (not 2.85.2 as I stated earlier) under linux PC.

I used gcc version 2.95.2 19991024 (release) also so I had better take a
closer look at the output. It will probably be a few days before I get
time to wring it out. I'll let you know if anything weird shows up.

> The source is a bit confusing at times, partly since the routines I used for solving
> the complex matrix problems use routines designed for real number, not complex one. I
> also moved things around in arrays a bit more than was needed. Some stuff gets put
> into an array for parasitic elements and some more into an array for driven elements.
> It would have been much more sensible to put them all in the one array, since it needs
> to get put there anyway later.

No need to apologize; I am all to familiar with the evolutionary nature
of this sort of package. Of course good public domain libraries are
available these days which make the task a lot simpler. Too bad C
doesn't have a built in complex type :-)

> The file self2.c calculates the self impedance of an element and the routine z21 in
> mutual.c calculates the mutual impedance between any pair of elements. Once you have
> this data, the driving point impedance is found from inverting a matrix. One then
> finds the drive current. I'm not quite sure how the gain is found from this (memory
> escapes me), but I suspect it relies somewhere on the fact the far field radiation
> pattern is the FFT of the current distribution. Just doing an FFT on the currents are
> summing the resulting radiation pattern would given the radiation in any direction.
I
> would need to double check that though - I wrote the code about 6 years ago, and have
> not done anything with it until about a month ago, when I mainly provided better
> documentation, but not changed the code much.

It looks like you do a pointwise integration of the current
distribution. Should be more efficient given the constraints on the
current distribution.
>
>

Thanks,

bart
wb6hqk

986. Re: Fractenna now in search of Jesus for another law suit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t6s4h$sr8$1@iac5.navix.net>
Source record: 177727

Frackky wants to find Jesus and sue him. I thought Jews didn't believe in
him Frackky...

"Gilbert Mouget" <gilbert.mouget@waika9.com> wrote in message
news:eFtJ5.1445$gE5.1851490@nnrp4.proxad.net...
>
> Tue, 24 Oct 2000 20:25:06 -0500 dans l'article
> <RxqJ5.18547$Xc.956073@nntp2.onemain.com>
> l'honorable Heath <radiovintage@hotmail.com> escrivit :
>
> :URGENT NEWS FLASH !!!!
> :
> : Fractenna has now made the ultimate move to silence all of the people
> :with half a brain by now posting his crap to the C.B. newsgroup.
> : Expected results and reports are as follows:
>
> From: fractenna@aol.com (Fractenna)
> Subject: INFO on '10 KW Jesus'
> Date: 28 Nov 1999 00:00:00 GMT
> Message-ID: <19991128175453.09993.00001207@ng-cr1.aol.com>
> Organization: AOL http://www.aol.com
> Newsgroups: rec.radio.cb
> X-Admin: news@aol.com
>
> I would appreciate any info regarding the identity of 'MC' who uses the
> anonymous aka "10 KW Jesus" and goes by the e-mail 'qsl27@hotmail.com'.
>
> I have a good idea of his name and location but would appreciate
confirmation.
> Kindly e-mail me at this screenname.
>
> Thank you.
>
> Nathan Cohen
>
>
>
> --
> Gilbert.
>

987. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t6s93ssc1@iac5.navix.net>
Source record: 177728

If only Al Gore hadn't beat him to the internet.....
"Fractenna" <fractenna@aol.com> wrote in message
news:20001025033633.09822.00000093@ng-fl1.aol.com...
>
> The MI geometries wre not around until I made them.
>
> NC

988. Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Pete <Pete@xyz.com>
Message-ID: <xDCJ5.633$Ha.26440@news1.rdc1.il.home.com>
Source record: 177729

Folks ignore all this fractenna posting crap and it will die on the vine if all of you quit paying attention to it.
I'm tired of seeing it all the time. Let's get back to what this NG is supposed to be all about, - providing help and good information to promote our hobby.
My 2 cents worth

989. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t6t4s$q7j$1@208.207.71.152>
Source record: 177730

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001024205755.04437.00000281@ng-fc1.aol.com...
> >
> > For the PRESIDENT of CUSHCRAFT to continue to ignore peer reviewed fact
> > indicates an agenda.
> >
> > If he had no agenda, then:
> >
> > 1) why would he continue to encourage a "fair use" copy to be published
> and
> > distribute OUTSIDE of that limitation?;
> > 2) Why does he say that 'this is my last post' and then continue posting
> > misinformation?;
> > 3)If what he says is TRUE, then why has he not published said info? In the
> time
> > he has spent providing incorrect and misleading information, he could have
> had
> > a paper published in Electronics Letters.
> >
> > No; this is not science. It is a competitor dead-scared of a disruptive
> > technology which will not eat, but devour, market share in markets he is
> trying
> > to penetrate.
> >
> > Misinformation and propaganda makes for good business--or so it would seem
> from
> > Mr. Best. This is Cushcraft's position, isn't it Mr. Best?
> >
> > 73
> > Chip N1IR
>
> Why all this foolishness just because I disagree with you? I simply think
> you're wrong in some of your technical statements. There is no agenda
> beyond that on my part. Why can't you keep the discussion at that level?
> Disagree with me and explain in some detail why you think I am wrong, rather
> than huffing and puffing about Cushcraft and all the other unrelated issues.
> You know as well as I do that Cushcraft has no interest in any of this.
> We're talking about an HF loop antenna for heaven's sake.
>
> BTW, I do intend to publish the work, I just need to pull it and all of the
> measurements together to make a comprehensive and definitive presentation.
>

> If I took any of your statements above seriously, or if I thought anyone
> else did for that matter, you would have received a "letter" quite some time
> ago. As it is, the more you continue to rant, slander, harrass, and libel,
> the more evidence you provide against your own position. In any event, your
> posts sure do provide a lot of entertainment. From my perspective, this
> whole issue and your posts are a big joke and I enjoy the laughs.
>
> Steve

Most readers have wondered why all the belligerant gibberish from
Fracky. I think that most have decided that he is engaged in either a
frantic attempt to scare off really serious anylisis of his brainstorms
so that the true facts, which will seriously damage his claims. of his
'invention' won't come to light, *or* he is truly a nutcase.

As time passes I lean more and more toward the second explanation as
the natural progression following the first.

Dick

990. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t6tjj$q7j$2@208.207.71.152>
Source record: 177731

Fractenna wrote:
>
> >
> >More MI2 'challenge' files have been uploaded to my site. They are
> >random4.EZ, random4.txt, random5.EZ, and random5.txt, all submitted by
> >Steve Best, VE9SRB. You can get them from ftp://eznec.com/pub/MI2/, or
> >you can go to http://eznec.com and click the "FTP Site" link. The text
> >files give more information about the corresponding .EZ files, and the
> >0Notes.txt file at the same URL has more information about all files.
> >All files submitted to date are compressed into MI2.ZIP.
> >
> >More information about the purpose of these files and why they're posted
> >can be found at the deja.com archive at
> >
> >http://x76.deja.com/[ST_rn=ps]/getdoc.xp?AN=673944577&CONTEXT=972449784.1
> 468334083&hitnum=11.
> >Chip's original "Challenge" posting is archived at
> >
> >http://x67.deja.com/[ST_rn=ps]/getdoc.xp?AN=657467296&CONTEXT=972215956.4
> 14253064&hitnum=17.
> >
> >Caution: If you click either of the above links while viewing with your
> >browser, it might not take you to the desired location if the displayed
> >link is wrapped onto more than one line.
> >
> >Although the 'challenge' officially ended on September 30, the questions
> >it raises are still relevant to the subject of this newsgroup.
> >
> >Roy Lewallen, W7EL
> >
>
> Roy Lewallen is a pirate who is deliberately breaking the law by illegally
> posting a copyright Mi2 file owned by me.
>
> BEWARE! Lewallen is a PIRATE!
>
> Nathan Cohen, Ph.D.

Beware! Nathan Cohen Ph.Dip is clearly a nut.

991. Re: Law suit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t6tln$q7j$3@208.207.71.152>
Source record: 177732

W4JLE wrote:
>
> Day three of the wait for the Fractal finger of fate to arrive at my door
> with no joy...

I do hope youj have some interesting things to do to occupy your time.
It may be a long wait.

992. Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t6ttn$j9$1@iac5.navix.net>
Source record: 177733

Day 5 ... I set alone, huddled at my computer, awaiting the fearful knock at the door...

Wait! was that the process server driving by... No, only the garbage truck... Maybe tomorrow... One can only hope...

993. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F6FE2A.C4BE3B03@bellatlantic.net>
Source record: 177734

Fractenna wrote:

> >The antenna is also written up in 73 magazine, October 1999.
> >
> >VE9SRB wrote:
> >
> >> Just as a matter of record, "depictions" of the MI2 Loop antenna
> >> sufficiently detailed to measure relative dimensions and create ones own
> >NEC
> >> or EZNEC model can be found in the following sources (others may exist).
> >>
>
> I see; its "non sequitar" time. OK; here;s one.
>
> The red and yellow leaves sure are pretty!
>
> Chip N1IR

You not only do not know how to spell non-sequitur, you do
not undertsand what it means. Not surprising, though. You do not
seem to realize that you have gone far beyond copyright infringement -
you have raised the stakes to libel and slander.

In point of fact, the write up in 73 magazine goes exactly
to the heart of the matter. An EZNEC file can be created
from the description in the magazine.

In a court of law those facts and the contents of the article prove:
1) That Mr. Lewellan had means other than "piracy" and "theft"
to create the file he posted.
2) That dimensional information required to create such a file is
in the public domain.
3) That you provided information to the author of the article; the
fact that it is your design is stated in the article.
4) That you have no record of claiming ownership of the information
at that time: there is no mention of any copyright, patent or intellectual
property rights in the article

In court, it is real simple, actually. You will need to produce
evidence that Roy pirated your file. Merely showing his file
and your file to the court, even assuming they are 100%
identical, does NOT provide evidence that theft was
involved. You will need to prove that each and every
publicly available document relative to fractal antennas
and containing dimensional information, COULD NOT have
been used to create the file. When you cannot prove that he stole it, you

are wide open to the countersuit for libel and slander.

It gets worse for you. He *can* prove that what you say
is a lie. He has written, public records here on the NG
as to the origin of the file. It was provided to him, by another
ham who says he developed it based on descriptions in the
public domain. That proves, to the court, and to the readers
here, that you are a liar and are engaged in slander when you
post those lies about Mr. Lewellan. You have been told,
repeatedly, that those files were provided to Mr. Lewellan,
yet you persist in the lies and the slander.

You love to stir up controversy here. What you don't seem
to realize is how pathetic you make yourself look in so doing.
It is sad to see you - a grown man - babbling foolishly.
You do yourself a horrible disservice.

994. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F6FDE6.4EEE4B09@hiwaay.net>
Source record: 177735

Indeed, if past history is an indicator, if we ignore him, he will froth
at the mouth and hold his breath till he turns blue.

sounds like a good idea to me.

Bill

Pete wrote:
>
> Folks ignore all this fractenna posting crap and it will die on the vine if
> all of you quit paying attention to it.
> I'm tired of seeing it all the time. Let's get back to what this NG is
> supposed to be all about, - providing help and good information to promote
> our hobby.
> My 2 cents worth

995. Re: Law Suit Watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39F6FE21.C61EC5A7@hiwaay.net>
Source record: 177736

Garbage? - WAIT- that was HIM!

W4JLE wrote:
>
> Day 5 ... I set alone, huddled at my computer, awaiting the fearful knock at
> the door...
>
> Wait! was that the process server driving by... No, only the garbage
> truck... Maybe tomorrow... One can only hope...

996. HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: tegwilym@my-deja.com
Message-ID: <8t72k6ies1@nnrp1.deja.com>
Source record: 177737

I live in a condominium that has all the usual rules against antennas, color of curtains, pet....etc. I am trying to figure out what kind of antenna I could put in my attic that might work ok on the 10-20 meter bands. I currently have a vacant unit next door to me that was just sold, so I figure this would be a good time to sneak around up in the attic without anyone hearing me up there. I do have one of those "Cliff Dweller" slinky antennas (You can see one on Ebay if you search) in the hallway and can't get it tuned up to transmit. I am thinking of maybe putting that up in the attic or maybe just a normal dipole up there. I am estimating that I have about 50 or 60 feet of room that I can play with up there. The attic is pretty short, only about 30 inches tall at the peak of the roof.

I do have a QFH antanne up there right now for receving the NOAA satellite images on 137mhz and have had great results from that, so I know an antenna is possible up there.

Any ideas from any of you condo dwellers?

Tom KA7VIK
Seattle

Sent via Deja.com http://www.deja.com/
Before you buy.

997. Re: PUBLIC NOTICE Fractenna flauts Federal Law

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8t72m2ifi1@nnrp1.deja.com>
Source record: 177738

In article <39f7dcb0.471297347@nntp.mindspring.com>,
kk5yyNOSPAM@arrl.net wrote:
> ... Chip feels no obligation to follow
> either the law of the land or the standards of decent human behavior.

I have the impression that Chip would stand in a crosswalk with a semi barreling down on him and threaten to sue the driver for failing to yield, instead of getting out of the way.

> Having had significant dealings with small children I am familiar with
>
> Chip's behavior but my kids outgrew it by their 4th birthday it would
> seem that the Cohen's kids did not, at least in Nathan's case.

A friend who works with surgeons gets frustrated because, though most are very intelligent, many have not progressed beyond about that same age socially. They try to solve all problems by intimidation and bullying. They would sue someone for leaving a bushel of lemons and fifty pounds of sugar on their doorstep, instead of turning to and making lemonade out of them. That behavior isn't the exclusive province of that group, of course. (The friend, fortunately, has a very positive can-do attitude, and freely shares the lemonade with all who would ask.)

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

998. Looking for monopole or marconi antenna parameters...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Hernan Sanchez <hernan.sanchez@iname.com>
Message-ID: <8t7496$k20$1@nnrp1.deja.com>
Source record: 177739

Hi.

I'm trying to learn about Monopole or Marconi Antenna, but I haven't found so much information yet. I want to know about "radiation pattern", "ray angle", "directivity", "gain", "radiation efficiency", "efective area", "ray efficiency", "aperture efficiency", "radiation resistance", "bandwidth", "quality factor", "antenna resolution", "polarization".

Where I can find information about equations and all this stuff in the web ?

Thanks.

--
Hern&#65533;n S&#65533;nchez

Sent via Deja.com http://www.deja.com/
Before you buy.

999. Who won the challange?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t745m$3hn$1@iac5.navix.net>
Source record: 177740

Chip who was the winner of the Fractal challenge? Who at this very moment is spending the $1000.00 offered by N1IR to ANYONE that could Best the M12?

Please do not keep us in suspense any longer...

1000. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a1212eb.771841930@news.seanet.com>
Source record: 177741

On 25 Oct 2000 14:05:45 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>Fractenna wrote:
>>
>> >Fractenna wrote:
>> >>
>> >> >> An antenna cannot be copyrighted.
>> >>
>> >> Who did THAT?? Do you REALLY think this? What will it take to get you to
>> >seek
>> >> an attorney's counsel Mr. Lewellan??
>> >>
>> >> Features about it can be patented,
>> >> >> but to my knowledge, no one has a patent which prevents anyone from
>> >> >> making, using, or selling the MI2.
>> >> >>
>> >> >> Roy Lewallen, W7EL
>> >>
>> >> Again, you are choosing to be ignorant. Mr. Lewallen--GET AN ATTORNEY! YOU
>> >NEED
>> >> HIS ADVICE!
>> >>
>> >
>> >
>> > MR COHEN! GET A PSYCHIATRIST! YOU NEED HIS ADVICE!
>> >
>> >
>>
>> Mr. Carroll!
>>
>> Get a priest of a pastor! Ask him what the Bible says about what you are trying
>> to do to me!
>>
>
> Not surprising. Fracky can only understand one thing. That is NOT an
>effort to help. Perhaps he realizes that just because one is paranoid
>doesn't mean that they're not out to get you. Follows right along with
>the rest of his selfdelusions.

Hi Dick,

Your response did not answer the complaint.

I believe the correct answer would be:
"Satan, get thee behind me."

Presumably this does not violate copyright (even though that illicit act is suggested). ;->

73's
Richard Clark, KB7QHC

1001. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a131401.772119789@news.seanet.com>
Source record: 177742

On Wed, 25 Oct 2000 04:15:59 +0100, "Dr. David Kirkby"
<davek@medphys.ucl.ac.uk> wrote:

>Reg Edwards wrote:
>>
>> Question about Bird power meters.
>>
>
>As a student I used to work for a government calibration lab that checked the
>calibration of Bird meters. They were specified to an accuracy of 5% of FSD.
>(Most were the Bird 43's). A site would send one in, with a selection of
>elements to have the calibration checked. We did not adjust them, only indicated
>pass/fail.
>
>So few passed the +/- 5% of FSD spec, that many places sent them in with a note
>that +/- 10% of FSD would be considered acceptable.
>
>I'm not able to recall every detail of the testing procedure, but know that
>power could be measured using a water caliometer. High power attenuators were
>available, which were calibrated (I'm not sure exactly how). However, meters
>were not tested using water calorimeters on a day-to day basis. It was too time
>consuming to check a meter of limited accuracy.
>
>The day-to-day calibration of the meters used a transmitter, low pass filter,
>the Bird meter, a high power attenuator (plus possibly smaller ones) and a
>Marconi (or perhaps HP, I forget) low-power meter, measuring mW or possibly uW
>(I can't recall) exiting from the attenuators. The first high power attenuator
>was 30 dB. At some frequencies, a directional coupler and load was used instead
>of the attenuator. The attenuator or directional coupler and marconi power meter
>were all calibrated in house, ultimately against precision standards (water
>calorimeter etc.). A computer controlled the transmitter and read the data from
>the Marconi (or HP ??) power meter, while storing the calibration data for the
>attenuator or coupler.
>
>While working at the lab, I purchased my own element to cover the 70 cm amateur
>band. I checked the new element at work, only to find it was not within spec,
>even when brand new. (The meter was not then new, but I had bought it new and
>never abused it). I returned the element to Aspen Electronics (the UK
>distributor) and it was calibrated at 432 MHz for me while I waited (I did not
>care too much for its accuracy outside the amateur band). I then returned it to
>work, to find that indeed it was then within spec at the spot frequency.
>
>My one thought on these meters is that they are fine for tuning a TX up to
>maximum, but don't even consider them as precision instruments. They are not,

>nor will they ever be. Few meet the published spec after use, and while I can't
>say how many do when new, the only element I personally purchased was out of
>spec when new. Hence in my opinion, they are not really worth calibrating. They
>are undoutably, in amateur circles, a very over-rated piece of equipment. If you
>want to see if your amp is working they are good, but if you want to *measure*
>power, with any degree of certainty, I would buy a used low-power meter, and
>somehow get someone to calibrate an attenuator for you using a calibrated
>spectrum analyser. That will give far better accuracy than a Bird ever will.
>
>
>Dr. David Kirkby Ph.D,
>Senior Research Fellow,
>Department of Medical Physics, University College London,
>11-20 Capper St, London, WC1E 6JA.
>Tel: 020 7209 6406 Fax: 020 7209 6269
>email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
>Amateur radio callsign: G8WRB

Hi Dr. Dave,

Finally! Corroborating testimony from another who has worked at the
bench with these instruments.

The 5% specification was always a fantasy and as you indicate even for
BRAND NEW.

73's
Richard Clark, KB7QHC

1002. Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <39F71B9C.51FB7352@swbell.net>
Source record: 177743

Want to Buy: Non-Working Icom 745

Got burned at the local hamfest and I brought an Icom 745 HF
Transciever
that has a whole bunch of problems. I have ordered the service manual
and
I would like to buy a non working Icom 745 for parts salvage. I am also
willing to pay tX-MoX-Mozilla-Status: 0009exas.
Please reply to:

Patrick Green....KC5WCC
Beaumont, Texas
(409)833 5697
(409)832 1632...Daytime Number

1003. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a141579.772495860@news.seanet.com>
Source record: 177744

On Wed, 25 Oct 2000 00:48:20 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

> I still use a Bird almost every day, I think Dr.
>Kirkby`s experience is atypical.

Hi Richard,

To quote another Doctor, Samuel Johnson LLD

"The triumph of hope over experience."

Richard, these assessments from Metrologists (now two here in this board) do not denigrate the robust design and general applicability, they simply point out that the determination of RF Power is extremely difficult if your objective is accuracy. Bird meters do not qualify as accurate except for the most lax meaning.

On the other hand accuracy is not necessary for day to day operations, whereas repeatability and ease of use are. The robustness is probably the only asset to be found.

Where accuracy counts (for the FAA or FCC), the law mandates that such instruments be calibrated and seals affixed and certificates made to indicate the exact nature of usage. This is neither the common practice nor the common experience of the Ham OR EVEN PROFESSIONAL. It does not alter that it is the common hope.

73's
Richard Clark, KB7QHC

1004. Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <39F70E5F.EB2F4A2D@swbell.net>
Source record: 177745

Want to Buy: Non-Working Icom 745

Got burned at the local hamfest and I brought an Icom 745 HF
Transciever
that has a whole bunch of problems. I have ordered the service manual
and
I would like to buy a non working Icom 745 for parts salvage. I am also
willing to pay the shipping to Beaumont, Texas.
Please reply to:

Patrick Green....KC5WCC
Beaumont, Texas
(409)833 5697
(409)832 1632...Daytime Number

1005. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a151a54.773738677@news.seanet.com>
Source record: 177746

On Tue, 24 Oct 2000 16:06:24 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>That is, assuming you mean the first of November.
>If not, what date should I mark on my calendar?

Hi Roy,

Maybe you should keep your dance card open too. This minuet hasn't
even started yet.

73's
Richard Clark, KB7QHC

1006. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001025135730.06343.00001210@ng-bg1.aol.com>
Source record: 177747

>:DELIBERATELY ATTEMPTING TO MAKE THE VALUE OF MY INTELLECTUAL PROPERTY WORTH
>:ZERO.
>
>How much is all your intellectual property worth ?
>I am afraid it is very close to zero.
>
>--
>Gilbert.
>
>

It is actually minus, even if he paid me to build that crap. I wouldn't!!!
Frucky, eat chili, and get help, you are getting worse and that is scary.
Happy Frucktal Halloveeeen!

1007. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F71FD4.B6AE4813@uci.edu>
Source record: 177748

Fractenna wrote:
> Please quote the relevant statements that led to this bogus conclusion. We
> would like to understand your train of thought.

Here's some:

"EZNEC: Warning of Copyright Violation"

"PIRACY BY W7EL-EZNEC"

"NOTICE: ENFORCEMENT OF COPYRIGHT"

The "conclusion" is an accurate assessment of your claim.

1008. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8051B0F2A@www.indianarep.com>
Source record: 177749

You know, if one pers-- just one person does it, they may think he's really sick and they won't take him. And if two people...two people do it -- in harmony -- they may think they're both faggots and they won't take either of 'em. And if three people do it...three... can ya imagine three people walkin' in, skippin' over a pile of "Fractenna posts", and walkin' out? They may think it's an organization! And can you...can you imagine fifty people a day...I said fifty people a day, walkin' in, skippin' over pile of "Fractenna posts", and walkin' out? Then, friends, they may think it's a movement.

And that's what it is. The Rec.Radio.Amateur.Antenna Anti-defamation Movement, and all ya gotta do to join is to sing it the next time it comes around on the guitar.

With feelin'.

Thanks (and apologies to) Arlo Guthrie.

Bill Aycock <baycock@hiwaay.net> wrote in message news:39F6FDE6.4EEE4B09@hiwaay.net...
> Indeed, if past history is an indicator, if we ignore him, he will froth
> at the mouth and hold his breath till he turns blue.
>
> sounds like a good idea to me.
>
> Bill
>
> Pete wrote:
> >
> > Folks ignore all this fractenna posting crap and it will die on the vine if
> > all of you quit paying attention to it.
> > I'm tired of seeing it all the time. Let's get back to what this NG is
> > supposed to be all about, - providing help and good information to promote
> > our hobby.
> > My 2 cents worth
>

1009. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <281-39F71CD0-44@storefull-111.iap.bryant.webtv.net>
Source record: 177750

Reg wrote:
"Ferrite rod antennas are the most inefficient antennas imaginable."

Ferite rod antennas are loop antennas. Loops must approach a perimeter of a wavelength, according to Terman, to be efficient.

I however recall the post-WW-2 era when traditional air-core loop antennas were replaced in broadcast receivers, not just for size reduction, but to boost performance, too. In the U.S. the Grayburne Loopstick appeared for aftermarket retrofit of radios with the new ferrite rods in place of the obsolete air-cored loops.

Keith Henney`s "Radio Engineering Handbook" says:
"An iron-cored d-f loop promises to improve performance in addition to reducing the size of loop antennas, 150 to 1700 KHz. (P 883)

I think the iron core`s permeability multiplies flux and reduces turns for a given inductance which cuts the copper loss. The lost coil area and fewer turns are more than offset by the increased core permeability.

Best regards, Richard Harrison, KB5WZI

1010. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F724D7.BAE210B7@eznec.com>
Source record: 177751

An' here I am, just sittin' on the Group W bench, with all them
mother-rapers. . . father-rapers. . .

Thanks, I needed that!

Roy Lewallen, W7EL

jimmy john wrote:
>
> You know, if one pers-- just one person does it, they may think he's really
> sick and they won't take him. And if two people...two people do it -- in
> harmony -- they may think they're both faggots and they won't take either of
> 'em. And if three people do it...three... can ya imagine three people
> walkin' in, skippin' over a pile of "Fractenna posts", and walkin' out? They
> may think it's an organization! And can you...can you imagine fifty people a
> day...I said fifty people a day, walkin' in, skippin' over pile of
> "Fractenna posts", and walkin' out? Then, friends, they may think it's a
> movement.
>
> And that's what it is. The Rec.Radio.Amateur.Antenna Anti-defamation
> Movement, and all ya gotta do to join is to sing it the next time it comes
> around on the guitar.
>
> With feelin'.
>
> Thanks (and apologies to) Arlo Guthrie.

1011. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F725EB.F37D8090@bigfoot.com>
Source record: 177752

REDBONE wrote:
> Got burned at the local hamfest and I brought an Icom 745 HF
> Transciever that has a whole bunch of problems.

Are you aware that the IC-745 uP program is stored in dynamic
RAM and if the battery runs down the transceiver stops working?
Do you know whether the dynamic RAM program is operational or not?
Even if there is a power surge and the RAM gets changed, the 745
will fail. I had one for many years.
--
http://www.mindspring.com/~w6rca

1012. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8t7acoppm1@nnrp1.deja.com>
Source record: 177753

And then of course there's one of my fravorite lines of all time, "But
when we arrived, we discovered there was a third possibility which we
had not counted upon..."

In article <39F724D7.BAE210B7@eznec.com>,
Roy Lewallen <w7el@eznec.com> wrote:
> An' here I am, just sittin' on the Group W bench, with all them
> mother-rapers. . . father-rapers. . .
>
> Thanks, I needed that!
>
> Roy Lewallen, W7EL
>
> jimmy john wrote:
> >
> > You know, if one pers-- just one person does it, they may think he's
really
> > sick and they won't take him. And if two people...two people do it
-- in
> > harmony -- they may think they're both faggots and they won't take
either of
> > 'em. And if three people do it...three... can ya imagine three
people
> > walkin' in, skippin' over a pile of "Fractenna posts", and walkin'
out? They
> > may think it's an organization! And can you...can you imagine fifty
people a
> > day...I said fifty people a day, walkin' in, skippin' over pile of
> > "Fractenna posts", and walkin' out? Then, friends, they may think
it's a
> > movement.
> >
> > And that's what it is. The Rec.Radio.Amateur.Antenna Anti-defamation
> > Movement, and all ya gotta do to join is to sing it the next time it
comes
> > around on the guitar.
> >
> > With feelin'.
> >
> > Thanks (and apologies to) Arlo Guthrie.
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

1013. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F729B6.643C@wt.net>
Source record: 177754

Rick Littlefield wrote:
>
> > ...what Dr. Cohen is essentially saying is that if he draws a picture of of
> the Statue of Liberty and copyrights it, then his copyright applies to any
> picture that I might subsequently draw of the Statue of Liberty by claiming
> that mine is a derivitive work.

Hummm, I wonder if that applies to the Washington monument. I was thinking about starting a new antenna company called frectenna. My first project I had in mind was to cover the Washington monument with thick tin foil. I think I will name it the Frectal Probe. I wonder if any infringements need to be contemplated? MK
--
http://web.wt.net/~nm5k

1014. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: K7MEM <meserve@my-deja.com>
Message-ID: <39F728CF.FF6D5DF@my-deja.com>
Source record: 177755

jimmy john wrote:
>
> You know, if one pers-- just one person does it, they may think he's really
> sick and they won't take him. And if two people...two people do it -- in
> harmony -- they may think they're both faggots and they won't take either of
> 'em. And if three people do it...three... can ya imagine three people
> walkin' in, skippin' over a pile of "Fractenna posts", and walkin' out? They
> may think it's an organization! And can you...can you imagine fifty people a
> day...I said fifty people a day, walkin' in, skippin' over pile of
> "Fractenna posts", and walkin' out? Then, friends, they may think it's a
> movement.
>
> And that's what it is. The Rec.Radio.Amateur.Antenna Anti-defamation
> Movement, and all ya gotta do to join is to sing it the next time it comes
> around on the guitar.
>
> With feelin'.
>
> Thanks (and apologies to) Arlo Guthrie.

There I was, sittin on the Group W bench. There were mother rapers
and father stabers and "Fractenna posts"! Yes, my friends,
sitting right there, next to me, on the Group W bench.

More apologies to Arlo.

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

---------== Posted via Deja News, The Discussion Network ==---------
http://www.deja.com/ Search, Read, Discuss, or Start Your Own

1015. Re: Who won the challange?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F72AC2.49F0E4EA@oio.net>
Source record: 177756

W4JLE wrote:
>
> Chip who was the winner of the Fractal challenge? Who at this very moment is
> spending the $1000.00 offered by N1IR to ANYONE that could Best the M12?
>
> Please do not keep us in suspense any longer...

Aww... Come on, ol'Frac' was the judge! Who do you
think would win?
'Doc

1016. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F72CB3.6801@wt.net>
Source record: 177757

Andrew J. O'Brien wrote:
>
> I was thinking about building a simple , short spaced (8 foot), two element
> beam for 20M made from wire as opposed to aluminum tubing. I have a design
> in mind that will use supports to get it up around 30 feet. My question is
> about feed method and matching. I was thinking about a reflector and a
> driven element fed as a dipole, I assume that will work. I am planning to
> fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or
> 1:1? I am confused because I have seen two differing articles and one
> says 4:1 and the other 1:1 . I assume that the center of the dipole would
> be close to 50 ohms and that 1:1 would be suffice ?
>
> Also, I think I can get the two wire elements fairly close to be aligned
> with each other, but some sag might exist. How critical is the alignment
> before it adversely affects the performace, and my Yagi becomes Yagi-less.?
>
> Andy KB2EOQ

I've seen some that use wooden spacers to hold the elements together at
the right spacing. You can design the antenna to have pretty much any
feed you would want. Depends on the spacing of the elements. I think I
would design for a appx 50 ohm feedpoint and just go with the 1:1 balun.
Actually, I was looking at a few of these on eznec demo the other day. I
made a 2 el beam that had a nearly perfect 50 ohm feedpoint. About 47
ohms if I remember right. The use of 4:1 baluns will usually be used on
yagi's that are designed for maximum performance.
The feedpoint impedance will usually drop to the 15-20-30 ohm range with
an optimum spacing for max gain/FB ratio.
The design of a yagi with a 50 ohm feed a slight compromize in
performance usually, but I doubt you would notice much difference in the
real world. For a simple 2 el wire beam, I'd keep it simple and design
for a 50 ohm feed, and use the 1:1 balun which can be as simple as a
choke. Easy to deal with. MK
--
http://web.wt.net/~nm5k

1017. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F72CD8.ED62CA3E@uci.edu>
Source record: 177758

Fractenna wrote:
> Lewallen is a PIRATE!

It is unlikely that your claim is legally supportable. Therefore, I offer the following:

libel - a written or oral defamatory statement or representation that conveys an unjustly unfavorable impression

1018. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39F72E50.9DF6530F@uci.edu>
Source record: 177759

Fractenna wrote:
> >How can you claim ownership of a file that you did not create? It's
> >easily arguable that fair use was made of publicly available
> >information. You've barely a leg to stand on here, Chip.

> I am not standing on any legs.

Well, I was being generous. You're right. You really haven't a leg to
stand on.

1019. Re: Butternut HF9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39F72FA7.5811BCA1@att.net>
Source record: 177760

The 17-meter band on my HF9V required a drastic departure from the directions in order to get it to tune. I think that the coil ended up compressed to about 1/2 the length called for in the instructions.

Just do with the coil whatever it takes to get the minimum SWR point where you want it. But, check the other bands for any effects. With any multi-band antenna, any one adjustment ripples through the entire system causing anywhere from negligible to major changes in other bands.

As I recall, both 12 and 17 were pretty far off with the basic instructions. But both tuned well with a little more effort.

As a practical matter, it is probably not worth a lot of time and effort to get every band under 2:1. Your rig tuner can easily handle that and take the antenna system impedance down to 50 ohms within the transceiver.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Klensir wrote:
>
> I have just put up a Butternut HF9V at ground level and installed 36 radial
> wires in all directions from its base for distances of 40 or more feet each
> (a total of 1500 feet of #14 copper wire). The radials are buried just
> below the surface.
>
> I am getting good VSWR readings of 1.4:1 or less on all bands 80 - 10 Meters
> except for 17 Meters. There the VSWR is running about 2.5:1. It is just
> about all my built-in tuner can handle.
>
> Has anyone encountered similar conditions such as this with only one band
> being way out of range? Any suggestions? I have doubled checked the
> installation procedure and looked for lose connections, etc.

1020. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39F7310D.3BC657F0@att.net>
Source record: 177761

Thanks for the background and advice, David.

I think that I will just let things alone and rely upon other better
calibrated power meters for detailed work.

I guess it just "gets me" that the comparatively low-tech metering
circuit in my MFJ 989-C tuner can track the output of my Kachina from
100 watts down to a few watts and be right on the money to within a
needle width at all power levels. The Kachina output power is regulated
digitally to within a small fraction of a dB. It also tracks the meter
and digital/panel indications of the IC-756PRO quite closely as well.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

"Dr. David Kirkby" wrote:
>
> Reg Edwards wrote:
> >
> > Question about Bird power meters.
> >
>
> As a student I used to work for a government calibration lab that checked the
> calibration of Bird meters. They were specified to an accuracy of 5% of FSD.
> (Most were the Bird 43's). A site would send one in, with a selection of
> elements to have the calibration checked. We did not adjust them, only indicated
> pass/fail.
>
> So few passed the +/- 5% of FSD spec, that many places sent them in with a note
> that +/- 10% of FSD would be considered acceptable.
>
> I'm not able to recall every detail of the testing procedure, but know that
> power could be measured using a water caliometer. High power attenuators were
> available, which were calibrated (I'm not sure exactly how). However, meters
> were not tested using water calorimeters on a day-to day basis. It was too time
> consuming to check a meter of limited accuracy.
>
> The day-to-day calibration of the meters used a transmitter, low pass filter,
> the Bird meter, a high power attenuator (plus possibly smaller ones) and a
> Marconi (or perhaps HP, I forget) low-power meter, measuring mW or possibly uW
> (I can't recall) exiting from the attenuators. The first high power attenuator
> was 30 dB. At some frequencies, a directional coupler and load was used instead
> of the attenuator. The attenuator or directional coupler and marconi power meter

> were all calibrated in house, ultimately against precision standards (water
> calorimeter etc.). A computer controlled the transmitter and read the data from
> the Marconi (or HP ??) power meter, while storing the calibration data for the
> attenuator or coupler.
>
> While working at the lab, I purchased my own element to cover the 70 cm amateur
> band. I checked the new element at work, only to find it was not within spec,
> even when brand new. (The meter was not then new, but I had bought it new and
> never abused it). I returned the element to Aspen Electronics (the UK
> distributor) and it was calibrated at 432 MHz for me while I waited (I did not
> care too much for its accuracy outside the amateur band). I then returned it to
> work, to find that indeed it was then within spec at the spot frequency.
>
> My one thought on these meters is that they are fine for tuning a TX up to
> maximum, but don't even consider them as precision instruments. They are not,
> nor will they ever be. Few meet the published spec after use, and while I can't
> say how many do when new, the only element I personally purchased was out of
> spec when new. Hence in my opinion, they are not really worth calibrating. They
> are undoutably, in amateur circles, a very over-rated piece of equipment. If you
> want to see if your amp is working they are good, but if you want to *measure*
> power, with any degree of certainty, I would buy a used low-power meter, and
> somehow get someone to calibrate an attenuator for you using a calibrated
> spectrum analyser. That will give far better accuracy than a Bird ever will.

1021. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8051B4CB1@www.indianarep.com>
Source record: 177762

Oh, yeah. There is THAT part, too. Hmmm, no not gonna go there. Hope no one at Westinghouse takes offense.

Roy Lewallen <w7el@eznec.com> wrote in message news:39F724D7.BAE210B7@eznec.com...
> An' here I am, just sittin' on the Group W bench, with all them
> mother-rapers. . . father-rapers. . .
>
> Thanks, I needed that!
>

1022. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a1731c3.779737012@news.seanet.com>
Source record: 177763

On Wed, 25 Oct 2000 12:59:44 -0500, "jimmy john" <jj@sandwitch.org>
wrote:

>You know, if one pers-- just one person does it, they may think he's really
>sick and they won't take him. And if two people...two people do it -- in
>harmony -- they may think they're both faggots and they won't take either of
>'em. And if three people do it...three... can ya imagine three people
>walkin' in, skippin' over a pile of "Fractenna posts", and walkin' out? They
>may think it's an organization! And can you...can you imagine fifty people a
>day...I said fifty people a day, walkin' in, skippin' over pile of
>"Fractenna posts", and walkin' out? Then, friends, they may think it's a
>movement.
>
>And that's what it is. The Rec.Radio.Amateur.Antenna Anti-defamation
>Movement, and all ya gotta do to join is to sing it the next time it comes
>around on the guitar.
>
>With feelin'.
>
>
>Thanks (and apologies to) Arlo Guthrie.
>
...

The revolution will not be brought to you by the
Schaefer Award Theatre and will not star Natalie
Woods and Steve McQueen or Bullwinkle and Julia.
The revolution will not give your mouth sex appeal.
The revolution will not get rid of the nubs.
The revolution will not make you look five pounds thinner,
because the revolution will not be televised, Brother.
...

Thanks (and apologies to) Gil Scott-Heron

73's
Richard Clark, KB7QHC

1023. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a183427.780349763@news.seanet.com>
Source record: 177764

On Wed, 25 Oct 2000 11:56:24 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Fractenna wrote:
>> Lewallen is a PIRATE!
>
>It is unlikely that your claim is legally supportable. Therefore, I
>offer the following:
>
>libel - a written or oral defamatory statement or representation that
>conveys an unjustly unfavorable impression

Hi Jim,

In the jury of peers (who decide what is justifiable and what is
favorable) the decision has already been acknowledged:
>
>I have received many e-mails saying what an evil person I am for damaging Roy
>Lewallen.
snip
>
>NC

As there is no other court with jurisdiction being approached, their
decision is final:

DO NOT RESPOND TO TROLLS OR FRAUDS

This thread is closed. ;->

73's
Richard Clark, KB7QHC

1024. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F73FB6.64077197@eznec.com>
Source record: 177765

You might be interested in the "Field Day Special". It's a
ZL-special-like antenna -- two elements spaced 8 feet apart on 20
meters, made entirely from 300 ohm twinlead. It has a very good
front/back ratio. It has a fairly broad forward lobe, and you can
remotely reverse the pattern, both of which are convenient if you can't
rotate it. I've used them for Field Day for many years, as well as from
the home QTH. You can get full information, and a simple program for
designing this antenna, from ftp://eznec.com/pub/, or by going to
http://eznec.com and clicking on the FTP Site link. The file is
fdsp~.exe. "Running" it expands it into several files, including
instructions.

Roy Lewallen, W7EL

Mark Keith wrote:
>
> Andrew J. O'Brien wrote:
> >
> > I was thinking about building a simple , short spaced (8 foot), two element
> > beam for 20M made from wire as opposed to aluminum tubing. I have a design
> > in mind that will use supports to get it up around 30 feet. My question is
> > about feed method and matching. I was thinking about a reflector and a
> > driven element fed as a dipole, I assume that will work. I am planning to
> > fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or
> > 1:1? I am confused because I have seen two differing articles and one
> > says 4:1 and the other 1:1 . I assume that the center of the dipole would
> > be close to 50 ohms and that 1:1 would be suffice ?
> >
> > Also, I think I can get the two wire elements fairly close to be aligned
> > with each other, but some sag might exist. How critical is the alignment
> > before it adversely affects the performace, and my Yagi becomes Yagi-less.?
> >
> > Andy KB2EOQ
>
> I've seen some that use wooden spacers to hold the elements together at
> the right spacing. You can design the antenna to have pretty much any
> feed you would want. Depends on the spacing of the elements. I think I
> would design for a appx 50 ohm feedpoint and just go with the 1:1 balun.
> Actually, I was looking at a few of these on eznec demo the other day. I
> made a 2 el beam that had a nearly perfect 50 ohm feedpoint. About 47
> ohms if I remember right. The use of 4:1 baluns will usually be used on
> yagi's that are designed for maximum performance.
> The feedpoint impedance will usually drop to the 15-20-30 ohm range with
> an optimum spacing for max gain/FB ratio.
> The design of a yagi with a 50 ohm feed a slight compromize in

> performance usually, but I doubt you would notice much difference in the
> real world. For a simple 2 el wire beam, I'd keep it simple and design
> for a 50 ohm feed, and use the 1:1 balun which can be as simple as a
> choke. Easy to deal with. MK
> --
> http://web.wt.net/~nm5k

1025. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <5087-39F73DF2-49@storefull-114.iap.bryant.webtv.net>
Source record: 177766

Richard Clark wrote:
"Bird meters do not qualify as accurate except for the most lax meaning."

We are fairly lax in the U.S.. The FCC inspectors on visiting the stations where I worked would accept the thermoammeter common-point reading along with our declarations of measured impedance at that point as definitive of the transmitter power output. They would at times also make fieldstrength measurements at our designated monitoring points, for power verification. antenna efficiency, and compliance with null impositions. The FCC didn`t require any seals, stickers, or traceability to standards. They did approve frequency standards and modulation monitors, as I recall. We also employed a frequency monitoring service to wire us a report every month to compare with our logged reading at the service`s measurement time.

Every two-way radio shop I ever saw, including those operated by radio manufacturers as company stores, used the Bird wattmeter as a power measurement standard. For microwaves they would use the appropriate H-P test set.

The radio manufacturer wouldn`t tolerate a power meter that read low on power any more than an auto manufacturer would tolerate speedometers that gave low indications.

On the other hand, a radio manufacturer wouldn`t want a wattmeter that read high because customers would ask why such a powerful radio didn`t talk farther.

Manufacturers and users also have maximum FCC licensed power restrictions that demand compliance. The inspector`s power meter had better be scaled the same as the licensee`s.

My experience has been, that if Link, RCA, GE, Motorola, or whoever said the radio would put out 500 watts, it sure did with a little extra in reserve. Anybody`s trusty Bird wattmeter would give very nearly the same reading in measuring that output in that instance.

I think Bird is truthful in their accuracy claim. There are many reasons other than a poor sample being measured to find inaccuracies. Bird gives quite a list starting with the standard against which the sample is being compared. There is the signal being measured which must be a clean sinusoid with no spurious signals attached. Temperatures must be controlled. The right media must be properly used, and it all will fail if the operator doesn`t know exactly what he is doing.

We have two metering experts testifying that they`ve found the Bird wattmeter very short of the claimed accuracy. I don`t know how many samples they`ve tested. I`ve seen thousands of measurements with no reason to question the results. Questionable slugs have been rare indeed.

But, it happens. You can`t put 10000 watts throough a 1/10-watt slug without the possibility of damage.

I own no Bird stock and I don`t know anyone who works for Bird. I`m not loyal. I`d buy something else in a heartbeat if it were cheaper and better. I never thought I`d be defending something I thought was common knowledge. The Bird isn`t just something that works well, it`s about the only thing that conveniently measures power in the field accurately while the equipment being measured is operating, (normally?)

Best regards, Richard Harrison, KB5WZI

1026. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F7414C.1074D9ED@eznec.com>
Source record: 177767

VE9SRB wrote:
>
> This is to Roy Lewallan:
>
> Roy: If you are breaking the law, please stop immediately. I do not
> encourage you or anyone else to break the law. Please do not break the law.
> In fact, I strongly encourage you not to break the law. I think breaking
> the law is wrong. Please Roy, if you are breaking the law, stop.
>
> Steve

But if I did, I'd have to give up all those mean an' ugly things -- all
them groooovy things -- that got me here sittin' on the Group W bench. .
.

Roy Lewallen, W7EL

[Now THAT's intellectual property. Thanks, Arlo.]

1027. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <XnHJ5.6574$UL.392754@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177768

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39F7414C.1074D9ED@eznec.com...
>
> But if I did, I'd have to give up all those mean an' ugly things -- all
> them grooovy things -- that got me here sittin' on the Group W bench. .
> .
>
> Roy Lewallen, W7EL
>
> [Now THAT's intellectual property. Thanks, Arlo.]

Speakn of mean and ugly things, me an' the boyz is goin out piratin this weekend. Putn on the woodn leg, eye patch, an all. Get off the bench, hoist the main sails, ye lan lubbn pirate and join us. Don't 'spect much illegal will happen tho', wouldn't want to encourage ya that way.

1028. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a1944be.784596960@news.seanet.com>
Source record: 177769

On Wed, 25 Oct 2000 15:09:22 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>
>I think Bird is truthful in their accuracy claim. There are many reasons
>other than a poor sample being measured to find inaccuracies. Bird gives
>quite a list starting with the standard against which the sample is
>being compared. There is the signal being measured which must be a clean
>sinusoid with no spurious signals attached. Temperatures must be
>controlled. The right media must be properly used, and it all will fail
>if the operator doesn`t know exactly what he is doing.
>
>We have two metering experts testifying that they`ve found the Bird
>wattmeter very short of the claimed accuracy. I don`t know how many
>samples they`ve tested. I`ve seen thousands of measurements with no
>reason to question the results. Questionable slugs have been rare
>indeed.

Hi Richard,

I've seen the same thousand, and qualified (the less encompassing version of calibrated) all of them. Absolutely every Bird that came through the door failed to meet standards. There is no way on god's green earth that any casual observation will reveal accuracy or inaccuracy in any reading.

But really, this is of no importance. Most measurements of power are not concerned with absolute accuracy, just relative accuracy. Taking the same out of spec Bird and measuring forward and reverse power suffers equally and after a fashion balances out. Birds are robust and good service monitors, but are not absolutely accurate.

And George, your Kachina probably exceeds the accuracy of the Bird, but using a Bird to prove it is rather getting the horse before the cart. Now when I say accurate, as he stated that the settings offered correlated good readings, this only proves the scale linearity of both instruments, but says absolutely nothing about absolute accuracy. The one relative to the other offers very good evidence of relative accuracy, which for his purposes is more than adequate. However, observing a new out-of-the-ordinary reading is suggestive, but lacking a third (non-Bird) standard, it is simply a coin toss as to where to point the finger at the offending device. All should note that this out-of-the-ordinary reading is still within the so-called 5% specification from Bird.

73's
Richard Clark, KB7QHC

1029. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F74AE9.4EE3@wt.net>
Source record: 177770

Andrew J. O'Brien wrote:
>
> I was thinking about building a simple , short spaced (8 foot), two element
> beam for 20M made from wire as opposed to aluminum tubing. I have a design
> in mind that will use supports to get it up around 30 feet. My question is
> about feed method and matching. I was thinking about a reflector and a
> driven element fed as a dipole, I assume that will work. I am planning to
> fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or
> 1:1? I am confused because I have seen two differing articles and one
> says 4:1 and the other 1:1 . I assume that the center of the dipole would
> be close to 50 ohms and that 1:1 would be suffice ?
>
> Also, I think I can get the two wire elements fairly close to be aligned
> with each other, but some sag might exist. How critical is the alignment
> before it adversely affects the performace, and my Yagi becomes Yagi-less.?
>
> Andy KB2EOQ

I ran your antenna thru eznec real quick to see what would happen being
stuck with a 8 ft spacing. I came up a with an optimized design for that
spacing. IE: gain vs FB ratio. The best match I could come up with to 50
ohm line so far was about 1:8 to 1 using a 52 ohm coax.

EZNEC Demo ver. 3.0

10m2el 10/25/00 3:36:01 PM

--------------- SOURCE DATA ---------------

Frequency = 14.15 MHz.

Source 1 Voltage = 27.76 V. at 3.89 deg.
Current = 1 A. at 0.0 deg.
Impedance = 27.69 + J 1.882 ohms
Power = 27.69 watts
SWR (50 ohm system) = 1.809 (75 ohm system) = 2.710

The feed impedance about 27 ohms. You could run this direct if you had a
non picky tube rig, but solid state you would want a little better
match. I could get a better match, but need a wider spacing. This design
has a good F/B ratio for a 2 el. Abt 10 db. About 6.5 dbi gain. Would
make a fairly good 2 el I think. And if you used wood spacers at each
end the antenna could be flipped in the opposite direction. But I guess
would be kinda of a pain. I made an image of the azimuth plot you can
see here: http://web.wt.net/~nm5k/20m2el-1.jpg
I kinda think this would be a good one to try if you need to keep the 8

ft spacing. But you need about a 2:1 ratio balun or whatever matching scheme for a perfect match. I also am posting the ez file.
http://web.wt.net/~nm5k/202elsp.ez

If you have or d/l the eznec demo you can run this antenna, and modify if needed. It's pretty easy to get one dialed in. Took me about 10 min for this one. The antenna uses #14 wire for lower weight.
MK
--
http://web.wt.net/~nm5k

1030. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F74C65.15E0@wt.net>
Source record: 177771

Sorry, I noticed you may have trouble d/ling the ez file. It's seems to think is an ascii file or something. You can also d/l a zipped version at http://web.wt.net/~nm5k/20m2el.zip MK

--
http://web.wt.net/~nm5k

1031. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F75257.176D@wt.net>
Source record: 177772

Mark Keith wrote:
>
> Sorry, I noticed you may have trouble d/ling the ez file. It's seems to
> think is an ascii file or something. You can also d/l a zipped version
> at http://web.wt.net/~nm5k/20m2el.zip MK
>
> --
> http://web.wt.net/~nm5k

P.S This is a public notice: Said ant design and ez file is copyright by
Frectal Antenna Industries Inc. A subsidiary of Piker Designs. Any
unauthorized use is encouraged. MK
--
http://web.wt.net/~nm5k

1032. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20001025174349.02753.00001090@ng-fu1.aol.com>
Source record: 177773

I would try a dipole, feed with ladder wire. Make the dipole as long as possible, and remember to keep the ladder wire away from metal.

Randy

1033. Re: Butternut HF9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <39f758c4.919603976@news.galilei.com>
Source record: 177774

Hi K

I had to squash my 17 meter coil considerably before I found a good
low SWR that stayed there throughout the band.

TTUL
Gary

1034. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12928-39F75668-22@storefull-118.iap.bryant.webtv.net>
Source record: 177775

Richard Clark wrote:
"Absolutely every Bird that came through he door failed to meet standards."

I could fix `em like that too. Or maybe they just sent Richard the bad ones.

We had Termaline meters in addition to the Thruline meters. The Termaline meter is a Dummy load with an R-F voltmeter calibrated in watts across the dummy load. Our Thrulines in series with the Termalines would would usually read very nearly the same. There is more than coincidence involved here.

Best regards, Richard Harrison, KB5WZI

1035. Re: Law suit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: accrider3@aol.comnospam
Message-ID: <20001025181716.04338.00000981@ng-cm1.aol.com>
Source record: 177776

Fractanal finger of fate is probably playing with his bippie

1036. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "Dr. David Kirkby" <davek@medphys.ucl.ac.uk>
Message-ID: <39F7608E.74706599@medphys.ucl.ac.uk>
Source record: 177777

Richard Harrison wrote:

> Dr. Kirkby is too pessimistic. I spent over a quarter century with a
> company which operated over a thousand radios which all got regular

All I can say is that we were a calibration lab, with temperature and humidity accurately controlled. We were a government lab, with standards that were internationally traceable. This was a whole different level of accuracy compared to transmitters whose output power possibly depended on temperature, mains voltage etc.

> + or -5% is not claimed as laboratory accuracy. But, compared to any
> other commonly available field measurement RF wattmeter, the Bird
> deserves the reputation it has with amateurs and professionals alike.

I'm not saying Bird claim +/- 5% is laboratory accuracy - what I am saying is that few meters meet that 5% spec. Most meet +/- 10% of FSD, but few meet 5%. The number failing to meet +/- 10% was not small, but I can't recall exact numbers.

For what it is worth, I've met other professionals who share the same opinion as me. I bought a Bird 43 as a ham and when a much older ham told me they were not very good, I did not believe him. Perhaps I did not want too, as I was at school at the time and a Bird 43 was quite a financial investment for me. The chap who told me this had worked for the Ministry of Defense too.

I'm not active now, but if I did become active again, I would probably buy a Bird again. They have an accurate 50 Ohm section of line (unlike most ham meters) and are accurate enough for most amateur use, but accurate to +/- 5% of FSD they are not.

I think we will have to agree to differ.

--
Dr. David Kirkby Ph.D,
Senior Research Fellow,
Department of Medical Physics, University College London,
11-20 Capper St, London, WC1E 6JA.
Tel: 020 7209 6406 Fax: 020 7209 6269
email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
Amateur radio callsign: G8WRB

1037. Re: PUBLIC NOTICE Fractenna flauts Federal Law

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F766BD.72E8@wt.net>
Source record: 177778

Gerald Schmitt wrote:

>
> Please spare us the tirade about trying to protect your copyright.
> This has nothing to do with your copyright it everything to do with
> your abnormal, unnatural need for attention and acceptance. Get
> some professional help I'm worried about you. If you lived closer
> and/or had any history of doing more than blustering I would be
> worried about me.

You never know. Many hams have gone off the deep end. "Many were extra class". I rememeber one that had an extra class ticket, and worked for the post office to boot. He went whacko one day and started shooting up the place. You hear the frac whine about his perceived death threats. if I were to write to him what he wrote in this post which I clip, you can bet the ranch he'd be crying death threat!!!! When someone says there will be grave consequences for making certain statements, what would you think. I'd be thinking bulletproof vest for starters if I had to venture out too far.

>>frac wrote
>> PLEASE talk to your attorney about this: It will have grave consequences
>for
>> you at a later time to have made such misleading public statements.
>>
>> Nathan Cohen, Ph.D.

Hummmmm. Sounds pretty serious to me. But only his area sporting goods store knows for sure. MK
--
http://web.wt.net/~nm5k

1038. Wanted: Stationmaster shipping tube...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "Adam T. Cately" <atcately@bright.net>
Message-ID: <39F76616.350B4D12@bright.net>
Source record: 177779

I need the shipping tube for a Stationmaster antenna - our club 2m repeater antenna went south, and we need to ship it back to it's maker to fix or replace. We did not keep the original. If anyone has one of these, and you are a few hours from the Toledo, OH area and would like to see me pick it up, this would be most cool. Thanks bunches.

Please reply direct - the address is good.

- Adam - KB8MDF - atcately@bright.net
- atcately@midport.com

1039. Re: Butternut HF9V question - "THANKS"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Klensir <klenc@earthlink.net>
Message-ID: <yHJJ5.24521$rD3.1634418@newsread2.prod.itd.earthlink.net>
Source record: 177780

Thanks to all of those who have offered tips on how to correct the problem.
It is good to know that the problem can be corrected (or at least improved
from what I have now). I will continue to work with it and see how it goes.

73's

Steve Klenc
kc0acq

1040. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39F76C4E.D10AFD15@mwci.net>
Source record: 177781

Richard Harrison wrote:

> We had Termaline meters in addition to the Thruline meters. The
> Termaline meter is a Dummy load with an R-F voltmeter calibrated in
> watts across the dummy load. Our Thrulines in series with the Termalines
> would would usually read very nearly the same. There is more than
> coincidence involved here.

A Bird 43 running *near full scale* that has 5% of full scale accuracy can in principle be off by 0.2 dB. Isn't this plenty good enough for most practical purposes?

One other thing. If a mfr guarantees 5% of full scale as it leaves the factory, it had better be substantially better than that during assembly. Else at the factory inspection station the number of rejects will be as much as 50 percent. This would be intolerable for any mfr. The tail of the probability curve should be quite small beyond the 5% level. This makes the "expected" accuracy more like 3% of full scale.

It's my understanding also that wattmeters with digital readout are more accurate and that a lot of the error rating is budgeted to the D'Arsonval meter.

Bill W0IYH

1041. If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <pUJJ5.85$ny6.760@newsfeed.slurp.net>
Source record: 177782

... is a phallic symbol, what is the Pentagon?

Mark keith wrote:

SNIP

Hummm, I wonder if that applies to the Washington monument. I was thinking about starting a new antenna company called frectenna. My first project I had in mind was to cover the Washington monument with thick tin foil. I think I will name it the Frectal Probe. I wonder if any infringements need to be contemplated? MK
--
http://web.wt.net/~nm5k

1042. Re: If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F76FBD.5503@wt.net>
Source record: 177783

David J. Windisch wrote:
>
> ... is a phallic symbol, what is the Pentagon?
>
> Mark keith wrote:
>
> SNIP
>
> Hummm, I wonder if that applies to the Washington monument. I was
> thinking about starting a new antenna company called frectenna. My first
> project I had in mind was to cover the Washington monument with thick
> tin foil. I think I will name it the Frectal Probe. I wonder if any
> infringements need to be contemplated? MK
> --
> http://web.wt.net/~nm5k

Won't touch that one....g MK
--
http://web.wt.net/~nm5k

1043. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <28425-39F7844B-140@storefull-112.iap.bryant.webtv.net>
Source record: 177784

Ian Jackson, G3OHX wrote:
"If the output impedance (resistance?) of a transmitter was equal to the load, a transmitter delivering 100W of power would dissipate at least 100W in its output stage."

Exactly the argument I made again and again on this newsgroup. Dr. John Fakan privately went to great lengths to show me I was wrong. But, I just didn`t get the idea of a lossless resistance controlling the output of a Class-C amplifier despite marvelous water-wheel analogies and the example of a marvelous electrical machine the good doctor had built for NASA.

Then it dawned on me. It was possible to have a dissipationless resistance to limit the flow of electricity. No energy storing reactances, nothing more than a perfect off/on switch. You increase resistance by increasing the % of off time during a regular switching cycle. This can be at a radio carrier frequency rate. The intrruptions can last for a large part of the cycle, in which case the effective resistance will be high, or the interruptions can last only for a short part of the cycle, in which case, the effective resistance will be low.

The Class-C amplifier is just such a switch but it is imperfect. Most of its loss comes from a finite resistance while switched on.

The internal resistance of the Class-C amplifier is thus made up of two parts, the resistance from its switched-on loss and the lossless resistance from its off/on cycle which creates its average energy flow. The sum of these two resistances is the output resistance of the Class-C amplifier.

The last time I posted this theory the silence was deafening. It probably comes from the idea that the insane had best be humored.

Best regards, Richard Harrison, KB5WZI

1044. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F78B5C.F7BA42F3@oio.net>
Source record: 177785

jbhall1282@my-deja.com wrote:
>
> I have a long run of coax from the shack out to my antenna garden and
> it must run underground. Trying to minimize losses, I was thinking of
> running hardline. Is most hardline suitable for direct burial? Thanks.
> 73
> Jerry
> W0PWE
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Jerry,
Most hard-line is buriable. If you have the choice,
a type with a PVC outer coating is better than bare metal
for burial.
'Doc

1045. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39f7950e$0$12848$45beb828@newscene.com>
Source record: 177786

I have a 43' W9INN dipole that works wonderfully well 80-10 meters. look for a small ad in the back of QST (very small) and same in CQ.

I feed with coax. Its works great and my attic is about 45' off the groud so with 100 watts I work the world on 10 and 20 meters. 80 meters is also respectable.

Tuner required.

--jeffrey

In article <8t72k6ies1@nnrp1.deja.com>, tegwilym@my-deja.com says...
>
>I live in a condominium that has all the usual rules against antennas,
>color of curtains, pet....etc. I am trying to figure out what kind of
>antenna I could put in my attic that might work ok on the 10-20 meter
>bands. I currently have a vacant unit next door to me that was just
>sold, so I figure this would be a good time to sneak around up in the
>attic without anyone hearing me up there. I do have one of
>those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
>search) in the hallway and can't get it tuned up to transmit. I am
>thinking of maybe putting that up in the attic or maybe just a normal
>dipole up there. I am estimating that I have about 50 or 60 feet of
>room that I can play with up there. The attic is pretty short, only
>about 30 inches tall at the peak of the roof.
>
>I do have a QFH antanne up there right now for receving the NOAA
>satellite images on 137mhz and have had great results from that, so I
>know an antenna is possible up there.
>
>Any ideas from any of you condo dwellers?
>
>Tom KA7VIK
>Seattle
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

1046. Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Kirby <kirby.no.spam@kpsnet.com>
Message-ID: <39F796AF.69FC9F6F@kpsnet.com>
Source record: 177787

I'm considering purchasing an antenna analyzer - the MFJ or something in that price range. Yeah, I know what MFJ stands for .... ;) . Have there been any comparison reviews done?

Kirby

1047. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39F78BF1.F9390D0C@dialpoint.net>
Source record: 177788

1. Only over a very narrow band of frequencies will most any antenna be purely resistive. There will all most always be some reactance in the antenna system.

2. Depending on tube or transistor finals in the transmitter you either start with a very high impenadance value (say around 800 volts at 200 ma for a pair of 6146 or similar tubes for about 100 watts output) or for transistors a very low one(12 volts at around 20 amps) and that is transformed by a matching circuit to whatever the antenna is for maximum power transfer. The output circuits must be designed to transform this value to whatever the antenna (load) is for maximum power transfer. Usually 50 ohms for modern transmitters.

> 1. Why can't you have a 'resistance' at RF? Surely all transmitters are
> designed to work onto a resistive load - usually 50 ohms. I hope ALL my
> fantastic antenna systems present (via a transmatch, where necessary) a
> perfect resistive 50 ohms to the transmitter (my 'perfect' SWR meter
> indicates zero reflected power with my perfect 50 ohm load, so this must
> be true!).
>
> 2. Surely the output impedance of a transmitter should be considerably
> LOWER than the load which it is intended to feed. A power transmitter is
> NOT a lab signal generator. If the output impedance (resistance?) of a
> transmitter was equal to the load, a transmitter delivering 100W of
> power would dissapate at least 100W in its output stage. The efficiency
> could NEVER exceed 50% (and we have not added any other losses). You
> would have a pretty hot rig! How, then, does a Class-C PA have an
> efficiency of ~66%?
>
> I have always understood that the output impedance of a transmitter is
> pretty low (compared with the design load), and pretty reactive (ie non-
> resistive). Have I been wrong? It won't be the first time!!.
>
> Ian.

1048. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18020-39F79BC2-4@storefull-116.iap.bryant.webtv.net>
Source record: 177789

Dr. Kirkby wrote:
"What I am saying is that few meters meet that 5% spec."

I had a thought while conversing with George, W5YR. Our technicians always carried their Bird wattmeters with them. I leave mine in my coax.

I disconnect the coax from my radio during frequent thunderstorms. That`s not much of a problem in Great Britain, but it is here. I don`t remove my Bird Wattmeter, so, to some extent the wattmeter is still in harm`s way. Unless I mend my ways, my meter may soon join Dr. Kirkby`s majority.

Best regards, Richard Harrison, KB5WZi

1049. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <39F7A873.C238F5FB@arrl.org>
Source record: 177790

Richard Harrison wrote:
>
> Ian Jackson, G3OHX wrote:
> "If the output impedance (resistance?) of a transmitter was equal to the
> load, a transmitter delivering 100W of power would dissipate at least
> 100W in its output stage."
>
> Exactly the argument I made again and again on this newsgroup. Dr. John
> Fakan privately went to great lengths to show me I was wrong. But, I
> just didn`t get the idea of a lossless resistance controlling the output
> of a Class-C amplifier despite marvelous water-wheel analogies and the
> example of a marvelous electrical machine the good doctor had built for
> NASA.
>
> Then it dawned on me. It was possible to have a dissipationless
> resistance to limit the flow of electricity. No energy storing
> reactances, nothing more than a perfect off/on switch. You increase
> resistance by increasing the % of off time during a regular switching
> cycle. This can be at a radio carrier frequency rate. The intrruptions
> can last for a large part of the cycle, in which case the effective
> resistance will be high, or the interruptions can last only for a short
> part of the cycle, in which case, the effective resistance will be low.
>
> The Class-C amplifier is just such a switch but it is imperfect. Most of
> its loss comes from a finite resistance while switched on.

It also doesn't switch instantaneously, so there is some non-zero loss
during the transition. You're on the right track, though. The efficiency
of the class-C amplifier is determined by these losses and has nothing
to do with any supposed amplifier source resistance.

> The internal resistance of the Class-C amplifier is thus made up of two
> parts, the resistance from its switched-on loss and the lossless
> resistance from its off/on cycle which creates its average energy flow.
> The sum of these two resistances is the output resistance of the Class-C
> amplifier.

Except that, as you pointed out, the resistance varies over the cycle.
So what is the "real" resistance? That's a hard question to answer.
Resistance is, by definition ("you could look it up"), a property of a
linear system that does not vary with time. The transfer function of a
class-C power amp is neither linear nor time invariant. So a compelling
argument can be made that it has NO definable resistance. (Consider that
if you applied a sine-wave signal to the output of a class-C amplifier
the resulting current would not be a sine wave. Thus the current

contains frequencies other than that of the applied voltage. Now, think about that. How do you use Ohm's law to compute resistance when the current and voltage don't even contain the same frequency components? Answer: you can't.)

Practically speaking, of course, the interesting question to the amplifier designer and user is what LOAD resistance (impedance) allows the amplifier device to operate safely and efficiently. There is no simple relationship between that value and the device's on/off resistances and duty cyle. It's device dependent.

In short, arguing about the source impedance of a non-class-A amplifier is pointless. Trying to relate source and load impedance with amplifier efficiency is even worse. You just can't reduce nonlinear, time-variant systems to Thevenin or Norton equivalents at will.

Jon, KE3Z

1050. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18695-39F7AF93-2@storefull-116.iap.bryant.webtv.net>
Source record: 177791

Ian Jackson, G3OHX wrote:
"I have always understood that the output impedance of a transmitter is pretty low (compared with the design load) and pretty reactive (i.e. non-resistive)."

The transmitter`s internal resistance would need to be low to get the typical Class-C efficiency were it not for lossless internal resistance from the transmitter`s high % of switched-off time. Otherwise, the transmitter`s internal resistance would have to be low as an electric power generator`s internal resistance must be low, as compared with its load, to get efficiency. But, by using lossless internal resistance and an unavoidable amount of lossy internal resistance, even maximum power transfer can be achieved with an efficiency exceeding 50%.

Most Class-C final amplifiers are "dipped" for minimum current, parallel resonance in the tank circuit, maximum (very high) tank impedance, and zero net reactance (a pure resistance) in the amplifier`s output.

At resonance, the tank has nearly disappeared, its impedance is so high. At other frequencies its impedance is very low so that only the fundamental frequency has any significant strength. It is "linear", that is sinusoidal, and the only load it sees is the transformed value of the transmitter`s ultimate load.

Best regards, Richard Harrison, KB5WZI

1051. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39F7D1B2.99C92842@haertig.com>
Source record: 177792

Jacketed hardline (Heliax type line) is rated for direct burial. It is fairly common practice at MW broadcast sites. The usual cautions apply (no sharp rocks, sufficient depth etc.). However, if the run isn't too long, it is wise to put in conduit so that you can replace the line if it has a problem or add a second line later for another antenna. If you don't, you may end up hating yourself in the morning. (c:

Gray

jbhall1282@my-deja.com wrote:
>
> I have a long run of coax from the shack out to my antenna garden and
> it must run underground. Trying to minimize losses, I was thinking of
> running hardline. Is most hardline suitable for direct burial? Thanks.
> 73
> Jerry
> W0PWE
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1052. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39F7D330.7D84E4AF@haertig.com>
Source record: 177793

I am not familiar with the Atomic Clock construction, but the Rat Snack clocks made by Oregon Scientific have a short pendant that contains both the loopstick and the receiver. The cable has four wires - V+, Vcommon, turn on, and signal. The signal is 1 Hz square waves of varying duty cycle, so extending the cable is not an issue. Perhaps the Atomic Clock has a similar arrangement where the receiver and antenna circuit are separate from the clock circuit, even if they are in the same case.

Signal strength doesn't seem to be the main concern as to whether these clocks synch up or not. The prime culprit is noise. TV's, computers, dimmers, touch lamps etc seem to be the biggest offenders. Perhaps relocating the clock will help.

I have no trouble with my Rat Snack clock here in Portland.

Gray

Mike Camp wrote:
>
> Hello-
>
> I have a couple of these things, but both have trouble reliably locking into
> the signal, maybe once every 3-5 days at best. I am located near San
> Francisco, CA., a hundred feet above sea level.
>
> Can I get your thoughts about enhancing the antenna/signal level? I don't
> have bad noise here that I am aware of.
>
> Maybe a Fractal for 60 KHz?
>
> Thanks
> 73 Mike Camp KI7FQ

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1053. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: KB9WFK@mindspring.com
Message-ID: <39F679CE.8F285896@mindspring.com>
Source record: 177794

Fractenna wrote:

> I have received many e-mails saying what an evil person I am for damaging Roy
> Lewallen.
>
> Let me put it this way: whatever I am DOING, I will DO until--and on a grander
> scale of notification--Lewallen stops pirating my property.
>
> Easy.
>
> NC

And when he is found legally innocent of your charges what will you do? sorry, I guess that should be "DO?".

1054. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: KB9WFK@mindspring.com
Message-ID: <39F683F3.928728C6@mindspring.com>
Source record: 177795

Gilbert Mouget wrote:

> Wed, 25 Oct 2000 15:03:57 GMT dans l'article
> <xDCJ5.633$Ha.26440@news1.rdc1.il.home.com>
> l'honorable Pete <Pete@xyz.com> escrivit :
>
> :My 2 cents worth
>
> My 2 is similar to MI2 and thus property of ...
>
> --
> Gilbert.

Julia?

1055. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: KB9WFK@mindspring.com
Message-ID: <39F683CF.C0AD9BCA@mindspring.com>
Source record: 177796

> ...
>
> The revolution will not be brought to you by the
> Schaefer Award Theatre and will not star Natalie
> Woods and Steve McQueen

O.K. I know of those two.

> or Bullwinkle

I know who he is.

> and Julia.

But who the HE## is Julia? :)

1056. Re: Supprt Roy, get a great tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: KB9WFK@mindspring.com
Message-ID: <39F6861F.9C052D95@mindspring.com>
Source record: 177797

Fractenna wrote:

> >
> >Hi Chip--
> >
> >Still wondering what you were doing selling publication rights to material
> >you
> >didn't own and then later attacking Roy Lewallen over material you still
> >didn't
> >own. I don't want to sound like Andy Rooney, but isn't that a little odd?
> >Perhaps this is something you'd just rather ignore talking about.
> >
> >Rick K1BQT
> >
>
> What you need to do is reproduce this alleged document in which copyright was
> transferred as you state. You cannot, because it did NOT occur.
>
> Nathan Cohen, Ph.D.

YOU are the one that said that FAS held the copyright of it during that time and that it was JUST transfered back to you on the 21st (I think you said) of this month.

1057. Low Profile & Quality Peformance mobile antenna, possible?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Nick Carrigan <nickcarr@earthlink.net>
Message-ID: <BBvJ5.17465$1S5.1635424@newsread1.prod.itd.earthlink.net>
Source record: 177854

I drive a BMW, and I am looking for the best dual-band VHF/UHF mobile antenna, that won't "advertise" my radio -- BUT, I'd like to get the perf gains...

(I don't know how good these 'quality' magnet mounts are either. It makes me nervous to think about what they do to paint. An old R/S 2m mobile ended up rusting my old car. I'm thinking of a trunk lip mount.)

I've tried those window mount antennas before (like the one from R/S). That thing was a waste of $$$. I couldn't even get the WX channel from my rig after that. Have these types improved at all??

Should I just spend the $100+ on a name-brand mount + antenna for will be a trunk lip mount?? Can I cut a few corners here without ruining my car?

If anyone has any suggestions, then please pass them along...

Thanks
-Nick

PS. Getting rid of the B'mer is not an option! ;o] (I already had a gas-guzzler SUV...)

1058. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025032426.09822.00000090@ng-fl1.aol.com>
Source record: 177855

>
>More MI2 'challenge' files have been uploaded to my site. They are
>random4.EZ, random4.txt, random5.EZ, and random5.txt, all submitted by
>Steve Best, VE9SRB. You can get them from ftp://eznec.com/pub/MI2/, or
>you can go to http://eznec.com and click the "FTP Site" link. The text
>files give more information about the corresponding .EZ files, and the
>0Notes.txt file at the same URL has more information about all files.
>All files submitted to date are compressed into MI2.ZIP.
>
>More information about the purpose of these files and why they're posted
>can be found at the deja.com archive at
>
>http://x76.deja.com/[ST_rn=ps]/getdoc.xp?AN=673944577&CONTEXT=972449784.1
468334083&hitnum=11.
>Chip's original "Challenge" posting is archived at
>
>http://x67.deja.com/[ST_rn=ps]/getdoc.xp?AN=657467296&CONTEXT=972215956.4
14253064&hitnum=17.
>
>Caution: If you click either of the above links while viewing with your
>browser, it might not take you to the desired location if the displayed
>link is wrapped onto more than one line.
>
>Although the 'challenge' officially ended on September 30, the questions
>it raises are still relevant to the subject of this newsgroup.
>
>Roy Lewallen, W7EL
>

Roy Lewallen is a pirate who is deliberately breaking the law by illegally
posting a copyright Mi2 file owned by me.

BEWARE! Lewallen is a PIRATE!

Nathan Cohen, Ph.D.

1059. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025032830.09822.00000091@ng-fl1.aol.com>
Source record: 177856

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001024165627.09991.00002562@ng-cg1.aol.com...
>>
>>
>> What I can see is that you are TRYING to say is that the MI2 that you
>> modeled--under "fair use" for your personal scholarly purposes-- does not
>> produce as high an FOM as two models which you spent a considerable amount
>of
>> time modeling and 'discovering'.
>>
>> 73
>> Chip N1IR
>
>"Considerable amount of time" - 5 minutes
>
>Yet another loop with similar or better performance. Random5.ez has been
>sent to Roy for distribution at www.eznec.com at the FTP site.
>
>Performance:
>
>Frequency = 14.485 MHz
>Resistance = 33.8 ohms
>Gain = 1.87 dBi
>2:1 bandwidth wrt 50 ohms = 1.58%
>
>Steve, VE9SRB

OK: Let me ne exp[licit about this.

FRACTAL GEOMETRY ALLOWS FOR LOOPS WITH THE HIGHEST FOM.

Unlike Mr. Best, I WILL submit results for publication., under the title

ELECTRICALLY SMALL BROADBAND FRACTAL LOOP.

This will be submitted for publication before 1 January.

In the meantime, the evidence is clear that BOTH Mr. Lewallen and Mr. Best are using this bogus assumption to AID AND ABET in ILLEGAL DISTRIBUTION AND PUBLICATION of copyright material.

Nathan Cohen, Ph.D.

1060. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025033527.09822.00000092@ng-fl1.aol.com>
Source record: 177857

```
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001024205755.04437.00000281@ng-fc1.aol.com...
>>
>> For the PRESIDENT of CUSHCRAFT to continue to ignore peer reviewed fact
>> indicates an agenda.
>>
>> If he had no agenda, then:
>>
>> 1) why would he continue to encourage a "fair use" copy to be published
>and
>> distribute OUTSIDE of that limitation?;
>> 2) Why does he say that 'this is my last post' and then continue posting
>> misinformation?;
>> 3)If what he says is TRUE, then why has he not published said info? In the
>time
>> he has spent providing incorrect and misleading information, he could have
>had
>> a paper published in Electronics Letters.
>>
>> No; this is not science. It is a competitor dead-scared of a disruptive
>> technology which will not eat, but devour, market share in markets he is
>trying
>> to penetrate.
>>
>> Misinformation and propaganda makes for good business--or so it would seem
>from
>> Mr. Best. This is Cushcraft's position, isn't it Mr. Best?
>>
>> 73
>> Chip N1IR
>
>Why all this foolishness just because I disagree with you? I simply think
>you're wrong in some of your technical statements. There is no agenda
>beyond that on my part. Why can't you keep the discussion at that level?
>Disagree with me and explain in some detail why you think I am wrong, rather
>than huffing and puffing about Cushcraft and all the other unrelated issues.
>You know as well as I do that Cushcraft has no interest in any of this.
>We're talking about an HF loop antenna for heaven's sake.
>
>BTW, I do intend to publish the work, I just need to pull it and all of the
>measurements together to make a comprehensive and definitive presentation.
>
```

>If I took any of your statements above seriously, or if I thought anyone
>else did for that matter, you would have received a "letter" quite some time
>ago. As it is, the more you continue to rant, slander, harrass, and libel,
>the more evidence you provide against your own position. In any event, your
>posts sure do provide a lot of entertainment. From my perspective, this
>whole issue and your posts are a big joke and I enjoy the laughs.
>
>Steve
>

Because, Steve, YOU ARE DELIBERATELY ENCOURAGING SOMEONE TO BREAK THE LAW and DELIBERATELY ATTEMPTING TO MAKE THE VALUE OF MY INTELLECTUAL PROPERTY WORTH ZERO.

NO ONE AT ANY TIME has disputed that it is LEGALLY POSSIBLE TO OBTAIN a copy of the MI2 file FROM ME.

This is not an issue of science--that is and will be easily settled by publication--but your DELIBERATE AND OBSESSIVE FOCUS to misinform and now to encourage COPYRIGHT INFRINGEMENT.

You keep on saying you will make "your last post' and then you just make it worse.

This is rapidly becoming the #1 topic of the antenna community. You seem to feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS and HONORING THE INTELLECTUAL PROPERTY OF OTHERS.

Why would I possibly care if you posted 1000 files with alledly better FOM's than the ham Mi2 file? Don't you think that I enjoy the challenge myself?? You have made a perversion of it by HELPING AND ENCOURAGING LEWALLEN TO BREAK THE LAW.

Nathan Cohen, Ph.D.

1061. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025033633.09822.00000093@ng-fl1.aol.com>
Source record: 177858

>>Why should anyone care what you think about this?<
>
>A therapist might reply, "Chip, can you say why YOU might not care about what
>Rick thinks about this----and allow others to ponder the issue for
>themselves?"
>
>Personally, I want to know more about Mr. Minkowski--that's far more
>interesting to me than your runs or mine. Give us some historical
>perspective
>on this bit of geometry.
>
>Rick K1BQT
>

Read Mandelbrot's book.

The MI geometries wre not around until I made them.

NC

1062. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025033754.09822.00000094@ng-fl1.aol.com>
Source record: 177859

>
>> ...what Dr. Cohen is essentially saying is that if he draws a picture of of
>the Statue of Liberty and copyrights it, then his copyright applies to any
>picture that I might subsequently draw of the Statue of Liberty by claiming
>that mine is a derivitive work.<
>
>Its worse than that, Jim. He's saying if he draws the picture, copyrights
>it,
>assigns the copyright to a company, then reporduces the picture in a journal
>as
>a scholarly work while failing to report notice of said copyright, he can
>still
>prevent anyone from ever drawing a likeness of that picture again--and sue
>them
>if they try. And, he can do this even if he didn't own the copyright when he
>sold the first publication rights in the first place! America's a great
>place,
>isn't it?
>
>I asked the question about who "Minkowski" is/was and how that name came to
>be
>attributed to this family of shapes (including the zero iteration which is a
>square box), and Chip totally ignored the entire issue. He probably doesn't
>know --or doesn't want to tell.
>
>But, here's the real kicker. If the MI2 is disallowed, then shouldn't all
>other iterations must be disallowed, too? This, of course, means anyone who
>draws even a simple square box (M10) or builds a square quad antenna must be
>equally in violation because this shape is graphically depicted along with
>the
>MI2 in the same article.
>
>And, the question still remains. Is Minkowski a colleague of Mandlebrot,
>Caley, Sierpinski, or Cantor? Who is this myterious being and why is he so
>special? A little more scholarly attribution and a little less blustering
>bullpucky might be in order if credibility matters.
>
>Rick K1BQT
>

Why am I responsible for your ignorance?? You have the fractal antenna papares
and their references. GO READ>

NC

1063. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025033914.09822.00000095@ng-fl1.aol.com>
Source record: 177860

>Fractenna wrote:
>>
>> >> An antenna cannot be copyrighted.
>>
>> Who did THAT?? Do you REALLY think this? What will it take to get you to
>seek
>> an attorney's counsel Mr. Lewellan??
>>
>> Features about it can be patented,
>> >> but to my knowledge, no one has a patent which prevents anyone from
>> >> making, using, or selling the MI2.
>> >>
>> >> Roy Lewallen, W7EL
>>
>> Again, you are choosing to be ignorant. Mr. Lewallen--GET AN ATTORNEY! YOU
>NEED
>> HIS ADVICE!
>>
>
>
> MR COHEN! GET A PSYCHIATRIST! YOU NEED HIS ADVICE!
>
>

Mr. Carroll!

Get a priest of a pastor! Ask him what the Bible says about what you are trying to do to me!

NC

1064. Re: 20 hours in a chair kills!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: njradiodude@aol.com
Message-ID: <20001025041445.05052.00001185@ng-fc1.aol.com>
Source record: 177861

>Off subject: Drink plenty of fluids. Women are known to have too large
>bladders. Men naturally get up for a walk. Take Aspirin to cut down on
>clots. Get up and stretch.
>
>N0UU
>

...don't forget to chew each piece of food 32 times, floss after eating, bring to dog back in when it's done, drain the garden hose before the first freeze, if you're an employee...you must wash your hands before returning to work, bring water to a full boil before adding the pasta, always wear clean underwear just in case, feed a cold...starve a fever, set your clocks ahead in the spring and an hour back in the fall, remember that only forest fires prevent bears, never cut the tags off pillows, wash...rinse...repeat, do not smoke while using hairspray, use both sides of the toilet paper, don't make a funny face...it might stay that way, don't call "cq" on a 2m repeater, if an object in your mirror is too big...shoot it, put new batteries in all your smoke detectors, have "911" programmed in your phones memory...it will save you precious milliseconds, rotate your tires, and remember to get up and stretch...if you're too tired...have someone else do it for you.

And yes, my wife does possess the uncanny ability to hold her pee like a hydroelectric dam. She just has one large bladder, not two large bladders. I just don't get it...I naturally get up for walks.

.

1065. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <39f6a75c_1@news.cybertours.com>
Source record: 177862

"Philip de Cadanet" <phil@invest.fsbusiness.co.uk> wrote in message
news:a7iC5RA3Mc95Ew1e@invest.fsbusiness.co.uk...
> When using a solid state transceiver without external atu is it
> advisable to use 52 or 75 ohm coax to feed a mono band HF dipole
> antenna?
>
> Many thanks.
>
> Phil G4ZOW

Hi Phil,
In most cases the difference in neglegible. Most dipoles have an impedence that ranges ruffly between 35 and 90 ohms dependant upon height above ground and surounding influences.. the differences between putting a 75 ohm line to a 50 ohm antenna is only on the order of 1:4 to 1 Swr. Not enough with most rigs to make any difference.

73 Dave KC1DI

1066. Re: Butternut HF9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Den <dspiess@my-deja.com>
Message-ID: <8t6bbt$ul5$1@nnrp1.deja.com>
Source record: 177863

Wow... with a ground like that you will get great performance...g'luck
with it.
I found the 12 and 17M coils are very touchy... it doesn't take much to
detune them as they have very narrow bandwidth. You may need to move
the position of the coil on the verticle up or down a bit besides
tuning the coil length. An antenna analyzer or a xmitter that xmits out
of band is a big help in finding where the coil is tuned and which way
to move it.
73
Den W2DEN _._

article <tQqJ5.16858$1S5.1550835@newsread1.prod.itd.earthlink.net>,
"Klensir" <klenc@earthlink.net> wrote:
> I have just put up a Butternut HF9V at ground level and installed 36
radial
> wires in all directions from its base for distances of 40 or more
feet each
> (a total of 1500 feet of #14 copper wire). The radials are buried
just
> below the surface.
>
> I am getting good VSWR readings of 1.4:1 or less on all bands 80 - 10
Meters
> except for 17 Meters. There the VSWR is running about 2.5:1. It is
just
> about all my built-in tuner can handle.
>
> Has anyone encountered similar conditions such as this with only one
band
> being way out of range? Any suggestions? I have doubled checked the
> installation procedure and looked for lose connections, etc.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1067. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <MpyJ5.8459$F14.4178@newsfeed.slurp.net>
Source record: 177864

It's my understanding that there may be an Attic monopole in or around Mt. Athos.

Hope this helps.

K3BHJ

1068. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001025075251.01536.00000389@ng-fy1.aol.com>
Source record: 177865

>
>It's my understanding that there may be an Attic monopole in or around Mt.
>Athos.
>
>Hope this helps.
>
>K3BHJ

So what are your suggestions?

Chip N1IR

1069. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <i%zJ5.9099$xJ4.309095@bgtnsc06-news.ops.worldnet.att.net>
Source record: 177866

"Fractenna" <fractenna@aol.com> wrote in message
news:20001025033527.09822.00000092@ng-fl1.aol.com...
>
> Because, Steve, YOU ARE DELIBERATELY ENCOURAGING SOMEONE TO BREAK THE LAW
and
> DELIBERATELY ATTEMPTING TO MAKE THE VALUE OF MY INTELLECTUAL PROPERTY
WORTH
> ZERO.
>
> NO ONE AT ANY TIME has disputed that it is LEGALLY POSSIBLE TO OBTAIN a
copy of
> the MI2 file FROM ME.
>
> This is not an issue of science--that is and will be easily settled by
> publication--but your DELIBERATE AND OBSESSIVE FOCUS to misinform and now
to
> encourage COPYRIGHT INFRINGEMENT.
>
> You keep on saying you will make "your last post' and then you just make
it
> worse.
>
> This is rapidly becoming the #1 topic of the antenna community. You seem
to
> feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS
and
> HONORING THE INTELLECTUAL PROPERTY OF OTHERS.
>
> Why would I possibly care if you posted 1000 files with alledly better
FOM's
> than the ham Mi2 file? Don't you think that I enjoy the challenge myself??
You
> have made a perversion of it by HELPING AND ENCOURAGING LEWALLEN TO BREAK
THE
> LAW.
>
> Nathan Cohen, Ph.D.

This is to Roy Lewallan:

Roy: If you are breaking the law, please stop immediately. I do not
encourage you or anyone else to break the law. Please do not break the law.
In fact, I strongly encourage you not to break the law. I think breaking
the law is wrong. Please Roy, if you are breaking the law, stop.

Steve

1070. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: "Dr. David Kirkby" <davek@medphys.ucl.ac.uk>
Message-ID: <39F6D055.5B3BD8DD@medphys.ucl.ac.uk>
Source record: 177867

Hi Bart,
I'm glad it compiles and runs okay on Free BSD. There seems however to be a problem with gcc-2.95.2 (not 2.85.2 as I stated earlier) under linux PC. Someone bought this to my attention and I've since seen it Given it only happens with the optimiser selected, I think this points to a bug in gcc. Without easy access to a linux PC, I can't see if I can alter the source to eliminate the problem. I've often come across compiler bugs that can be eliminated by changing a few source lines. Declaring an integer static instead of just int used to solve many a bug in Microsoft's old C compilers.

The source is a bit confusing at times, partly since the routines I used for solving the complex matrix problems use routines designed for real number, not complex one. I also moved things around in arrays a bit more than was needed. Some stuff gets put into an array for parasitic elements and some more into an array for driven elements. It would have been much more sensible to put them all in the one array, since it needs to get put there anyway later.

The file self2.c calculates the self impedance of an element and the routine z21 in mutual.c calculates the mutual impedance between any pair of elements. Once you have this data, the driving point impedance is found from inverting a matrix. One then finds the drive current. I'm not quite sure how the gain is found from this (memory escapes me), but I suspect it relies somewhere on the fact the far field radiation pattern is the FFT of the current distribution. Just doing an FFT on the currents are summing the resulting radiation pattern would given the radiation in any direction. I would need to double check that though - I wrote the code about 6 years ago, and have not done anything with it until about a month ago, when I mainly provided better documentation, but not changed the code much.

The routies that plot the results need gnuplot installed. They plot the graphs on a log scale, which makes the patterns look much worst than people are used to.

Dr. David Kirkby, G8WRB

Bart Rowlett wrote:

> "Dr. David Kirkby" wrote:
> >
> > I have written some software of my own to model Yagi antennas. It does not run
> > on a Windows PC, but on a unix workstation (PC with linux is okay). See
> >
> > http://www.medphys.ucl.ac.uk/~davek/ham/yagi/index.html
> >
> > (Note the message on my web site about a bug in gcc's optimiser under linux,
> > which means the programme must be compiled with the optimiser off under linux on
> > a PC. This is not necessary on my Sun SPARCstation using gcc-2.85.2, nor was it
> > on older versions of gcc on a PC).

> >
>
> Hi David,
>
> The entire package configures, makes, runs, and produces what appear to
> be reasonable results in my FreeBSD box without any massaging
> whatsoever! I look forward to perusing the source.
>
> Thanks!
>
> bart
> wb6hqk

--
Dr. David Kirkby Ph.D,
Senior Research Fellow,
Department of Medical Physics, University College London,
11-20 Capper St, London, WC1E 6JA.
Tel: 020 7209 6406 Fax: 020 7209 6269
email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
Amateur radio callsign: G8WRB

1071. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F6D439.4B7D590A@dvol.com>
Source record: 177868

Heath wrote:

> Put it on the antenna range at the VHF
> conferences and show us some real world results that are of more substance
> than theory and then I will be interested.If you are not willing to do that
> then please don't waste the time of honest intelligent people who are here
> to learn and help others in the spirit of amateur radio.

>
I'd like to run against him on 20m in the CQ WW cw bash with 100 watts and a
dipole . . . separate the men from the boys real quick like.
>
w3rv

1072. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:00:32 UTC
From: k1bqt@aol.com
Message-ID: <20001024200032.00206.00000467@ng-fy1.aol.com>
Source record: 177827

Last time I spotted myself, I had a terrible attack of flu while driving on the Maine Turnpike and sought immediate remedy. Why Chip would publicly spot himself on the DX cluster defies comprehention!

Rick K1BQT

1073. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:49:37 UTC
From: fractenna@aol.com
Message-ID: <20001024204937.04437.00000278@ng-fc1.aol.com>
Source record: 177828

>Last time I spotted myself, I had a terrible attack of flu while driving on
>the
>Maine Turnpike and sought immediate remedy. Why Chip would publicly spot
>himself on the DX cluster defies comprehention!
>
>Rick K1BQT
>
>

Why should anyone care what you think about this?

Hope this helps.

Best,
Chip N1IR

1074. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:56:36 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39F62F44.7133D921@att.net>
Source record: 177829

Folks, I hate to appear totally "dumb," but *where* is this calibration adjustment that everyone mentions?

I can find nothing on the case proper to adjust other than the meter zero-adjustment screw. The only other possibility that I can see would be the thin metal cover over the front of each slug. It appears to have been seated with a blow with a centerpunch (to account for that mark in the center of the arrow). This cover does not want to come off "readily" but I have not really been very aggressive in trying to remove one.

So, any help will be appreciated.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Richard Harrison wrote:
>
> Gary Coffman wrote:
> "You don`t want to twiddle this (calibration adjustment) unless you`re
> 100% absolutely sure that it is the problem."
>
> Yes. The Bird wattmeter is a very reliable instrument which tolerates
> many excesses, but not all. It can be overloaded beyond its yield point.
> It may also have some late appearing defect. So, readjustment may make
> it read right at one point only to be off the mark at other levels.
>
> Best regards, Richard Harrisomn, KB5WZI

--

1075. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:57:55 UTC
From: fractenna@aol.com
Message-ID: <20001024205755.04437.00000281@ng-fc1.aol.com>
Source record: 177831

>
>
>
>VE9SRB wrote:
>
>> Although there is no dispute that the MI2 Fractal Loop performs or works as
>> claimed and offers this performance in a reduced aperture, it is evident
>> that the Fractal nature of the antenna geometry is not the significant
>> factor in determining the antenna's performance. To verify this, an EZNEC
>> model of the MI2 antenna was created as a method to determine the baseline
>> performance of the MI2. The baseline MI2 performance at first resonance is
>> as follows:
>>
>> Fr = 15.155 MHz
>> Resistance = 28.4 ohms
>> Gain = 1.83 dBi
>> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
>>
>> These results are very consistent with the claimed performance of the
>> antenna as presented by the MI2 antenna designer.
>>
>> About a month ago, several arbitrarily shaped antennas were designed (about
>> 5-10 minutes of effort in each case) occupying the same physical aperture
>as
>> the MI2. These antennas performed as well as and in some cases, better
>than
>> the MI2. The EZNEC files and results for these antennas can be found at
>> www.eznec.com under the FTP site.
>>
>> To further prove that the Fractal geometry is not the significant factor is
>> achieving performance, yet another arbitrarily shaped design was created
>and
>> modeled in EZNEC. This antenna has a slightly smaller aperture size and
>> shorter total wire length than the MI2. It is not a "meander" design (as
>> defined by the MI2 designer) like two of the previous antennas that were
>> subsequently dismissed by the designer of the MI2 antenna as not being able
>> to work. This new design is simply an arbitrary, yet symmetrical,
>> rearrangement of wire shape in the same aperture. This new design took
>> about 6.7 minutes to create. Performance of the new design at first
>> resonance is as follows:
>>
>> Fr = 16.06 MHz
>> Resistance = 32.8 ohms
>> Gain = 1.91 dBi

>> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
>>
>> Clearly, if a simple rearrangement of the wire into a non-fractal shape can
>> result in similar or better performance, the Fractal geometry is not the
>> significant factor in determining antenna performance. Although the
>antenna
>> geometry will impact antenna performance, factors such as feed point
>> location, total wire length, and aperture size are as and in many cases,
>> more significant than the geometry itself. Models of this new antenna can
>> be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
>> random4.ez.
>>
>> Steve, VE9SRB
>>
>> "You always get back what you give"
>
>Thanks for the insightful post Steve. This is what I (many) have long
>suspected-
>appreciate you doing the "brain work".
>
>Dale W4OP
>

For the PRESIDENT of CUSHCRAFT to continue to ignore peer reviewed fact indicates an agenda.

If he had no agenda, then:

1) why would he continue to encourage a "fair use" copy to be published and distribute OUTSIDE of that limitation?;
2) Why does he say that 'this is my last post' and then continue posting misinformation?;
3)If what he says is TRUE, then why has he not published said info? In the time he has spent providing incorrect and misleading information, he could have had a paper published in Electronics Letters.

No; this is not science. It is a competitor dead-scared of a disruptive technology which will not eat, but devour, market share in markets he is trying to penetrate.

Misinformation and propaganda makes for good business--or so it would seem from Mr. Best. This is Cushcraft's position, isn't it Mr. Best?

73
Chip N1IR

1076. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 00:58:42 UTC
From: fractenna@aol.com
Message-ID: <20001024205842.04437.00000282@ng-fc1.aol.com>
Source record: 177830

>
>
>Fractenna wrote:
>> Roy Lewallen has published and distributed this file on a COMMERCIAL WEB
>SITE
>> without authorization; indeed, in DEFIANCE of the notification that he is
>> breaking copyright law.
>
>How can you claim ownership of a file that you did not create? It's
>easily arguable that fair use was made of publicly available
>information. You've barely a leg to stand on here, Chip.
>

I am not standing on any legs. I am upholding the law.

Mr. Lewallen is breaking the LAW.

73
Chip n1IR

1077. Re: PIRACY BY N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 01:01:20 UTC
From: fractenna@aol.com
Message-ID: <20001024210120.04437.00000283@ng-fc1.aol.com>
Source record: 177832

>> look what an idiot you have made of yourself.<
>
>Oh oh, I smell a personal attack.
>
>>THERE WERE NO TRANSFER OF RIGHTS.<
>
>What are first North American Publication Rights if not rights? Bananas?
>Tacos? You sold 'em Chip.

Then SHOW US THE TRANSFER OF COPYRIGHT FORM, SIGNED BY ME. I give you
permisssion to procure and display said document.

You WON'T because it DOESN'T EXIST.

You sold them to CQ Communications Inc.

No, I did NOT.

CQ even
>(eventually) paid you.

I was NOT PAID FOR THIS TRANSFER OF RIGHTS. BECAUSE there weren't any.

Was that a 1099 you got, or was CQ just sending out
>recycled government paper for the hell of it?
>
>Now, when that article containing the MI2 went into editorial production,
>who
>owned the copyright on the matierals you provided?

I did.

I know you're not an
>idiot
>and I know you are an educator, so (unlike me) I know you'll answer the
>question honestly, fully, and candidly.
>

I am. And I am happy to have it enetered in a court record. I OWNED THEM.

Hope that helps.

73
Chip N1IR

>Rick K1BQT
>
>

>
>
>
>

1078. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 01:09:42 UTC
From: fractenna@aol.com
Message-ID: <20001024210942.05088.00001101@ng-fc1.aol.com>
Source record: 177833

>Mark Keith wrote:
>> I'm scratching my head. Frac says yep, he agree's , it's a weak case,
>> but that everything else you said is wrong. Ok, lets review the
>> question.:
>>
>> "So your claim is that it is a violation of copyright to produce a table
>> > of numbers which represent the dimensions of an antenna that is in the
>> > public domain, and for which radio amateurs and others have been
>> > publicly invited to build? "
>>
>> Ok, we know hams were invited to build this, and compete against it. I
>> don't see how he can disagree with this statement. Which leaves the
>> first, where you ask him if his claim is that it is a violation of
>> copyright to produce a table of numbers which represent the dimensions
>> of an antenna that is in the public domain is true. He disagrees with
>> that. So that means he really agrees that it is legal to do this. If he
>> agrees this is legal, why does he keep pressing this? He's a confused
>> puppy. MK
>
>Thank you. Yes, what Dr. Cohen is essentially saying is that if he
>draws a picture of of the Statue of Liberty and copyrights it, then his
>copyright applies to any picture that I might subsequently draw of the
>Statue of Liberty by claiming that mine is a derivitive work.
>

Please quote the relevant statements that led to this bogus conclusion. We would like to understand your train of thought.

73
Chip n1IR

1079. Re: NOTICE: ENFORCEMENT OF COPYRIGHT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 01:34:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t5dbpags0@208.207.71.148>
Source record: 177834

W.G. Ewald wrote:
>
> x-no-archive:yes
> On 23 Oct 2000 14:28:40 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>
> >What I'm waiting for is for Gentleman Roy to get a gut full of this
> >crap and hit HIM where it hurts with a SERIOUS suit for libel, slander
> >and damage to his professional reputation among whatever else a good
> >torts attorney can work up from all that has gone on here.
>
> I have to disagree. Surely, in the first place, all of this is
> pure entertainment, isn't it? Secondly, why would Roy want to appear
> as silly as this Cohen fellow?
>
>

Because it goes way beyond silly at some point.

1080. Butternut HF9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 01:38:33 UTC
From: Klensir <klenc@earthlink.net>
Message-ID: <tQqJ5.16858$1S5.1550835@newsread1.prod.itd.earthlink.net>
Source record: 177835

I have just put up a Butternut HF9V at ground level and installed 36 radial wires in all directions from its base for distances of 40 or more feet each (a total of 1500 feet of #14 copper wire). The radials are buried just below the surface.

I am getting good VSWR readings of 1.4:1 or less on all bands 80 - 10 Meters except for 17 Meters. There the VSWR is running about 2.5:1. It is just about all my built-in tuner can handle.

Has anyone encountered similar conditions such as this with only one band being way out of range? Any suggestions? I have doubled checked the installation procedure and looked for lose connections, etc.

1081. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 01:45:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t5e0jags1@208.207.71.148>
Source record: 177836

Fractenna wrote:
>
> >> An antenna cannot be copyrighted.
>
> Who did THAT?? Do you REALLY think this? What will it take to get you to seek
> an attorney's counsel Mr. Lewellan??
>
> Features about it can be patented,
> >> but to my knowledge, no one has a patent which prevents anyone from
> >> making, using, or selling the MI2.
> >>
> >> Roy Lewallen, W7EL
>
> Again, you are choosing to be ignorant. Mr. Lewallen--GET AN ATTORNEY! YOU NEED
> HIS ADVICE!
>

MR COHEN! GET A PSYCHIATRIST! YOU NEED HIS ADVICE!

1082. Re: Check out N1IR's egomaniacal ad....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 02:04:12 UTC
From: redberd95@aol.comnospam
Message-ID: <20001024220412.07035.00000067@ng-fn1.aol.com>
Source record: 177837

It is a small classified ad.

Randy

1083. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 02:23:01 UTC
From: k1bqt@aol.com
Message-ID: <20001024222301.28815.00000091@ng-cc1.aol.com>
Source record: 177838

> ...what Dr. Cohen is essentially saying is that if he draws a picture of of the Statue of Liberty and copyrights it, then his copyright applies to any picture that I might subsequently draw of the Statue of Liberty by claiming that mine is a derivitive work.<

Its worse than that, Jim. He's saying if he draws the picture, copyrights it, assigns the copyright to a company, then reporduces the picture in a journal as a scholarly work while failing to report notice of said copyright, he can still prevent anyone from ever drawing a likeness of that picture again--and sue them if they try. And, he can do this even if he didn't own the copyright when he sold the first publication rights in the first place! America's a great place, isn't it?

I asked the question about who "Minkowski" is/was and how that name came to be attributed to this family of shapes (including the zero iteration which is a square box), and Chip totally ignored the entire issue. He probably doesn't know --or doesn't want to tell.

But, here's the real kicker. If the MI2 is disallowed, then shouldn't all other iterations must be disallowed, too? This, of course, means anyone who draws even a simple square box (M10) or builds a square quad antenna must be equally in violation because this shape is graphically depicted along with the MI2 in the same article.

And, the question still remains. Is Minkowski a colleague of Mandlebrot, Caley, Sierpinski, or Cantor? Who is this myterious being and why is he so special? A little more scholarly attribution and a little less blustering bullpucky might be in order if credibility matters.

Rick K1BQT

1084. Re: Fractanal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 02:43:26 UTC
From: k1bqt@aol.com
Message-ID: <20001024224326.28815.00000094@ng-cc1.aol.com>
Source record: 177839

>Why should anyone care what you think about this?<

A therapist might reply, "Chip, can you say why YOU might not care about what Rick thinks about this----and allow others to ponder the issue for themselves?"

Personally, I want to know more about Mr. Minkowski--that's far more interesting to me than your runs or mine. Give us some historical perspective on this bit of geometry.

Rick K1BQT

1085. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 02:57:40 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <E_rJ5.462$5b4.25224@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177840

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024205755.04437.00000281@ng-fc1.aol.com...
>
> For the PRESIDENT of CUSHCRAFT to continue to ignore peer reviewed fact
> indicates an agenda.
>
> If he had no agenda, then:
>
> 1) why would he continue to encourage a "fair use" copy to be published
and
> distribute OUTSIDE of that limitation?;
> 2) Why does he say that 'this is my last post' and then continue posting
> misinformation?;
> 3)If what he says is TRUE, then why has he not published said info? In the
time
> he has spent providing incorrect and misleading information, he could have
had
> a paper published in Electronics Letters.
>
> No; this is not science. It is a competitor dead-scared of a disruptive
> technology which will not eat, but devour, market share in markets he is
trying
> to penetrate.
>
> Misinformation and propaganda makes for good business--or so it would seem
from
> Mr. Best. This is Cushcraft's position, isn't it Mr. Best?
>
> 73
> Chip N1IR

Why all this foolishness just because I disagree with you? I simply think you're wrong in some of your technical statements. There is no agenda beyond that on my part. Why can't you keep the discussion at that level? Disagree with me and explain in some detail why you think I am wrong, rather than huffing and puffing about Cushcraft and all the other unrelated issues. You know as well as I do that Cushcraft has no interest in any of this. We're talking about an HF loop antenna for heaven's sake.

BTW, I do intend to publish the work, I just need to pull it and all of the measurements together to make a comprehensive and definitive presentation.

If I took any of your statements above seriously, or if I thought anyone else did for that matter, you would have received a "letter" quite some time ago. As it is, the more you continue to rant, slander, harrass, and libel,

the more evidence you provide against your own position. In any event, your posts sure do provide a lot of entertainment. From my perspective, this whole issue and your posts are a big joke and I enjoy the laughs.

Steve

1086. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 03:09:15 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <v9sJ5.5603$UL.357764@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177841

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024165627.09991.00002562@ng-cg1.aol.com...
>
>
> What I can see is that you are TRYING to say is that the MI2 that you
> modeled--under "fair use" for your personal scholarly purposes-- does not
> produce as high an FOM as two models which you spent a considerable amount
of
> time modeling and 'discovering'.
>
> 73
> Chip N1IR

"Considerable amount of time" - 5 minutes

Yet another loop with similar or better performance. Random5.ez has been
sent to Roy for distribution at www.eznec.com at the FTP site.

Performance:

Frequency = 14.485 MHz
Resistance = 33.8 ohms
Gain = 1.87 dBi
2:1 bandwidth wrt 50 ohms = 1.58%

Steve, VE9SRB

1087. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 03:15:59 UTC
From: "Dr. David Kirkby" <davek@medphys.ucl.ac.uk>
Message-ID: <39F6506F.40C76B7F@medphys.ucl.ac.uk>
Source record: 177842

Reg Edwards wrote:
>
> Question about Bird power meters.
>

As a student I used to work for a government calibration lab that checked the calibration of Bird meters. They were specified to an accuracy of 5% of FSD. (Most were the Bird 43's). A site would send one in, with a selection of elements to have the calibration checked. We did not adjust them, only indicated pass/fail.

So few passed the +/- 5% of FSD spec, that many places sent them in with a note that +/- 10% of FSD would be considered acceptable.

I'm not able to recall every detail of the testing procedure, but know that power could be measured using a water caliometer. High power attenuators were available, which were calibrated (I'm not sure exactly how). However, meters were not tested using water calorimeters on a day-to day basis. It was too time consuming to check a meter of limited accuracy.

The day-to-day calibration of the meters used a transmitter, low pass filter, the Bird meter, a high power attenuator (plus possibly smaller ones) and a Marconi (or perhaps HP, I forget) low-power meter, measuring mW or possibly uW (I can't recall) exiting from the attenuators. The first high power attenuator was 30 dB. At some frequencies, a directional coupler and load was used instead of the attenuator. The attenuator or directional coupler and marconi power meter were all calibrated in house, ultimately against precision standards (water calorimeter etc.). A computer controlled the transmitter and read the data from the Marconi (or HP ??) power meter, while storing the calibration data for the attenuator or coupler.

While working at the lab, I purchased my own element to cover the 70 cm amateur band. I checked the new element at work, only to find it was not within spec, even when brand new. (The meter was not then new, but I had bought it new and never abused it). I returned the element to Aspen Electronics (the UK distributor) and it was calibrated at 432 MHz for me while I waited (I did not care too much for its accuracy outside the amateur band). I then returned it to work, to find that indeed it was then within spec at the spot frequency.

My one thought on these meters is that they are fine for tuning a TX up to maximum, but don't even consider them as precision instruments. They are not, nor will they ever be. Few meet the published spec after use, and while I can't say how many do when new, the only element I personally purchased was out of spec when new. Hence in my opinion, they are not really worth calibrating. They are undoutably, in amateur circles, a very over-rated piece of equipment. If you want to see if your amp is working they are good, but if you want to *measure*

power, with any degree of certainty, I would buy a used low-power meter, and somehow get someone to calibrate an attenuator for you using a calibrated spectrum analyser. That will give far better accuracy than a Bird ever will.

Dr. David Kirkby Ph.D,
Senior Research Fellow,
Department of Medical Physics, University College London,
11-20 Capper St, London, WC1E 6JA.
Tel: 020 7209 6406 Fax: 020 7209 6269
email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
Amateur radio callsign: G8WRB

1088. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 03:22:51 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2410002322220001@dialup-296.hip.cam.org>
Source record: 177843

In article <39F3DACF.47A1A4E7@eznec.com>, Roy Lewallen <w7el@eznec.com> wrote:

> No, the rod functions as both an AM and FM antenna. It's very
> inefficient on AM, but that's made up for by a large amount of receiver
> gain. The capacitance of the coax acts as part of a voltage divider
> which reduces the AM signal from the rod. It's specially made to have as
> little capacitance as possible to minimize this attenuation. Someone
> with more experience can correct me on this, but I don't think a typical
> ferrite rod antenna will receive as much signal as a typical whip of
> half meter or so length. If I'm correct about that, a portable AM/FM
> radio probably has a ferrite rod antenna mostly because it doubles as
> the inductor in a couple of tuned circuits, and it allows use of the
> radio on AM without extending the antenna.
>
> Roy Lewallen, W7EL
>

Traditionally, the antenna jack on a car radio has connected to the
top side of a tuned circuit, where impedance is quite high. The way
I visualize it, the shielded cable needs to be special because it
has low capacitance, so it won't mistune the tuned circuit by too
much. The trimmer capacitor that was in place in such radios
was to compensate for that additional capacitance across the tuned
circuit.

The antenna acts as a probe, to couple the signal into the receiver.
The concept is there in more recent "active antennas" where a short
whip antenna feeds a high impedance input stage, using a semiconductor
device rather than a tuned circuit to make that point high impedance.

One could theoretically have simply left the input coil unshielded,
but that causes problems in a car due to pick up of noise, and the
shielding that the car creates.

I gather this isn't the way it's done in more recent car radios.
You don't see the trimmer caps in more recent sets, and one Delco
I looded at fed the antenna jack to a low impedance point (i assume
a few turns of wire, but perhaps a tap) on a tuned circuit, which
feeds an RF stage.

The original concept may not have translated so well to transistorized
radios, since bipolar transistors have relatively low impedance input.

With loopsticks (or those old-style loops you'd see on the back of
older all-American Five's), the grid of a tube would connect to
the top of the loop. But when they translated to transistors,
the loopstick and capacitor would be isolated, with a coupling

loop of a small number of turns being used to get the signal
to the base of the transistor.

Those old-style loops probably came into use as radios became more
common, and nobody wanted to string up a wire in the backyard to
simply receive local stations. Since they needed a tuned circuit
at the front of the radio, it made sense to make it unshielded
to act as an antenna. When the switch to transistors were made,
it made sense to stay with the scheme. I have no idea when ferrite
loopsticks came into common use, with the coming of transistor
radios or before that. Probably the earliest transistor radios
were AM only, so there would be no incentive to switch to a whip
antenna at that point, and probably the loopstick remained even
when FM was added to such radios, because inertia is a strong
thing to break. Face it, an AM broadcast radio in most cases
is the same basic design that it was fifty years ago, with
the only change being transistors instead of tubes.

Michael VE2BVW

> Wayne Watson wrote:
> >
> > On many AM/FM radios there's a rod antenna that collapses. I'm sure it
is the FM antenna, and a
> > small ferrite AM antenna is inside. However, what's the deal with the
old AM rod antennas on autos?
> > Is there actually some sort of ferrite antenna disguised in the fat
portion of the rod and the rest
> > of the rod is used for FM?
> >
> > --
> > "Reality is merely an illusion, albeit a very
persistent one."
> > -- Albert Einstein

1089. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 03:59:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t5oqjfdq1@plutonium.btinternet.com>
Source record: 177846

An excellent analysis except for one thing. It is not volts which has to be maximised into the first stage of the receiver -- but signal POWER.

Ferrite rod antennas are the most inefficient antennas imaginable. Receivers use the first Rx tuned circuit itself as the antenna. In comparison they appear to be extremely sensitive only because they are used to receive 50 KW MF local broadcast stations with an IF gain much greater than that of your HF amateur band receiver which is designed to be used with a 250 feet long dipole at a height of 60 feet.

The receiving aperture of a ferite rod antanna is no greater than a dipole about twice the length of the rod. It does have the advantage of being easily and low-loss matched into the base-emitter junction of the first stage, usually the frequency changer.

A short dipole antenna would need a large high-Q matching coil about the same size as the rod. So the rest of the story is self-explanatory.

The ordinary ferrite rod pocket receiving antenna is so inefficient it would burn out if used with only a 2 watt transmitter.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Bart Rowlett <BHRowlett@west.raytheon.com> wrote in message news:39F5FDEB.946624B0@west.raytheon.com...
>
>
> Roy Lewallen wrote:
> >
> > No, the rod functions as both an AM and FM antenna. It's very
> > inefficient on AM, but that's made up for by a large amount of receiver
> > gain. The capacitance of the coax acts as part of a voltage divider
> > which reduces the AM signal from the rod. It's specially made to have as
> > little capacitance as possible to minimize this

attenuation. Someone
> > with more experience can correct me on this, but I don't
think a typical
> > ferrite rod antenna will receive as much signal as a
typical whip of
> > half meter or so length.
>
> I think the output of a short monopole and typical
loopstick are often
> comparable. The loopstick is preferred for portable
applications
> because of better compactness and greatly reduced
sensitivity to
> detuning from nearby objects which would require an
additional manual
> control. Let's take a look at some hypothetical numbers:
>
> Assume:
>
> F = 1 MHz // operating frequency
> E = 0.001 V/m // RF electric field strength,
assumed
> vertically polarized
>
> The effective height of a short monopole (without a top
hat) operating
> against a ground image is one half it's physical height.
Therefore the
> effective height of a monopole 1/2 m high is 1/4m. The
voltage
> induced at the base of the monopole is the electric field
strength
> times the effective height.
>
> Vmonopole = 0.001 (V/m) * 0.25 (m) = 250 * 10^-6.
>
> The antenna looks like a 250 uV source in series with a
very large
> (>10,000 ohms) capacitive reactance. The antenna could
directly drive
> a high impedance RF amplifier but is usually resonated
with an
> inductor to provide front end selectivity and some voltage
gain.
>
> The magnetic field, H (A/m) is equal to the electric field
divided by
> the characteristic impedance of free space, 120 * pi
(ohms).
>

> H = 0.001 (V/m) / (120*pi) = 2.7 * 10^-6 (A/m)
>
> Assume the ferrite loopstick is 1/2 inch (12.7 mm) in
diameter and
> long enough to achieve an effective permeability of 50
compared to
> free space. The permeability of free space = 4*pi*10^-7
Henry/m.
>
> The peak magnetic flux density in the loopstick is the
magnetic field
> strength times the effective permeability.
>
> Bpeak = 2.7 * 10^-6 (A/m) * 4*pi*10^-7 (H/m) * 50 = 170 *
10^-12
> (Wb/m^2)
>
> The peak magnetic flux through the coil, PHIpeak, is
approximately
> equal to the peak magnetic flux density, B, times the
cross sectional
> area containing the flux.
>
> PHIpeak (Wb) = 170 * 10^-12 (Wb/m^2) * pi/4 * (0.0127
(m))^2 = 21.5 *
> 10^-15 (Wb)
>
> The voltage induced is equal to the number of turns times
the time
> rate of change of magnetic flux in the loopstick. Assume
N = 100
> turns.
>
> Vloopstick = N * 2*pi*F * PHIpeak = 100 * 6.28*10^6
(radians/sec) *
> 21.5 * 10^-15 (Wb) = 13.5 * 10^-6 (V).
>
> The open circuit voltage across the loopstick is only
13.5/250 = 5.4%
> open circuit voltage at the base of the 1/2m monopole. In
practice,
> the loopstick is almost always resonated with a capacitor
which
> provides a voltage gain (proportional to the loaded Q of
the resonant
> circuit) of between 10 and 50. The higher impedance of the
short
> monopole makes achieving a loaded Q of much more than 20
> problematical.
>

> In the end, the monopole wins by between 10 and 20 dB as
long as there
> is negligible capacitance between the base of the monopole
and ground.
> As little as 100 pF of shunt capacitance to ground can
completely
> negate the monopole's advantage. Of course in this day
and age, low
> noise gain is so cheap that a few dB is of little
practical
> consequence.
>
> bart
> wb6hqk

1090. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 04:18:06 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t5mve$f9q$1@iac5.navix.net>
Source record: 177844

Whoa! You have stated that he is not a competitor as you do not manufacture amateur antennas. Now your saying he is Which is it? He shows you an antenna that is superior to the M12 and makes it available to all amateurs for perusal and you say no peer review. What gives? Your antenna models just fine in EZNEC, but his does not? What gives?

I can understand as you feel you have no peers, that peer review means something different to you than the rest of us. I for one am satisfied that Steve's antenna dos what he says it dos, and I consider myself his peer.

Your mental state is slipping by the day, we are all worried about you. Please seek competent mental help. I have genuine concerns about you being around young people in your present state.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024205755.04437.00000281@ng-fc1.aol.com...
> >
> >
> >
> >VE9SRB wrote:
> >
> >> Although there is no dispute that the MI2 Fractal Loop performs or
works as
> >> claimed and offers this performance in a reduced aperture, it is
evident
> >> that the Fractal nature of the antenna geometry is not the significant
> >> factor in determining the antenna's performance. To verify this, an
EZNEC
> >> model of the MI2 antenna was created as a method to determine the
baseline
> >> performance of the MI2. The baseline MI2 performance at first
resonance is
> >> as follows:
> >>
> >> Fr = 15.155 MHz
> >> Resistance = 28.4 ohms
> >> Gain = 1.83 dBi
> >> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
> >>
> >> These results are very consistent with the claimed performance of the
> >> antenna as presented by the MI2 antenna designer.
> >>
> >> About a month ago, several arbitrarily shaped antennas were designed
(about
> >> 5-10 minutes of effort in each case) occupying the same physical

aperture
> >as
> >> the MI2. These antennas performed as well as and in some cases, better
> >than
> >> the MI2. The EZNEC files and results for these antennas can be found
at
> >> www.eznec.com under the FTP site.
> >>
> >> To further prove that the Fractal geometry is not the significant
factor is
> >> achieving performance, yet another arbitrarily shaped design was
created
> >and
> >> modeled in EZNEC. This antenna has a slightly smaller aperture size
and
> >> shorter total wire length than the MI2. It is not a "meander" design
(as
> >> defined by the MI2 designer) like two of the previous antennas that
were
> >> subsequently dismissed by the designer of the MI2 antenna as not being
able
> >> to work. This new design is simply an arbitrary, yet symmetrical,
> >> rearrangement of wire shape in the same aperture. This new design took
> >> about 6.7 minutes to create. Performance of the new design at first
> >> resonance is as follows:
> >>
> >> Fr = 16.06 MHz
> >> Resistance = 32.8 ohms
> >> Gain = 1.91 dBi
> >> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
> >>
> >> Clearly, if a simple rearrangement of the wire into a non-fractal shape
can
> >> result in similar or better performance, the Fractal geometry is not
the
> >> significant factor in determining antenna performance. Although the
> >antenna
> >> geometry will impact antenna performance, factors such as feed point
> >> location, total wire length, and aperture size are as and in many
cases,
> >> more significant than the geometry itself. Models of this new antenna
can
> >> be found at www.eznec.com in the FTP site (MI2 Folder) under the name
of
> >> random4.ez.
> >>
> >> Steve, VE9SRB
> >>
> >> "You always get back what you give"
> >

> >Thanks for the insightful post Steve. This is what I (many) have long
> >suspected-
> >appreciate you doing the "brain work".
> >
> >Dale W4OP
> >
>
>
> For the PRESIDENT of CUSHCRAFT to continue to ignore peer reviewed fact
> indicates an agenda.
>
> If he had no agenda, then:
>
> 1) why would he continue to encourage a "fair use" copy to be published
and
> distribute OUTSIDE of that limitation?;
> 2) Why does he say that 'this is my last post' and then continue posting
> misinformation?;
> 3)If what he says is TRUE, then why has he not published said info? In the
time
> he has spent providing incorrect and misleading information, he could have
had
> a paper published in Electronics Letters.
>
> No; this is not science. It is a competitor dead-scared of a disruptive
> technology which will not eat, but devour, market share in markets he is
trying
> to penetrate.
>
> Misinformation and propaganda makes for good business--or so it would seem
from
> Mr. Best. This is Cushcraft's position, isn't it Mr. Best?
>
> 73
> Chip N1IR

1091. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 04:26:01 UTC
From: "Dr. David Kirkby" <davek@medphys.ucl.ac.uk>
Message-ID: <39F660D9.1E15DF47@medphys.ucl.ac.uk>
Source record: 177845

"Andrew J. O'Brien" wrote:
>
> I was thinking about building a simple , short spaced (8 foot), two element
> beam for 20M made from wire as opposed to aluminum tubing. I have a design
> in mind that will use supports to get it up around 30 feet. My question is
> about feed method and matching. I was thinking about a reflector and a
> driven element fed as a dipole, I assume that will work. I am planning to
> fee it with 50 Ohm coax. Should I use a balun? If so, what type 4:1 or
> 1:1? I am confused because I have seen two differing articles and one
> says 4:1 and the other 1:1 . I assume that the center of the dipole would
> be close to 50 ohms and that 1:1 would be suffice ?
>
> Also, I think I can get the two wire elements fairly close to be aligned
> with each other, but some sag might exist. How critical is the alignment
> before it adversely affects the performace, and my Yagi becomes Yagi-less.?
>
> Andy KB2EOQ

I have written some software of my own to model Yagi antennas. It does not run on a Windows PC, but on a unix workstation (PC with linux is okay). See

http://www.medphys.ucl.ac.uk/~davek/ham/yagi/index.html

(Note the message on my web site about a bug in gcc's optimiser under linux, which means the programme must be compiled with the optimiser off under linux on a PC. This is not necessary on my Sun SPARCstation using gcc-2.85.2, nor was it on older versions of gcc on a PC).

I believe this software is as good as anything available, as the equations used are exact analytical ones - not polynomial approximations. The source code references the source of the equations.

What is apparent is that by adjusting the antenna for the highest forward gain, the input Z falls very low. One could design an antenna for quite high theoretical free space gain, but the input Z would be so low that losses would dominate (which I don't model).

In conclusion, design the antenna for a 12.5 Ohms feed impedance and use a 4:1 balun. Adjust the driven element length to make the impedance seen looking into it purely resistive.

Using 0.3 mm diameter wire (0.0003 lambda), at 300 MHz (free space lambda is 1 m), the following would seem reasonable, if designed for use with a 4:1 balun.

G= 7.15dBi, Z= 12.27+j 0.15 Ohms, SWR= 1.02:1 (in 12.5 Ohm system)

driven = 0.48086 lambda
reflector = 0.49414 lambda
reflector-director spaing = 0.09336 lambda

In contrast, a design for 50 Ohms (remember it is balanced, so use a 1:1 balun) input Z

G= 6.74dBi, Z= 38.78+j 1.67 Ohms, SWR= 1.29 (in 50 Ohm system).

reflector = 0.48887 lambda
driven = 0.47383 lambda
reflector-driven spacing = 0.19164 lambda.

(I personally prefer to design for 300 MHz = 1m, as it makes scaling nice and easy.).

If you give me the wire diameter, I could model it for you, or if you have access to a unix machine, download my source code and build the programmes yourself. I'm not sure of the exact band centre in the USA, but assuming it is exactly 20 m (I know it is not), you would need to scale all the dimensions by exactly 20. Hence the above would need a wire diameter of 6 mm, which is perhaps more than you wanted.

At 15 MHz (precise 20m in free space), the 12.5 Ohm design needs a spacing of 0.09336 lambda = 6.13 feet, so it fits your boom length.

My software can model the effect of random variations in the placement and lengths of the elements, but not a drooping.

--
Dr. David Kirkby Ph.D,
Senior Research Fellow,
Department of Medical Physics, University College London,
11-20 Capper St, London, WC1E 6JA.
Tel: 020 7209 6406 Fax: 020 7209 6269
email: davek@medphys.ucl.ac.uk web page: http://www.medphys.ucl.ac.uk/~davek
Amateur radio callsign: G8WRB

1092. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 04:53:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t5oqlfdq2@plutonium.btinternet.com>
Source record: 177847

David, thanks very much for the frank description of your experience with RF wattmeters. My own experience does not extend above 30 MHz and, insofar as precision measurements are concerned, 0.001 dB, only below 5 MHz. But I have no reason to doubt your findings by extrapolating my own experience to higher frequencies.

My interest is in measurements in general. I enquired about Bird meters only because they appear to be of the best US quality and from the frequency of being mentioned in this newsgroup a fairly large number of amateurs have practical experience of them. Whereas I have none.

It has been said (I forget by who) Radio is the most inexact of all the sciences. This is not surprising when one considers the propagation fade depths experienced at all frequencies. Perhaps it is the unpredictability inherent in radio propagation which amateurs have found so intriguing for the best part of 100 years.

--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Dr. David Kirkby <davek@medphys.ucl.ac.uk> wrote in message news:39F6506F.40C76B7F@medphys.ucl.ac.uk...
> Reg Edwards wrote:
> >
> > Question about Bird power meters.
> >
>
> As a student I used to work for a government calibration lab that checked the
> calibration of Bird meters. They were specified to an accuracy of 5% of FSD.
> (Most were the Bird 43's). A site would send one in, with a selection of
> elements to have the calibration checked. We did not adjust them, only indicated
> pass/fail.
>
> So few passed the +/- 5% of FSD spec, that many places sent them in with a note

> that +/- 10% of FSD would be considered acceptable.
>
> I'm not able to recall every detail of the testing
procedure, but know that
> power could be measured using a water caliometer. High
power attenuators were
> available, which were calibrated (I'm not sure exactly
how). However, meters
> were not tested using water calorimeters on a day-to day
basis. It was too time
> consuming to check a meter of limited accuracy.
>
> The day-to-day calibration of the meters used a
transmitter, low pass filter,
> the Bird meter, a high power attenuator (plus possibly
smaller ones) and a
> Marconi (or perhaps HP, I forget) low-power meter,
measuring mW or possibly uW
> (I can't recall) exiting from the attenuators. The first
high power attenuator
> was 30 dB. At some frequencies, a directional coupler and
load was used instead
> of the attenuator. The attenuator or directional coupler
and marconi power meter
> were all calibrated in house, ultimately against precision
standards (water
> calorimeter etc.). A computer controlled the transmitter
and read the data from
> the Marconi (or HP ??) power meter, while storing the
calibration data for the
> attenuator or coupler.
>
> While working at the lab, I purchased my own element to
cover the 70 cm amateur
> band. I checked the new element at work, only to find it
was not within spec,
> even when brand new. (The meter was not then new, but I
had bought it new and
> never abused it). I returned the element to Aspen
Electronics (the UK
> distributor) and it was calibrated at 432 MHz for me while
I waited (I did not
> care too much for its accuracy outside the amateur band).
I then returned it to
> work, to find that indeed it was then within spec at the
spot frequency.
>
> My one thought on these meters is that they are fine for
tuning a TX up to
> maximum, but don't even consider them as precision

instruments. They are not,
> nor will they ever be. Few meet the published spec after
use, and while I can't
> say how many do when new, the only element I personally
purchased was out of
> spec when new. Hence in my opinion, they are not really
worth calibrating. They
> are undoutably, in amateur circles, a very over-rated
piece of equipment. If you
> want to see if your amp is working they are good, but if
you want to *measure*
> power, with any degree of certainty, I would buy a used
low-power meter, and
> somehow get someone to calibrate an attenuator for you
using a calibrated
> spectrum analyser. That will give far better accuracy than
a Bird ever will.
>
>
> Dr. David Kirkby Ph.D,
> Senior Research Fellow,
> Department of Medical Physics, University College London,
> 11-20 Capper St, London, WC1E 6JA.
> Tel: 020 7209 6406 Fax: 020 7209 6269
> email: davek@medphys.ucl.ac.uk web page:
http://www.medphys.ucl.ac.uk/~davek
> Amateur radio callsign: G8WRB

1093. Re: Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 04:57:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t5p3d$s8d$1@neptunium.btinternet.com>
Source record: 177848

It matters. Ground it at the first oportunity by the most
direct route.

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Wayne Jones wrote -
> Does it matter where along the length of the coax feed
line that the outer
> braid is grounded for lightening protection?
> Can I ground both the metal mast and feedline right at the
antenna? (The
> antenna is an inverted V.)
> or
> If it's a wooden mast can I ground the braid at some point
closest to the
> ground rod which may be 1/2 way to the transceiver?
>
>
> Wayne
> ve3 gqx
>
>
>
>

1094. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 05:00:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F668F6.DF3E91FA@oio.net>
Source record: 177849

Ian,
Since we're speaking of alternating current at RF frequencies,
the proper term is impedance. Except in specific instances, the
impedance that the radio 'sees' is almost never pure resistance.
There will almost always be some reactance of some kind present.
While I agree, the exact output impedance of a radio is seldom
50 ohms, it's close enough that the difference is unimportant.
It's certainly as 'exact' as the actual impedance of typical
coaxial cable.
'Doc

1095. Re: Butternut HF9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 05:07:16 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F66A84.6D177CD1@oio.net>
Source record: 177850

Klensir,
Just as a guess, I'd say that the dimensions for the 17 meter
portion of the vertical is incorrect. Re-adjusting the antenna
may correct the problem (it's probably going to 'screw-up' the
adjustments for the other bands, though).
Good luck....
'Doc

1096. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 05:48:20 UTC
From: richardharrison@webtv.net
Message-ID: <29977-39F67424-35@storefull-118.iap.bryant.webtv.net>
Source record: 177853

Dr. David Kirkby, Ph.D. wrote:
"Hence in my opinion, they (Bird wattmeters) are not really worth calibrating. They are undoubtably, in amateur circles, a very over-rated piece of equipment."

Dr. Kirkby is too pessimistic. I spent over a quarter century with a company which operated over a thousand radios which all got regular checks with Bird wattmeters. Logs were kept which recorded the readings. Many different Birds were used and they agreed closely, short term, or long term, barring changes in the power measured. These measurements were repeatable and different meters agreed. Moreover the measurements were usually exactly what was expected and conformed to the specifications of the equipment being checked. Poor instruments don`t give consistently good results. All of the Bird wattmeters gave consistently good results, and were interchangeable. Dr. Kirkby`s experience is very different from mine. Since my experience is with dozens of Bird wattmeters making thousands of measurements, ever since 1960, and counting, I still use a Bird almost every day, I think Dr. Kirkby`s experience is atypical.

+ or -5% is not claimed as laboratory accuracy. But, compared to any other commonly available field measurement RF wattmeter, the Bird deserves the reputation it has with amateurs and professionals alike.

Best regards, Richard Harrison, KB5WZI

1097. Re: Attic monopole--Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 06:04:09 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t5t6a$i3t$1@iac5.navix.net>
Source record: 177851

Are you saying that anyone that has 100 foot towers is a bad guy?

"Fractenna" <fractenna@aol.com> wrote in message
news:20001024132315.23222.00002446@ng-ch1.aol.com...
>
> Mr. O'Neal has well ovr 100 foot towers. THus it makes sense that he
cannot
> relate to the plight of those of us who want good performing, efficient
small
> antennas that our neighbors can't see.
>
> Ask yourself: what right does someone with such a grotesque--in your face
> --antenna set up have to categorize attempts at making a useful attic
antenna
> "inane"?
>
> 73
> Chip N1IR

1098. Law suit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 06:05:03 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8t5t80$i44$1@iac5.navix.net>
Source record: 177852

Day three of the wait for the Fractal finger of fate to arrive at my door
with no joy...

1099. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 14:35:21 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <tpVvNEAp+u95EwTR@invest.fsbusiness.co.uk>
Source record: 177635

Many thanks to everyone who responded to my 50/75 ohm question.

Phil G4ZOW

1100. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 17:40:50 UTC
From: KB9WFK@mindspring.com
Message-ID: <39F71B22.1F1076@mindspring.com>
Source record: 177657

wouldn't it be better to solder on the wires, run them to a lithium battery holder and then just leave them in place? You could then just add the battery to the holder, replace the old battery and then remove the battery from the holder until next time. If there is enough room for this it would reduce wear and tear on the pcb and make the change next time much easier as there is less to remember 5 years down the road..

ehsjr@bellatlantic.net wrote:

> Like the other poster, I don't think your problem is the battery.
> I don't know for sure.
>
> However, since you asked, here's some info about the battery.
>
> There is a small board inside the 745 that plugs in and is also held
> in place by 1 screw, if memory serves me. The board is easily
> accessible by removing the top cover, and easily identifiable by
> the size, and the fact that it hosts a lithium coin cell.
>
> That board contains the memory (RAM memory) of the stuff you
> store *plus* the stuff ICOM stored in there - the "brains" of the
> rig. The stuff ICOM stored allows your radio to work. I have heard
> that if that "stuff" is wiped out (due to battery failure) the radio
> becomes a vegatable. Ok - that board has a 3 V lithium coin cell
> soldered on. It is that battery that needs to be replaced before it
> runs down. The replacement procedure requires providing 3 volts
> to the board while you are unsoldering the old battery and soldering
> in the new one.
>
> What I do (I've replaced the battery twice) after removing the board
> from the rig is as follows:
> 1) solder a couple of wires to the board before removing the battery;
> 2) run those wires to a brand new 3 V lithium cell;
> 3) unsolder the old battery;
> 4) solder in a second brand new lithium cell;
> 5) unsolder the wires installed in setp 1;
> 6) reinstall the board.
>
> You need 2 new lithium batteries, some wire and about
> ten minutes from start to finish. The first time you do it,
> take an hour and be 100% sure of each move before you
> make it. You need to solder those wires to the board such
> that you can remove the old battery and still keep 3 V going
> to the board - selecting the places on the board where you
> will add the wires is both an electrical (so you get the polarity

> right) and mechanical (so you leave yourself plenty of room
> to unsolder the old battery without disturbing the "life support"
> attachement of those 2 wires) consideration.
>
> Al wrote:
>
> > > Are you aware that the IC-745 uP program is stored in dynamic
> > > RAM and if the battery runs down the transceiver stops working?
> > > http://www.mindspring.com/~w6rca
> >
> > The picture of W6RCA and daughters is cool, but I did not find info about
> > the Icom. Could you please be more specific as to the battery information. I
> > too have a 745 and it is starting to jump frequency on me (about 3 kHz up
> > for about 30 seconds, then back again). Perhaps the problem is the battery
> > you are referring to.
> >
> > Thank you.
> > Al

1101. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-25 23:07:07 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <flzHUSAbe295EwUI@g3ohx.demon.co.uk>
Source record: 177798

In article <39F668F6.DF3E91FA@oio.net>, 'Doc <w5lz@oio.net> writes
>
>
>Ian,
> Since we're speaking of alternating current at RF frequencies,
>the proper term is impedance. Except in specific instances, the
>impedance that the radio 'sees' is almost never pure resistance.
>There will almost always be some reactance of some kind present.
> While I agree, the exact output impedance of a radio is seldom
>50 ohms, it's close enough that the difference is unimportant.
>It's certainly as 'exact' as the actual impedance of typical
>coaxial cable.
> 'Doc

Maybe I'm losing a grip on things Doc!

1. Why can't you have a 'resistance' at RF? Surely all transmitters are designed to work onto a resistive load - usually 50 ohms. I hope ALL my fantastic antenna systems present (via a transmatch, where necessary) a perfect resistive 50 ohms to the transmitter (my 'perfect' SWR meter indicates zero reflected power with my perfect 50 ohm load, so this must be true!).

2. Surely the output impedance of a transmitter should be considerably LOWER than the load which it is intended to feed. A power transmitter is NOT a lab signal generator. If the output impedance (resistance?) of a transmitter was equal to the load, a transmitter delivering 100W of power would dissapate at least 100W in its output stage. The efficiency could NEVER exceed 50% (and we have not added any other losses). You would have a pretty hot rig! How, then, does a Class-C PA have an efficiency of ~66%?

I have always understood that the output impedance of a transmitter is pretty low (compared with the design load), and pretty reactive (ie non-resistive). Have I been wrong? It won't be the first time!!.

Ian.

1102. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <59A9kNAKj895EwQU@ifwtech.demon.co.uk>
Source record: 177813

George, W5YR wrote:
>Kirby, you mentioned price range . . .
>
>Consider spending a little more and get the AEA/Tempo CIA-HF analyzer.
>It is much superior to the 259B. Please check the specs and compare
>them. The enormous difference is that the CIA-HF plots curves of several
>variables against frequency. That alone is worth the difference in cost
>- you will see things in those plots that you so easily miss with
>spot-frequency measurements. I won't even mention the relative accuracy
>of the two instruments . . .

You'd better not. At the time I was wanting to review an AEA-CIA for RadCom, it was impossible to obtain one that didn't have serious glitches in the R-X measurement display. After trying two different models and a modification, all direct from the factory, I reluctantly gave up on it. The good points about the AEA-CIA were the superb build quality and it worked fine as a graphical SWR meter... but the magazine review was supposed to be about the new generation of R-X analyzers, and that feature of the AEA-CIA just wasn't reviewable.

Instead I reviewed an MFJ-269, and found it very satisfactory within the limitations of low-cost instrument. AEA, MFJ and Autek all share the same limitation of being broadband, and thus vulnerable to strong incoming signals when used with antennas. Build quality is adequate - almost everything is on machine-assembled SMD boards with a minimum of hand soldering.

That experience with the AEA-CIA was about two years ago. I have no knowledge about current production.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1103. Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 00:32:05 UTC
From: jbhall1282@my-deja.com
Message-ID: <8t7u25bds1@nnrp1.deja.com>
Source record: 177799

I have a long run of coax from the shack out to my antenna garden and
it must run underground. Trying to minimize losses, I was thinking of
running hardline. Is most hardline suitable for direct burial? Thanks.
73
Jerry
W0PWE

Sent via Deja.com http://www.deja.com/
Before you buy.

1104. PCB based antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 01:20:26 UTC
From: pdrunen@aol.com
Message-ID: <20001025212026.28496.00000058@ng-cs1.aol.com>
Source record: 177800

Hi Group,

Been working on a home project with data transmitter at 433 MHz.
My antenna is a PCB trace, 1/12 wavelength long and the osc is a colpitt with saw resonator.

My power goes down if I mount the PCB onto the metal siding of my garage.
The PCB is single sided.

Other than mount the PCB with stand offs, is there a way to prevent the unwanted coupling to the metal siding? Can I leave the copper on the other side of the RF circuit but ungrounded and then tune the osc? I would expect this to limit the unwanted coupling? Or maybe ground the copper side to the PCB RF ground point?

Thanks,

Paul

1105. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 01:57:08 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8t831i$f3q$1@nnrp1.deja.com>
Source record: 177801

In article <8t7u25bds1@nnrp1.deja.com>,
jbhall1282@my-deja.com wrote:
> I have a long run of coax from the shack out to my antenna garden and
> it must run underground. Trying to minimize losses, I was thinking of
> running hardline. Is most hardline suitable for direct burial? Thanks.
> 73
> Jerry
> W0PWE
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>
Jerry, no most hardline is not suitable for direct burial. I would
recommend placing in conduit. The conduit will both protect the cable,
and make it easier if you need to either replace the cable or add
another cable. I would plan well and use conduit large enough to
acomodate any future cable you may want to run out there. Try to
minimize the turns and use sweeps not short radius sweeps. I mostly
work with 75 ohm CATV hardline and we use flooded cable. The flooding
compund helps if you should happen to nick the jacket. If you should go
the direct bury route be carefule about your backfill. Rocks are a
definite negative. Good luck. 73, Bill
--
BillN6VLR

Sent via Deja.com http://www.deja.com/
Before you buy.

1106. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 03:23:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t882qkpp0@208.207.71.169>
Source record: 177802

CAM wrote:
>
> REDBONE wrote:
> > Got burned at the local hamfest and I brought an Icom 745 HF
> > Transciever that has a whole bunch of problems.
>
> Are you aware that the IC-745 uP program is stored in dynamic
> RAM and if the battery runs down the transceiver stops working?
> Do you know whether the dynamic RAM program is operational or not?
> Even if there is a power surge and the RAM gets changed, the 745
> will fail. I had one for many years.
>

You might check the Icom list. There are several people there who might help you sort it out. AB4OJ, Adam Farson, is the resident Icom expert and he really knows his stuff. Also there have been some aftermarket RAM boards produced for some of the Icom rigs that cure the above problem, and work better than the original boards. One may work with the 745, and Adam will know. Also the Icom net meets on 20 meters SSB each Sunday afternoon, takes inquiries and offers advice. I don't have the time and frequency at hand, but if you subscribe to the Icom email list at QTH.net you can get them.
The 745 is one of the few Icom rigs I *haven't* owned.

Dick

1107. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 03:40:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8t8942kpp1@208.207.71.169>
Source record: 177803

VE9SRB wrote:
>
> Although there is no dispute that the MI2 Fractal Loop performs or works as
> claimed and offers this performance in a reduced aperture, it is evident
> that the Fractal nature of the antenna geometry is not the significant
> factor in determining the antenna's performance. To verify this, an EZNEC
> model of the MI2 antenna was created as a method to determine the baseline
> performance of the MI2. The baseline MI2 performance at first resonance is
> as follows:
>
> Fr = 15.155 MHz
> Resistance = 28.4 ohms
> Gain = 1.83 dBi
> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
>
> These results are very consistent with the claimed performance of the
> antenna as presented by the MI2 antenna designer.
>
> About a month ago, several arbitrarily shaped antennas were designed (about
> 5-10 minutes of effort in each case) occupying the same physical aperture as
> the MI2. These antennas performed as well as and in some cases, better than
> the MI2. The EZNEC files and results for these antennas can be found at
> www.eznec.com under the FTP site.
>
> To further prove that the Fractal geometry is not the significant factor is
> achieving performance, yet another arbitrarily shaped design was created and
> modeled in EZNEC. This antenna has a slightly smaller aperture size and
> shorter total wire length than the MI2. It is not a "meander" design (as
> defined by the MI2 designer) like two of the previous antennas that were
> subsequently dismissed by the designer of the MI2 antenna as not being able
> to work. This new design is simply an arbitrary, yet symmetrical,
> rearrangement of wire shape in the same aperture. This new design took
> about 6.7 minutes to create. Performance of the new design at first
> resonance is as follows:
>
> Fr = 16.06 MHz
> Resistance = 32.8 ohms
> Gain = 1.91 dBi
> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
>
> Clearly, if a simple rearrangement of the wire into a non-fractal shape can
> result in similar or better performance, the Fractal geometry is not the
> significant factor in determining antenna performance. Although the antenna
> geometry will impact antenna performance, factors such as feed point

> location, total wire length, and aperture size are as and in many cases,
> more significant than the geometry itself. Models of this new antenna can
> be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
> random4.ez.
>
> Steve, VE9SRB

Well, Friends, there we have it...from certainly a competent enough
source to qualify as accurate. The Word is out, and it is unambiguous.

As anticipated, Fracky has stonewalled, stewed and threatened clearly
with the sole purpose of making and keeping hazy the boring and deeply
mundane details of his "invention" - which turns out to be no invention
whatever and at all! Are we surprised? Not much!!!!

So now sue away, Freakenstein!
>
> "You always get back what you give"

1108. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 03:50:33 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <dSNJ5.120858$g6.55857666@news2.rdc2.tx.home.com>
Source record: 177804

Hi Tom, you might think of installing a pulley system over your neighbors attic or wind a dipole on a length of PVC so you can make adjustments without freaking out you neighbors. For more ideas check out my page at http://www.geocities.com/n0hc/ and don't forget to check out the DXZONE (link on page) for more ideas.

Good Luck Cliff N0HC
<tegwilym@my-deja.com> wrote in message news:8t72k6ies1@nnrp1.deja.com...
> I live in a condominium that has all the usual rules against antennas,
> color of curtains, pet....etc. I am trying to figure out what kind of
> antenna I could put in my attic that might work ok on the 10-20 meter
> bands. I currently have a vacant unit next door to me that was just
> sold, so I figure this would be a good time to sneak around up in the
> attic without anyone hearing me up there. I do have one of
> those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
> search) in the hallway and can't get it tuned up to transmit. I am
> thinking of maybe putting that up in the attic or maybe just a normal
> dipole up there. I am estimating that I have about 50 or 60 feet of
> room that I can play with up there. The attic is pretty short, only
> about 30 inches tall at the peak of the roof.
>
> I do have a QFH antanne up there right now for receving the NOAA
> satellite images on 137mhz and have had great results from that, so I
> know an antenna is possible up there.
>
> Any ideas from any of you condo dwellers?
>
> Tom KA7VIK
> Seattle
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1109. Re: Looking for monopole or marconi antenna parameters...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 04:16:13 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F7AFED.489626FF@dvol.com>
Source record: 177805

Hernan Sanchez wrote:

> Hi.
>
> I'm trying to learn about Monopole or Marconi Antenna, but I haven't
> found so much information yet. I want to know about "radiation
> pattern", "ray angle", "directivity", "gain", "radiation
> efficiency", "efective area", "ray efficiency", "aperture
> efficiency", "radiation resistance", "bandwidth", "quality
> factor", "antenna resolution", "polarization".
>
> Where I can find information about equations and all this stuff in the
> web ?

>
Rumors to the contrary life, knowledge and education actually exist beyond
the Web, curl up with the ARRL Antenna Book for a couple months for
openers, start at page one. .
>
http://www.arrl.org/catalog/?item=8047
>

>
>
> Thanks.
>
> --
> Hernï¿½n Sï¿½nchez
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

>
w3rv

1110. ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 04:30:40 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <QrOJ5.356621$i5.5639730@news1.frmt1.sfba.home.com>
Source record: 177806

Hello-

I have a couple of these things, but both have trouble reliably locking into the signal, maybe once every 3-5 days at best. I am located near San Francisco, CA., a hundred feet above sea level.

Can I get your thoughts about enhancing the antenna/signal level? I don't have bad noise here that I am aware of.

Maybe a Fractal for 60 KHz?

Thanks
73 Mike Camp KI7FQ

1111. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 04:30:46 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F7B352.B126844C@dvol.com>
Source record: 177807

Kirby wrote:

> I'm considering purchasing an antenna analyzer - the MFJ or something in
> that price range. Yeah, I know what MFJ stands for .... ;) . Have
> there been any comparison reviews done?

>
I don't know of any comparative reviews, I'm not a big MFJ fan, but the only way you'll get my MFJ 259B is to pry it outta my cold, dead hands. My only squawks on the 259B being that it takes some work to figger out if the "j" is capacitive or inductive reactance, and it quits when R+j exceeds 600 ohms. But what do ya expect for a lousy $200?

>
>
> Kirby

>
w3rv

1112. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 04:48:39 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <HIOJ5.356646$i5.5642417@news1.frmt1.sfba.home.com>
Source record: 177808

Hi Kirby-

For what it's worth, I have a MFJ 259B and an Autek RF Analyst RF-1. I use the Autek only when carrying weight is an issue, otherwise the 259B gets 98% of the use here.

Mike Camp ki7fq

"Kirby" <kirby.no.spam@kpsnet.com> wrote in message news:39F796AF.69FC9F6F@kpsnet.com...
> I'm considering purchasing an antenna analyzer - the MFJ or something in
> that price range. Yeah, I know what MFJ stands for .... ;) . Have
> there been any comparison reviews done?
>
> Kirby
>

1113. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 05:04:22 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001026010422.18057.00001019@ng-cr1.aol.com>
Source record: 177809
Body handling: HTML body converted to readable text

<>

Don't know what I'd do w/out my 259 B...
Maybe I'd have to get one of them 269's...
It's a Great tool & the New one is even better...
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

1114. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 05:27:46 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39F7C051.6CA19498@att.net>
Source record: 177810

Kirby, you mentioned price range . . .

Consider spending a little more and get the AEA/Tempo CIA-HF analyzer.
It is much superior to the 259B. Please check the specs and compare
them. The enormous difference is that the CIA-HF plots curves of several
variables against frequency. That alone is worth the difference in cost
- you will see things in those plots that you so easily miss with
spot-frequency measurements. I won't even mention the relative accuracy
of the two instruments . . .

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Kirby wrote:
>
> I'm considering purchasing an antenna analyzer - the MFJ or something in
> that price range. Yeah, I know what MFJ stands for .... ;) . Have
> there been any comparison reviews done?

1115. Re: wire beam design ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 06:24:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F7CE36.7A5D@wt.net>
Source record: 177811

Roy Lewallen wrote:
>
> You might be interested in the "Field Day Special". It's a
> ZL-special-like antenna -- two elements spaced 8 feet apart on 20
> meters, made entirely from 300 ohm twinlead.

That would probably be easier than the one I came up with. I like the ability to switch easily. I didn't see that one before I gave the other example. Something is goofy with the news feed here. I'm getting most of the posts about 6 hours later. I usually get them real fast. I guess they changed something again. It crashed for a while the other day. MK

--
http://web.wt.net/~nm5k

1116. Re: Looking for monopole or marconi antenna parameters...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 06:31:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F7CFAD.1308@wt.net>
Source record: 177812

Hernan Sanchez wrote:
>
> Hi.
>
> I'm trying to learn about Monopole or Marconi Antenna, but I haven't
> found so much information yet. I want to know about "radiation
> pattern", "ray angle", "directivity", "gain", "radiation
> efficiency", "efective area", "ray efficiency", "aperture
> efficiency", "radiation resistance", "bandwidth", "quality
> factor", "antenna resolution", "polarization".
>
> Where I can find information about equations and all this stuff in the
> web ?
>
> Thanks.
>
> --
> Hernï¿½n Sï¿½nchez

Well, you would be better off to find a few good books. But is some info around. You could try a search on yahoo or whatever. Also search the deja-news. Offhand I can think of one that almost surely has a some info on this antenna. I think there is an article on it. It's at http://www.cebik.com/radio.html I'm sure there are other places, but you'll have to search them out. I think you will get more detailed info from a book like one of the handbooks etc. Any of those cover those in detail. MK

--
http://web.wt.net/~nm5k

1117. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 11:26:48 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001026072648.02857.00001342@ng-cf1.aol.com>
Source record: 177814

>I live in a condominium that has all the usual rules against antennas,
>color of curtains, pet....etc. I am trying to figure out what kind of
>antenna I could put in my attic that might work ok on the 10-20 meter
>bands. I currently have a vacant unit next door to me that was just
>sold, so I figure this would be a good time to sneak around up in the
>attic without anyone hearing me up there. I do have one of
>those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
>search) in the hallway and can't get it tuned up to transmit. I am
>thinking of maybe putting that up in the attic or maybe just a normal
>dipole up there. I am estimating that I have about 50 or 60 feet of
>room that I can play with up there. The attic is pretty short, only
>about 30 inches tall at the peak of the roof.
>
>I do have a QFH antanne up there right now for receving the NOAA
>satellite images on 137mhz and have had great results from that, so I
>know an antenna is possible up there.
>
>Any ideas from any of you condo dwellers?
>
>Tom KA7VIK
>Seattle
>

Tom,
I would try this link (http://www.nerc.com/~jdegood/coaxtrap).
There is a traped dipole with an over all length of less the 60 ft to work
80-10 mtrs. It can be shortend and has the specs there to drop bands you dont
want or need. I have not tried it but the idea is sound.
73 de KG4FET Sandor

1118. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 11:31:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t94h9$kg7$1@neptunium.btinternet.com>
Source record: 177815

CAM wrote -
> My IC-706 outputs maximum power into 50 ohms. Its power
output
> falls off on each side of 50 ohms.
======================
Left and right ? What about above and below ?

Reg.

1119. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 11:35:56 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <9RX4OXHStrrr5XOMTyoP=u+vWU6k@4ax.com>
Source record: 177816

"Mike Camp" <mikerobin@home.com> wrote:

>Hello-
>
>I have a couple of these things, but both have trouble reliably locking into
>the signal, maybe once every 3-5 days at best. I am located near San
>Francisco, CA., a hundred feet above sea level.
>
>Can I get your thoughts about enhancing the antenna/signal level? I don't
>have bad noise here that I am aware of.
>
>Maybe a Fractal for 60 KHz?
>
>Thanks
>73 Mike Camp KI7FQ
>

They broadcast on 5, 10, 15 and 20 Mhz. You should be able to pick up
something. I have a cheapo Radio Shack wwv receiver that picks up wwv
in Ft. Collins just fine with a pullup whip antenna. You should be
getting either Ft. Collins or the Hawaii version of wwv unless you're
listening on something really wretched, altho' I can't thing of
anything more wretched than these little RShack gizmos, and they do
just fine :-)

Bob
k5qwg

1120. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:08:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t9k30$q8j$1@neptunium.btinternet.com>
Source record: 177637

Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote in message
news:flzHUSAbe295EwUl@g3ohx.demon.co.uk...
> In article <39F668F6.DF3E91FA@oio.net>, 'Doc
<w5lz@oio.net> writes
> >
> >
> >Ian,
> > Since we're speaking of alternating current at RF
frequencies,
> >the proper term is impedance. Except in specific
instances, the
> >impedance that the radio 'sees' is almost never pure
resistance.
> >There will almost always be some reactance of some kind
present.
> > While I agree, the exact output impedance of a radio
is seldom
> >50 ohms, it's close enough that the difference is
unimportant.
> >It's certainly as 'exact' as the actual impedance of
typical
> >coaxial cable.
> > 'Doc
>
> Maybe I'm losing a grip on things Doc!
>
> 1. Why can't you have a 'resistance' at RF? Surely all
transmitters are
> designed to work onto a resistive load - usually 50 ohms.
I hope ALL my
> fantastic antenna systems present (via a transmatch, where
necessary) a
> perfect resistive 50 ohms to the transmitter (my 'perfect'
SWR meter
> indicates zero reflected power with my perfect 50 ohm
load, so this must
> be true!).
>
> 2. Surely the output impedance of a transmitter should be
considerably
> LOWER than the load which it is intended to feed. A power
transmitter is
> NOT a lab signal generator. If the output impedance
(resistance?) of a

> transmitter was equal to the load, a transmitter
delivering 100W of
> power would dissapate at least 100W in its output stage.
The efficiency
> could NEVER exceed 50% (and we have not added any other
losses). You
> would have a pretty hot rig! How, then, does a Class-C PA
have an
> efficiency of ~66%?
>
> I have always understood that the output impedance of a
transmitter is
> pretty low (compared with the design load), and pretty
reactive (ie non-
> resistive). Have I been wrong? It won't be the first
time!!.

****

Dear Old Wives,

One more time -

The output resistance, more accurately described as the internal resistance, can be anything it likes. To design the output circuit, tank or Pi-match or transformer turns ratio, no knowledge of that parameter is required.

More often than not the internal resistance looking back into the anode, plate, collector or drain, is some high value because the amplifying device can be considered as a current source. But who cares ?

PA efficiency is a function only of the operating angle of the device which is controlled by the grid, base or gate bias circuit. Plate dissipation, etc, is minimised simply by allowing current through the device to flow only when the voltage across it is at the lowest value of the RF cycle.

Small operating angle = high efficiency.

For maximum power output the resistive load which should be presented to the anode, plate, drain or collector is given by Ohm's Law as -

Load = (Peak Voltage Rating)/(Peak Current Rating) ohms.

Alternatively -

Load = K*(Square of DC supply voltage)/(Required RF power output) ohms.

None of these device ratings has anything to do with internal resistance.

And non-dissipative resistances are the invention of
baffle-gabs.

Reg, G4FGQ

1121. Re: Supprt Roy, get a great tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:13:13 UTC
From: fractenna@aol.com
Message-ID: <20001026081313.28289.00001057@ng-mg1.aol.com>
Source record: 177817

>
>
>
>Fractenna wrote:
>
>> >
>> >Hi Chip--
>> >
>> >Still wondering what you were doing selling publication rights to material
>> >you
>> >didn't own and then later attacking Roy Lewallen over material you still
>> >didn't
>> >own. I don't want to sound like Andy Rooney, but isn't that a little odd?
>> >Perhaps this is something you'd just rather ignore talking about.
>> >
>> >Rick K1BQT
>> >
>>
>> What you need to do is reproduce this alleged document in which copyright
>was
>> transferred as you state. You cannot, because it did NOT occur.
>>
>> Nathan Cohen, Ph.D.
>
>YOU are the one that said that FAS held the copyright of it during that time
>and
>that it was JUST transfered back to you on the 21st (I think you said) of
>this
>month.

Sometimes I wonder if being cogent is a handicap. EXACTLY what contradiction do you see here? What does a non-existent transfer of rights to CQ Communications--the topic so described--have to do with a transfer to anyone else?

WHERE DOES IT SAY THAT I NEVER TRANSFERED COPYRIGHT--EVER?

WHERE??

NC.

1122. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:16:24 UTC
From: fractenna@aol.com
Message-ID: <20001026081624.28289.00001058@ng-mg1.aol.com>
Source record: 177818

>VE9SRB wrote:
>>
>> Although there is no dispute that the MI2 Fractal Loop performs or works as
>> claimed and offers this performance in a reduced aperture, it is evident
>> that the Fractal nature of the antenna geometry is not the significant
>> factor in determining the antenna's performance. To verify this, an EZNEC
>> model of the MI2 antenna was created as a method to determine the baseline
>> performance of the MI2. The baseline MI2 performance at first resonance is
>> as follows:
>>
>> Fr = 15.155 MHz
>> Resistance = 28.4 ohms
>> Gain = 1.83 dBi
>> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
>>
>> These results are very consistent with the claimed performance of the
>> antenna as presented by the MI2 antenna designer.
>>
>> About a month ago, several arbitrarily shaped antennas were designed (about
>> 5-10 minutes of effort in each case) occupying the same physical aperture
>as
>> the MI2. These antennas performed as well as and in some cases, better
>than
>> the MI2. The EZNEC files and results for these antennas can be found at
>> www.eznec.com under the FTP site.
>>
>> To further prove that the Fractal geometry is not the significant factor is
>> achieving performance, yet another arbitrarily shaped design was created
>and
>> modeled in EZNEC. This antenna has a slightly smaller aperture size and
>> shorter total wire length than the MI2. It is not a "meander" design (as
>> defined by the MI2 designer) like two of the previous antennas that were
>> subsequently dismissed by the designer of the MI2 antenna as not being able
>> to work. This new design is simply an arbitrary, yet symmetrical,
>> rearrangement of wire shape in the same aperture. This new design took
>> about 6.7 minutes to create. Performance of the new design at first
>> resonance is as follows:
>>
>> Fr = 16.06 MHz
>> Resistance = 32.8 ohms
>> Gain = 1.91 dBi
>> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
>>
>> Clearly, if a simple rearrangement of the wire into a non-fractal shape can

>> result in similar or better performance, the Fractal geometry is not the
>> significant factor in determining antenna performance. Although the
>antenna
>> geometry will impact antenna performance, factors such as feed point
>> location, total wire length, and aperture size are as and in many cases,
>> more significant than the geometry itself. Models of this new antenna can
>> be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
>> random4.ez.
>>
>> Steve, VE9SRB
>
>
> Well, Friends, there we have it...from certainly a competent enough
>source to qualify as accurate. The Word is out, and it is unambiguous.
>
> As anticipated, Fracky has stonewalled, stewed and threatened clearly
>with the sole purpose of making and keeping hazy the boring and deeply
>mundane details of his "invention" - which turns out to be no invention
>whatever and at all! Are we surprised? Not much!!!!
>
> So now sue away, Freakenstein!
>>
>> "You always get back what you give"
>
>
>
>
>
>

The word is indeed out:

A FRACTAL LOOP PROVIDES THE SUPERIOR FOM.

As I said, a manuscript will be submitted before Jan 1.

So where is Mr. best's manuscript?

There won't be any .

NC

1123. MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:18:37 UTC
From: radiofreq0@aol.com
Message-ID: <20001026081837.13348.00002967@ng-md1.aol.com>
Source record: 177619

All,
Please read this thread and tell me who has a problem with whom.
This guy has made it impossible for me to buy anything on the web, I've had to stop buying, as my wife and children have come to the conclusion that its too much a gamble.
How is it this guy gets favorable reports, did he threaten the people he screwed? As he did me? He threatened me, should I post this, yet he has the audacity to try to back out of his word by harrasing me.
The follwing is the thread of emails.
You be the judge.
In my opinion, this guy is a dangerous, unstable individual who needs to be dealt with through the legal process.
Any feedback, ideas on how to deal with him and this matter is appreciated.
He seems to believe he can and threaten people into submission.
Is there a type of syndicate on the web of people who procure for each other, thus having a vestid interest in falsly
recomending,falsly giving favorable comments on a trader for their own personal gain?
Lets see who comes out in his defense! There is a disturbing pattern
CAVEAT EMTOR!

Jeff

Subj: Re: AT50 dispute
Date: 10/25/2000 9:08:56 PM Eastern Daylight Time
From: RadioRanch@qth.com (Murray Neece)
Reply-to: radioranch@qth.com
To: RadioFreq0@aol.com

If you want your money back Im sure we can come to an agreement, if you want another tuner...Im afraid, we cant...Because Im not going to buy another one......and Im not going to buy that one back, til Im assured that is in proper
condition like it was when it left.....that is the only option you have at this point...DO YOU UNDERSTAND THAT?...I could not..fail to pay you if I wanted to stay here doing what I do like I have for the past 6 years...do you understand that too?...So if you are afraid you wont get your money, arrange an escrow account and we will go thru the motions...you figure out how you wanna do it....If you talked to any real regular traders , they all told you the same thing...Murry does what he say and is a man of honor...Now lets hear you plan Jeff. If you have any contacts with KNOWN hamtraders, we will use them to go between if that helps your feeling...Ive paid more than 225 to watch a monkey fuck a football, but I ll be damned if I will do it for a weasel...73 Murray

RadioFreq0@aol.com wrote:

> Murray,
> After talking to several hams involved in trading, I must again demand this
> be resolved by a third party. I will not 'send you the AT50,' on your
> 'promise; to 'send me the money.' I have made it plain I expected you to keep
> your word and trade this unit out for another. I do not want the money, as I
> have made clear.
> Now we must come to an agreement as to who shall be that third party.
> You said you use someone, who?
> Jeff
>
> In a message dated 10/21/2000 11:33:06 AM Eastern Daylight Time,
> RadioRanch@qth.com writes:
>
> > Subj: Re: AT50 dispute
> > Date: 10/21/2000 11:33:06 AM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > After talking with several other ham traders last nite, we are of the
> > opinion
> > that even though it makes no sense and is certainly petty on your
> part...the
> > best
> > I can do is take it back, if its in the same shape and whether it smells
> or
> > not,
> > refund your money....So I offer you this one time only opportunity...Send
> it
> > back
> > where it came from, insure it, pack it well...when it arrives I will
> refund
> > your
> > money. Anyfurther rhetoric from you will result in your continued
> > ownership of
> > said tuner....You wont have to worry about trading with me again Jeff, you
> > cant...I await your reply...my reputation is good, NO ONE and I mean NO
> ONE
> > can
> > say Ive ripped em off, I will not send the money first, but I WILL send
> > the
> > money and you know it...Ive paid more than 225 to to "See a monkey play
> > football",
> > its not a about money...73 Murray
> >
Subj: Re: AT50 dispute
Date: 10/21/2000 11:33:06 AM Eastern Daylight Time
From: RadioRanch@qth.com (Murray Neece)
Reply-to: radioranch@qth.com
To: RadioFreq0@aol.com

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that even though it makes no sense and is certainly petty on your part...the
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I can do is take it back, if its in the same shape and whether it smells or
not,
refund your money....So I offer you this one time only opportunity...Send it
back
where it came from, insure it, pack it well...when it arrives I will refund
your
money. Anyfurther rhetoric from you will result in your continued ownership
of
said tuner....You wont have to worry about trading with me again Jeff, you
cant...I await your reply...my reputation is good, NO ONE and I mean NO ONE can
say Ive ripped em off, I will not send the money first, but I WILL send the
money and you know it...Ive paid more than 225 to to "See a monkey play
football",
its not a about money...73 Murray

RadioFreq0@aol.com wrote:

> Murray,
> I am not going to let you try to weasle your way out of your word, threats
> will get you know where, and I am not going to let you commit any kind of
> similar perpitration against others under the pretense.
> My only dealings with you will have to be with a third party.
> Clearly you cannot be trusted.
> I must post this publically as I take your thinly vailed threat as very
> serious and I think you are possibly dangerous, and I must protect myself
> form your bazzarr behaivior. You are unstable!!!!
> FIRST, WE WILL LET THE COURT OF PUBLIC OPINION RENDER ITS VERDICT !!!!!!
> Thanks to you Murray, my wife has protested my purchasing anything of value
> over the web from individuals!!!! Maybe for good reason!!!
> Jeff
>
> Subj: Re: AT50
> Date: 10/20/2000 11:01:11 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> --------------------
> READ MY LIPS>..not buying it back at any price...swap if I get the
> chance...dont
> need any questioable PR but I can handle it much better than you...you will
> be
> deemed picky pricky anal idiot...get it? EVEN if I was wrong, which Im not,
> you couldnot win this still argument...just be cause you "DONT WANT IT ' now,
> doesnt mean you get your way...wait 24 hours til I see if I trade, if not, do
> not contact me again...just go fore, be prepard...to be belittled. Im not
> nuts,
> Im just tired of little pricks like you that whine when they find they didnt
> do

> the right thing and want the seller to take it back...even when its GREAT!!
> I
> would offer you $150 for it if that will help you out...thats what I thing
> wholesale price would be.....That is all, you need not contact me further...I
> will let you know if we are trading...if not, by monday you can "have at
> it"....KMA Murray
>
> Subj: Re: AT50
> Date: 10/20/2000 10:13:23 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> In response to this particular and the previous email, let me
> say....BULLSHIT....If I get the other tuner I willl send it to
> you...otherewise
> you are on your own...I will let you know either way by tomorrow, then do as
> you
> will and Ill do as I will...You are correct , Im under too much stress and
> dont
> need petty bull shit like this to even think about...Your story is all crap
> in my
> book...ive been clearing up smelly radios half mylife..... its easily done
> using
> common sense and common practice' that I KNOW...so I will let you know by
> sunday
> or as soon as I get it done, that I got one and and will send it, OR I will
> advise you to sell it, say what you will, we both know it doesnt smell much,
> you
> could say , "slight smoke odor" and I wouldnt argue....much...though I dont
> think
> so...anything more will get you what YOU deserve...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > I do not know why you are reacting like you are. I said, it was a problem,
> my
> > wife is far more sensitive then I. I am less sensitive. In actuality, I am
> > just more willing to make things work at my expense.
> > I WANT an AT50. I do NOT want to sell it if I do not have to.
> > I am not at all anal-retentive! -:)
> > Your under too much stress Murray.
> > Really, if you have another one, lets just swap! (so long as its in the
same
> > excellent shape) Please have someone else check it out regarding the smell.
> > Really Murray, no need to become so angry. Heck, I am not angry at all.
> > I just do not feel comfortable selling it, as I will not be able to say its
> a
> > nonsmokers unit.

> > I do not know how to otherwise explain it.
> > I do not know why you are angry with me. Just swap me out.
> > I need an AT50. I WANT an AT50.
> > What else can I say?
> > The fact that my wife has more a problem with it then me, is irrelevant.
The
> > Darn smell, though not strongly of cigarettes.
> > Why does this have to be such a big deal?
> > Jeff
>
> ------------
>
> Subj: Re: AT50
> Date: 10/20/2000 10:07:09 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> The swap is an IF....if I get the other one...Ill let you
> know.....Meanwhile you try to sell it...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > You tell me how you want to do the swap.
> > Jeff
> Subj: Re: AT50
> Date: 10/20/2000 8:56:28 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> --------------------
> Remeber this?
> << previous in search ï¿½ next in search >>
>
> I have an AT50 auto tuner for sale. I just bought it used, it works a looks
> great.
> I have no need for it. I now have an HS1500 screwdriver and have no need
> for it.
> $250.00 plus shipping
>
> ------
>
> ubj: Re: AT50
> Date: 10/20/2000 8:46:03 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>

> Jeff, just put it on the internet for sale for $250, sell and I will take
> care of
> any difference you have to cut for the so called smell, OK...no use making a
> federal case of...my tempers pretty short but its not your fault...You will
> go on
> my list as "anal retentive' but I have lots of those and once I know , I know
> to
> "check closer"....if the other one comes thru in the meantime...WE WILL
> SWAP!!...I still dont think you "want the tuner"..If this is not
satisfactory,
> then refer to my previous message OR call my company at 1 800 888 3999.. and
> when
> you get to option #7...press that number...you should do that anyway...you
can
> always use an option #7....73 Murray
>
> --------
> ubj: Re: AT50
> Date: 10/20/2000 8:46:03 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Jeff, just put it on the internet for sale for $250, sell and I will take
> care of
> any difference you have to cut for the so called smell, OK...no use making a
> federal case of...my tempers pretty short but its not your fault...You will
> go on
> my list as "anal retentive' but I have lots of those and once I know , I know
> to
> "check closer"....if the other one comes thru in the meantime...WE WILL
> SWAP!!...I still dont think you "want the tuner"..If this is not
satisfactory,
> then refer to my previous message OR call my company at 1 800 888 3999.. and
> when
> you get to option #7...press that number...you should do that anyway...you
can
> always use an option #7....73 Murray
>
> --------
> Subj: Re: AT50
> Date: 10/20/2000 8:33:40 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Well Jeff, that does it...I just bought a TS50 and AT 50 with good
intenetions
> but YOU Threatened me so Im gonna show what that will do for you...I think
> youre

> a whiner and pickly little asshole, but i was trying to help...HELP
> YOURSELF>>>
> BUt speak bad of me on the internet, and I will retaliate 10 times...I sent
> you
> a great tuner...I know it was clean as a pin, Icouldnt smell anything, first
> you
> blame it on your wife, now you say its YOU....WHats the real story guy...???
> IF
> you wanna cool your little whimpering jets for a few days, Ill try to get
this
> other one and trade...but at this point Im not so inclined.......For all I
> know ,
> your wife smokes cigars and blew em in the tuner....Id have known if it was
> BAD,
> and I have ,in two weeks ,cleaned two amps that WERE BAD, to the point that
MY
> wife cant smell em...or me either, you know....I quit singing after 35 years
> cause of smoke...dont tell me about it. Press this, and youll be very
> sorry...no
> threat...just a promise...buck up , you whined for a better price, you
> hurried,
> . and you were stupid to buy a tuner anyway...you just want me to take it
back
> cause youve found out you dont need...I can make that case too...so go for
> it. Im
> in the mood!!
>
> RadioFreq0@aol.com wrote:
>
> > No, Murray I really do not know what you mean.
> > I have not been able to use the AT50 Its been in the garage in the plastic
> > bag, as you told me to do. Ive done more then anyone would when there was a
> > promise made. You told me it a nonsmokers, it may not have been, but you
> > rapped it in smelly plastic, or the person you got it from, just did a good
> > job of cleaning it up, and you must have an allergy or something as because
> > it was not that bad. I just have no tolerance for the smell.
> > I will sell it on the web, and say why. I will say it smells of cigarette
> > smoke even though Murray said it was from a nonsmoker. Ive bent over
> backward
> > hoping this would be OK.
> > At this point I think you are not a man of your word. And have no problem
> > making my case, or substantiating it.
> > Your loss.
> > Jeff
>
> ------
>
> Subj: Re: AT50
> Date: 10/20/2000 7:26:12 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)

> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Put it on the net and sell it Jeff, thats just a little tooooo long to
> wait.
> and I sold it to you cheap enuff to advance anyway... there is one
> possibilty,
> Im try to trade for a TS 50 at 50 pkg...will be happy to swap em out...sorry
> but
> I just cant imagine.....know what I mean? Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > Well, Ive had the AT50 in a plastic bag now for weeks, Ive tried everything
> I
> > know to get that odor to leave.
> > While it is better, and not strong, it is present and does cause a problem
> > Can you find another buyer who wont notice it?
> > Can you find another mint AT50 to replace this one?
> > I really do need it for my TS50.
> > Thanks,
> > Jeff
>
> Subj: Re: FS: AT50 autotuner (Kenwood)
> Date: 10/4/2000 10:44:32 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Coooooool!!! I m goin to fest this weekend, if I find a want for at 50 we
> will 'off it"...CUL Murray
>
> RadioFreq0@aol.com wrote:
>
> > Its in a big baggy w/ the dryer sheets in the garage. think it will be just
> > fine
> > Thanks
> > Jeff
> >
>
> -------
> Subj: Re: FS: AT50 autotuner (Kenwood)
> Date: 10/4/2000 10:40:35 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> I must be missing something.....yes? M
>

> RadioFreq0@aol.com wrote:
>
> > Its in a b
>
> Subj: Re: FS: AT50 autotuner (Kenwood)
> Date: 10/4/2000 10:33:51 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: radiofreq0@aol.com (RadioFreq0)
>
> I just went back thru correspondence...im assuming , OH I
> remmeber...gigged you on the AT 50....Dont take me to seriously, that
> was just jab!! How does it smell now? M
>
> RadioFreq0 wrote:
>
> > Wrong.
>
> Subj: Re: FS: AT50 autotuner (Kenwood)
> Date: 10/4/2000 10:30:07 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: radiofreq0@aol.com (RadioFreq0)
>
> WHat does that mean....spit it out..... Jeff? M
>
> RadioFreq0 wrote:
>
> > Wrong.
>
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/29/2000 9:03:35 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> --------------------
> Could be, I really did "smell the radio" to check...but somedays , with my
> sinus'
> that could be inaccurate...also put the radio in a plastic back with a few
> more
> sheets or FABREEZE on a washrag, ive cured them easily with those deals as
> long as it wasnt "greasy " with nicotene hi hi...
> eBay Buying and Selling Tools <<this is the page that tells you about the
> mediation service....Ive been there once on a a buy that was totally "wrong"
> and
> the fellow didnt agree...and didnt go along with the mediation either so was
> kicked off Ebay...dont think ours would go that far..if you try and can get
it
> smelling good...I will try to do something...73 Murray

> RadioFreq0@aol.com wrote:
>
> > Murray,
> > Let me try your suggestion about the fabric softener sheet.
> > Its not a bad smell at all, just egnouph to cause a problem.
> > Lets see if it works.
> > Ill let you know.
> > By the way, who is the mediation outfit, how are they contacted? Oh yes, It
> > seems the packaging you used may have been contaminated with the smell. I
> say
> > this because I was reusing it, and I notice just one piece of the air
bubble
> > sheets smelled. The others did not.
> > It may have been contaminated from another radio.
> >
> > Jeff
>
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/29/2000 7:15:11 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> PS...I will be glad to swap if I come across one , and its a good
> possibilty...I
> buy and sell them regularly but mostly just the radios....dont find many
> experieced mobileers who use auto tuners...73...let me know your thinking, I
> dont
> want and hard feelings.... Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > Just thought I would let you know Ive got the AT50 up for sale.
> > Aside from my having a High Sierra screwdriver, it definitely smells as if
> it
> > was owned by a smoker. It smell as if was cleaned up well.
> > My wife got in from out of town and noticed it right away. Ive got a bad
> cold
> > so it was not noticeable to me. I had it in the garage for several days,
> > thinking maybe it was the cleaning fluid or something you or the previous
> > owner used.
> > I asked you if was exposed to a smoker, you said you did not believe it
was.
> > If you get another one in, that absolutely did not get exposed to cigarette
> > smoke and looks as good, Ill swap you.
> > Anyway, I must get rid of it.
> > Do you offer any kind of satisfaction guarantee?
> > I really do want to have an AT50, so I would like to swap for another one.
> > thanks

> > Jeff
> >
>
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/29/2000 7:12:02 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Jeff, as best Icould tell it didnt smell and Im pretty particular too....I do
> know how to clean it up to impossible to tell if you are interested...put a
> fabric softener sheet in side it for four or five days......I went back and
> looked at our converstions and in fact said it didnt appear or seem to me
> that it
> had been smoked...and that is true, I see nowhere that I gauranteed it had
not
> been smoked around..I know that could be considered weaseling out but Ive
been
> doing this a long time and dont weasel as any will tell you. If you feel that
> you
> have been duped, lets go to the mediation service and let them solve it. I
> dont
> feel I should be required to do anything, it works and looks good...but I
dont
> have ANY unhappy customers and dont want any....if you feel something should
> be
> done, I will give you the email for the company which mediates ebay and
> newsgroup dis agreements, and we will go from there with whatever they say.
> Just let me know what you wish to do. OR before anything else gets
> started...short of taking it back which I dont think will happen, what do
you
> feel should be done? Thanks 73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > Just thought I would let you know Ive got the AT50 up for sale.
> > Aside from my having a High Sierra screwdriver, it definitely smells as if
> it
> > was owned by a smoker. It smell as if was cleaned up well.
> > My wife got in from out of town and noticed it right away. Ive got a bad
> cold
> > so it was not noticeable to me. I had it in the garage for several days,
> > thinking maybe it was the cleaning fluid or something you or the previous
> > owner used.
> > I asked you if was exposed to a smoker, you said you did not believe it
was.
> > If you get another one in, that absolutely did not get exposed to cigarette
> > smoke and looks as good, Ill swap you.
> > Anyway, I must get rid of it.

> > Do you offer any kind of satisfaction guarantee?
> > I really do want to have an AT50, so I would like to swap for another one.
> > thanks
> > Jeff
> >
> >
> Subj: Re: Mobile use of AT50 w/TS50
> Date: 9/20/2000 9:36:23 AM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: radiofreq0@aol.com (RadioFreq0)
>
> HI Jeff, saw your question so I thought Id add to the info....it works great
> with
> a hamstick "FOR the individual band" to give you more frequency
> coverage...using it
> with any fixed antenna other than a long wire, will probably un acceptable,
at
> least that was my experience with the ICom tuners....I use 706 and tuner to
> work
> ALL of 40 and 80 meters as well as 17...but use a hamstick tuned in the
> middle of
> the band for each band. JUst thought Id drop that on ya...I love hamsticks
> and
> it does give them much more coverage but you do have to switch antennas...no
> much
> trouble with quik disconnects though....A screwdriver pretty much eliminate
> the
> need for tuner BUT they shift and drift enough that a tuner is handy...I
> broke so
> many screwdrivers and bug catcher that I now just use a ham stick...gonna try
> that
> expesive OUT BACKER when I find a good used one...73 I will look for
> something to
> hang it with today in my "backroom hobby shack" . CUL Murray
>
> RadioFreq0 wrote:
>
> > Any of you using an AT50 with a TS50 in a mobile setup? How are you
> configuring
> > it and with what type antenna?
> > Can I put my AT50 in the trunk? Is it a waist to use a 20 mtr hamstick for
> > multiband ops?
> > Aside from using a screwdriver, what can I do with the AT50 in my mobile?
> Or is
> > it really for base/portable ops?
> > tnx,
> > Jeff
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/19/2000 11:20:38 PM Eastern Daylight Time

> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> IF you will look in the manual, I think you will see, that is not so...I
didnt
> really know either way, but thats how I got it "as complete" and the manual
> said nothing about it that I can recall, nor does my ad...I know I dont have
> one, but dont mind trying to find one, I have lots of lite weight mounts
> (unknown varieties) lying around, measure side to side for me and let me see
> if
> I can find something that looks good and may work. OK? Thanks Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > I was under the impression the AT50 came with a mobile mount. This one has
> > the mobile mounting bracket bolts screwed into it, but not mounting bracket
> > itself.
> > Might you have it laying. around, or one from another?
> > I believe its the same as comes with the TS50.
> > tnx
> > Jeff
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/17/2000 11:43:07 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Got the money Jeff, thanks a bunch...enjoy...Murray
>
> RadioFreq0@aol.com wrote:
>
> > OK,
> > Ship it.
> > MO out in the morning.
> > Let me know the tracking #
> > Thanks,
> > Jeff
> >
> > Ship to me at:
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/17/2000 4:57:23 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Got the money Jeff, thanks....let me know when you get the tuner...73
> Murray
>

> RadioFreq0@aol.com wrote:
>
> > Thanks.
> > You should receive your MO tomorrow or certainly Friday.
> > Let me know when it is received
> > Jeff
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/13/2000 9:48:47 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> Tuner out today UPS # 1Z 752 X71 03 1336 105 8...ready to work on your
> TS 50 , worked fine on mine to day!!! Enjoy, I think you should be
> happy..73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > OK,
> > Ship it.
> > MO out in the morning.
> > Let me know the tracking #
> > Thanks,
> > Jeff
> >
> > Ship to me at:
> >
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/12/2000 5:03:35 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranchNOSPAM@qth.com>
> To: RadioFreq0@aol.com
>
> Ill ship it tomorrow no sweat, Id forgotten I said that...will get i right
> out...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > In a message dated 9/10/2000 10:29:07 PM Eastern Daylight Time,
> > RadioRanch@qth.com writes:
> >
> > > No smoke that I can tell...credit card thru paypal is fine, all cables
> > > necessary
> > > are with it!! OK? IF you want to pay with Ccard go to www.paypal.com,
> > > sign up
> > > and give em your card # I think(not sure) you can do it all at once, but
> > may
> > > be
> > > wrong..OK??.73 murray ps if you are just in a hurry, send me the money
> > > order and

> > > give me your address now, Ill ship tomorrow...no sweat...M
> >
> > Murray,
> > As I anticipated your shipping the at50 out as soon as i let you know i
sent
> > out the MO,(per your words) would you please ship the at50 1st or 2nd day,
> > upon the receipt of the MO. I would really like to have it by the weekend
or
> > at least the first of next week if possible.
> > I am in a rush :-)
> > thanks Murray,
> > Jeff
> > >
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/12/2000 4:52:05 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranchNOSPAM@qth.com>
> To: RadioFreq0@aol.com
>
> I will ship when it arrives and let you know...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > The USPS MO for $225.00 is on its way Priority Mail. (return receipt)
> > You should have it in 2 or 3 days) maybe less)
> > Let me know when you ship the AT50, include the tracking #]
> > Thanks
> > Jeff
>
> -----Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/11/2000 6:33:56 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranchNOSPAM@qth.com>
> To: RadioFreq0@aol.com
>
> Looks fine serial # is 50200596 Let me know if its on...have a nother
> request for it now...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > OK, email me the info and Ill send you the MO
> > Thanks, Jeff
> ubj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/11/2000 1:46:17 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranchNOSPAM@qth.com>
> To: RadioFreq0@aol.com
>
> Tried it this morning at the shop....works fine...its at the shop and Im

> not!! dont know serial number as I recall it was a 1995 unit...will check
> tonite if I get back...73 murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > Before I put the MO in the mail to you, please give me serial # and also
> > confirm with me that you have tested the AT50, and its 100% OK, both
> > operationally and cosmetically.
> > Thanks, Jeff
> Subj: Re: WTB:Kenwood AT50 (matches TS50)
> Date: 9/10/2000 10:29:07 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranchNOSPAM@qth.com>
> To: RadioFreq0@aol.com
>
> No smoke that i can tell...credit card thru paypal is fine, all cables
> necessary
> are with it!! OK? IF you want to pay with Ccard go to www.paypal.com, sign
> up
> and give em your card # I think(not sure) you can do it all at once, but may
> be
> wrong..OK??.73 murray ps if you are just in a hurry, send me the money order
> and
> give me your address now, Ill ship tomorrow...no sweat...M
>
> RadioFreq0@aol.com wrote:
>
> > Sounds good,
> > Oh, just want to make sure it comes with the appropriate cables, etc., to
>

1124. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:18:41 UTC
From: fractenna@aol.com
Message-ID: <20001026081841.28337.00000990@ng-mg1.aol.com>
Source record: 177620

>
>>VE9SRB wrote:
>>>
>>> Although there is no dispute that the MI2 Fractal Loop performs or works
>as
>>> claimed and offers this performance in a reduced aperture, it is evident
>>> that the Fractal nature of the antenna geometry is not the significant
>>> factor in determining the antenna's performance. To verify this, an
>EZNEC
>>> model of the MI2 antenna was created as a method to determine the baseline
>>> performance of the MI2. The baseline MI2 performance at first resonance
>is
>>> as follows:
>>>
>>> Fr = 15.155 MHz
>>> Resistance = 28.4 ohms
>>> Gain = 1.83 dBi
>>> 2:1 SWR bandwidth wrt 50 ohms = 1.05%
>>>
>>> These results are very consistent with the claimed performance of the
>>> antenna as presented by the MI2 antenna designer.
>>>
>>> About a month ago, several arbitrarily shaped antennas were designed
>(about
>>> 5-10 minutes of effort in each case) occupying the same physical aperture
>>as
>>> the MI2. These antennas performed as well as and in some cases, better
>>than
>>> the MI2. The EZNEC files and results for these antennas can be found at
>>> www.eznec.com under the FTP site.
>>>
>>> To further prove that the Fractal geometry is not the significant factor
>is
>>> achieving performance, yet another arbitrarily shaped design was created
>>and
>>> modeled in EZNEC. This antenna has a slightly smaller aperture size and
>>> shorter total wire length than the MI2. It is not a "meander" design (as
>>> defined by the MI2 designer) like two of the previous antennas that were
>>> subsequently dismissed by the designer of the MI2 antenna as not being
>able
>>> to work. This new design is simply an arbitrary, yet symmetrical,
>>> rearrangement of wire shape in the same aperture. This new design took
>>> about 6.7 minutes to create. Performance of the new design at first
>>> resonance is as follows:

>>>
>>> Fr = 16.06 MHz
>>> Resistance = 32.8 ohms
>>> Gain = 1.91 dBi
>>> 2:1 SWR bandwidth wrt 50 ohms = 1.62%
>>>
>>> Clearly, if a simple rearrangement of the wire into a non-fractal shape
>can
>>> result in similar or better performance, the Fractal geometry is not the
>>> significant factor in determining antenna performance. Although the
>>antenna
>>> geometry will impact antenna performance, factors such as feed point
>>> location, total wire length, and aperture size are as and in many cases,
>>> more significant than the geometry itself. Models of this new antenna can
>>> be found at www.eznec.com in the FTP site (MI2 Folder) under the name of
>>> random4.ez.
>>>
>>> Steve, VE9SRB
>>
>>
>> Well, Friends, there we have it...from certainly a competent enough
>>source to qualify as accurate. The Word is out, and it is unambiguous.
>>
>> As anticipated, Fracky has stonewalled, stewed and threatened clearly
>>with the sole purpose of making and keeping hazy the boring and deeply
>>mundane details of his "invention" - which turns out to be no invention
>>whatever and at all! Are we surprised? Not much!!!!
>>
>> So now sue away, Freakenstein!
>>>
>>> "You always get back what you give"
>>
>>
>>
>>
>>
>>
>>
>
>The word is indeed out:
>
>A FRACTAL LOOP PROVIDES THE SUPERIOR FOM.
>
>As I said, a manuscript will be submitted before Jan 1.
>
>So where is Mr. best's manuscript?
>
>There won't be any .
>
>NC
>

>
>
>
>
>

1125. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:57:05 UTC
From: Al <ABurzynski@swri.edu>
Message-ID: <svgah2biamlm28@corp.supernews.com>
Source record: 177621

> Are you aware that the IC-745 uP program is stored in dynamic
> RAM and if the battery runs down the transceiver stops working?
> http://www.mindspring.com/~w6rca

The picture of W6RCA and daughters is cool, but I did not find info about the Icom. Could you please be more specific as to the battery information. I too have a 745 and it is starting to jump frequency on me (about 3 kHz up for about 30 seconds, then back again). Perhaps the problem is the battery you are referring to.

Thank you.
Al

1126. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:59:38 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8051E84CC@www.indianarep.com>
Source record: 177623

This is a reference to the TV show starring Dianne Carroll (surely I spelled that wrong), about the only notable thing relative to it, is that it was the first network series that starred a black female.

<KB9WFK@mindspring.com> wrote in message
news:39F683CF.C0AD9BCA@mindspring.com...
> > ...
> >
> > The revolution will not be brought to you by the
> > Schaefer Award Theatre and will not star Natalie
> > Woods and Steve McQueen
>
> O.K. I know of those two.
>
> > or Bullwinkle
>
> I know who he is.
>
> > and Julia.
>
> But who the HE## is Julia? :)
>

1127. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 12:59:44 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <8t99sf$m9r6t$1@ID-52642.news.dfncis.de>
Source record: 177622

Uhhh...he seems to be talking about the 60 Khz wwvb signal, not wwv on 2.5,
5, 10 Mhz.

Totally different ballgame.
Bob Miller <bamiller@texas.net> wrote in message
news:9RX4OXHStrrr5XOMTyoP=u+vWU6k@4ax.com...
> "Mike Camp" <mikerobin@home.com> wrote:
>
> >Hello-
> >
> >I have a couple of these things, but both have trouble reliably locking
into
> >the signal, maybe once every 3-5 days at best. I am located near San
> >Francisco, CA., a hundred feet above sea level.
> >
> >Can I get your thoughts about enhancing the antenna/signal level? I
don't
> >have bad noise here that I am aware of.
> >
> >Maybe a Fractal for 60 KHz?
> >
> >Thanks
> >73 Mike Camp KI7FQ
> >
>
> They broadcast on 5, 10, 15 and 20 Mhz. You should be able to pick up
> something. I have a cheapo Radio Shack wwv receiver that picks up wwv
> in Ft. Collins just fine with a pullup whip antenna. You should be
> getting either Ft. Collins or the Hawaii version of wwv unless you're
> listening on something really wretched, altho' I can't thing of
> anything more wretched than these little RShack gizmos, and they do
> just fine :-)
>
> Bob
> k5qwg
>

1128. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 13:06:41 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F82C61.4CDEA01@bigfoot.com>
Source record: 177624

Reg Edwards wrote:
>
> CAM wrote -
> > My IC-706 outputs maximum power into 50 ohms. Its power
> output
> > falls off on each side of 50 ohms.
> ======================
> Left and right ? What about above and below ?

Reg, You must be asleep (horizontal) while I'm still wide
awake and vertical.
--
http://www.mindspring.com/~w6rca

1129. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 13:16:28 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F82EAC.AF1022B0@bigfoot.com>
Source record: 177625

Al wrote:
> I
> too have a 745 and it is starting to jump frequency on me (about 3 kHz up
> for about 30 seconds, then back again). Perhaps the problem is the battery
> you are referring to.

Hi Al, the battery needs to be replaced every 5-10 years. Sorry, I
sold my 745 and don't have the manuals anymore so that's about all
I remember.

Your problem doesn't sound like a battery problem to me. It sounds
like the PLL is coming unlocked every so often and the problem
will probably gradually get worse. I had a similiar problem with
my 725 which was fixed by readjusting the lock range on the PLL.
--
http://www.mindspring.com/~w6rca

1130. Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:05:20 UTC
From: Scott <yetbbwa@grove.iup.edu>
Message-ID: <39F83A20.F6E6BE9D@grove.iup.edu>
Source record: 177626
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

No, my new vehicle isn't possessed!

I wanted to up the power in my HF Mobil setup in my truck. Is there any danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I have heard some bad things about running power in newer vehicles - does anyone have any insight/advice? I would being using 40 meters on up. Any bands cause more problems than others?

Scott.

1131. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:08:31 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <zVWJ5.1853$5b4.107190@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177627

"Fractenna" <fractenna@aol.com> wrote in message
news:20001026081624.28289.00001058@ng-mg1.aol.com...
>
> The word is indeed out:
>
> A FRACTAL LOOP PROVIDES THE SUPERIOR FOM.
>
> As I said, a manuscript will be submitted before Jan 1.
>
> So where is Mr. best's manuscript?
>
> There won't be any .
>
> NC

Not seeing any posts last night and early this morning, I expected this would all just fade away.

Does anybody recall this statement by NC:

>
>> What Mr. Best has done is produced a end-loaded meander model which,
>> unfortunately, does not work in practice as the model suggests--this
>because
>> NEC4 is incapable of modeling close-spaced meanders of small size and
very
>> close spacing.
>>

NC's talking about the random2 and random3 designs that were posted by Roy. He clearly claims that my design will "not work in practice".

Well, for the record, I constructed the MI2 loop, one of my arbitrary loop designs (random4) and one of the meander line designs (random3). I chose an aperture size for the MI2 loop such that I expected it to resonate at 300 MHz. It actually resonated at about 298 MHz. The resonance of the random4 design was at about 301 MHz. Anyway, the random4 design had a higher resonant resistance than the MI2 by about 20% (no numbers will be posted here) which is consistent with the EZNEC model predictions. Looking at the random3 meander line loop (the "not work in practice" design), it resonated at about 350 MHz rather than near 300 MHz. Resonant frequency of the meander design may be tough to model as it is a sensitive parameter. Change the wire diameter in any of the modeled antennas and resonant frequency shifts consierably. What was really interesting, however, is that the meander line resonant resistance was about 50% higher than that of the MI2 as EZNEC predicted. All antennas have current and voltage max's where the

model's predicted and radiated quite well.

As for "Mr. Best's manuscript", it's in preparation for a conference submittal deadline of November 17th.

Steve, VE9SRB

1132. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:10:51 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <5legvsko2udf7vfschehis8lcp5mlqans5@4ax.com>
Source record: 177628

A dipole is very easy to make and put up, especially for 10 and 20
meters. You can use two, fed with the same coax, one for each band.
Something to think about is the new regs regarding RF exposure when
using antennas inside the house. Do some calculations to see if you
are OK. An antenna in the hallway would be especially bad, unless you
are running very low power.

Dick Hughes - W6CCD

On 26 Oct 2000 11:26:48 GMT, kg4fet@aol.combadspam (KG4FET) wrote:

>>I live in a condominium that has all the usual rules against antennas,
>>color of curtains, pet....etc. I am trying to figure out what kind of
>>antenna I could put in my attic that might work ok on the 10-20 meter
>>bands. I currently have a vacant unit next door to me that was just
>>sold, so I figure this would be a good time to sneak around up in the
>>attic without anyone hearing me up there. I do have one of
>>those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
>>search) in the hallway and can't get it tuned up to transmit. I am
>>thinking of maybe putting that up in the attic or maybe just a normal
>>dipole up there. I am estimating that I have about 50 or 60 feet of
>>room that I can play with up there. The attic is pretty short, only
>>about 30 inches tall at the peak of the roof.
>>
>>I do have a QFH antanne up there right now for receving the NOAA
>>satellite images on 137mhz and have had great results from that, so I
>>know an antenna is possible up there.
>>
>>Any ideas from any of you condo dwellers?
>>
>>Tom KA7VIK
>>Seattle
>>
>
>Tom,
>I would try this link (http://www.nerc.com/~jdegood/coaxtrap).
>There is a traped dipole with an over all length of less the 60 ft to work
>80-10 mtrs. It can be shortend and has the specs there to drop bands you dont
>want or need. I have not tried it but the idea is sound.
>73 de KG4FET Sandor

1133. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:19:54 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <cuegvskklhm4t8klkibebdkbe75fs980h6@4ax.com>
Source record: 177629

Take a look at http://www.ameritech.net/users/willco788/my1.htm . They
make a replacement memory board for your radio that, besides not
losing data for the CPU (it will lose memories you have programmed in)
when the battery goes dead, it gives you up to 1,024 memories. It is
a little pricey at $135, but if you don't want to spend that kind of
money, I think they will also program your card for less than Icom
wants. Icom may no longer even do it. BTW, I put one of the Willco
boards in my IC-745 and it works great.

Dick Hughes - W6CCD
Remove 33 from address

On Thu, 26 Oct 2000 07:57:05 -0500, "Al" <ABurzynski@swri.edu> wrote:

>
>> Are you aware that the IC-745 uP program is stored in dynamic
>> RAM and if the battery runs down the transceiver stops working?
>> http://www.mindspring.com/~w6rca
>
>The picture of W6RCA and daughters is cool, but I did not find info about
>the Icom. Could you please be more specific as to the battery information. I
>too have a 745 and it is starting to jump frequency on me (about 3 kHz up
>for about 30 seconds, then back again). Perhaps the problem is the battery
>you are referring to.
>
>Thank you.
>Al
>

1134. Re: If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:20:47 UTC
From: richardharrison@webtv.net
Message-ID: <7101-39F83DBF-20@storefull-111.iap.bryant.webtv.net>
Source record: 177631

David J. Windisch wrote:
"---is a phalic symbol. What is the Pentagon?"

One point shy of a sextagon.

Best regards, Richard Harrison, KB5WZI

1135. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:25:10 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F83EC6.CF28B763@bigfoot.com>
Source record: 177630
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Scott wrote:
> I wanted to up the power in my HF Mobil setup in my truck. Is there any
> danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I
> have heard some bad things about running power in newer vehicles - does
> anyone have any insight/advice? I would being using 40 meters on up. Any
> bands cause more problems than others?

I've got a GMC1500. When I tune my HS1600 on 40m, the speedometer
goes full scale past 100 mph. This is with only 100w and a rear
bumper mount. Only seems to happen on 40m. I haven't gotten my
SGC-500 installed yet but I plan to avoid 40m with 500w.
--
http://www.mindspring.com/~w6rca

1136. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 14:53:33 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <NzXJ5.4818$n26.45832@news1.onlynews.com>
Source record: 177632

> >I have a couple of these things, but both have trouble reliably locking
into
> >the signal, maybe once every 3-5 days at best. I am located near San
> >Francisco, CA., a hundred feet above sea level.
> >
> >Can I get your thoughts about enhancing the antenna/signal level? I
don't
> >have bad noise here that I am aware of.

I receive WWVB very reliably here in the mountains of western North Carolina, but found that selectivity is the key. I use a tuned 100 turn loop on a 24 inch bicycle wheel, a design I found here on the Internet. That feeds a balanced pair of 40 dB gain instrumentation amplifiers made up from LM833 op-amps and results in a very high level of signal strength from the loop. (WWVB is about -70 dBm out of the amplifiers) The tuned loop is hung from a nail in a basement workshop, not a very good location.

I had quite a bit of trouble with that arrangement feeding a TRF receiver while feeding a HP-312 selective voltmeter was a piece of cake. After quite a bit of investigation, I found that the computer monitor in the hamshack 2 floors removed was putting in a +10 dBm signal on 58.5 KHz out of the loop amplifier, this despite a good bit of selectivity in the tuned loop itself. Since the frequency conversion of the 312 did me in trying to use the signal to a comparator, the only way I could get the TRF to lock up was with a sharp filter at 60 KHz proper. It no longer matters what's on or off at my home, or my neighbors for that matter, I can maintain lock 24 hours a day now although the grayline makes it unuseable for a few hours each day.

Good luck

W4ZCB

1137. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:19:19 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <39F84B60.B5DE9598@sccoast.net>
Source record: 177633

RadioFreq0 (Jeff) wrote:
>
> All,
> Please read this thread and tell
> me who has a problem with whom.
> This guy has made it impossible
> for me to buy anything on the
> web, I've had to stop buying,
> as my wife and children have
> come to the conclusion that its
> too much a gamble.

Sorry, Jeff, but I have to agree with Murry on this one. It looks to me like he made every reasonable effort to work with you where he could (a refund, a trade for another unit if he could find one, mediation, etc.). In reality, I think you're being a little absurd to have such high requirements on a used item (never owned by a smoker??). If you want something like that, then you should buy new since it is almost impossible to know the entire history of every used item a person might come across.

At this point, I think you should apologize to Murry, send the unit back to him (assuming you've not messed it up), and get a refund. That is assuming that he is even willing to continue dealing with you (at this point, I would probably tell you where to go and walk away - no refund, no nothing).

You posted a message in this newsgroup asking for opinions and I gave that opinion. And with that I'm out of this. I have no desire to argue with you, or get in the middle of a dispute between to two of you.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1138. Re: AM Rod Antenna??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:28:05 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39F84D85.C37F1ECC@wb6hqk.ampr.org>
Source record: 177634

Richard Harrison wrote:
>
> Bart, WB6HQK wrote:
> "In the end the monopole wins by between 10 and 20 dB as long as there
> is negligible capacitance between the base of the monopole and ground."
>
> Why then does the ferrite loop stick seem to work so well by comparison
> with a few feet of wire?

My experience is that either work well and deliver comparable signal to noise ratios on MF as long as they well engineered.

> Bart may not have included the enormous loss in coupling an antenna so
> short in terms of wavelength. All signal transfer schemes will prove
> very lossy in the usual receiver. The monopole will be a high capacitive
> reactance in series with a tiny radiation resistance. Not easy to couple
> efficiently into a receiver.

The losses were taken into account by considering the loaded Q of the tuned circuit which includes the antenna. I assumed the objective was to deliver the largest possible signal voltage to a high impedance, voltage noise limited, amplifying device. Typically this would be the objective for a MF broadcast receiver.

The primary objective of a receiving system is to provide an adequate demodulated signal to noise ratio to the user. The maximum signal to noise ratio is not necessarily achieved by delivering the maximum power from the antenna to the first amplifying device. Optimization of signal to noise ratio is a complex topic involving a number of practical tradeoffs.

bart
wb6hqk

1139. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:44:38 UTC
From: "Louis A. Bellock" <lbellock@hoflink.com>
Message-ID: <8t9jdi01rsu@enews3.newsguy.com>
Source record: 177640

Hi Tom, My reply to your email was bounced back, here's my general reply to the group. I thought all in the group could be helped by this advice.

Regards, Lou N2JPR

Hello Tom,

My name is Lou, callsign N2JPR. Unfortunately, I had the same situation twice in my life, a condo and an upstairs apartment, both with attics. My nightmare has been over for years. My advice is as follows:

1. The only, and ultimate, solution is to permenantly move to your own house on a minimum 1/2 acre wooded plot. There, you can play "antenna" and put out KW level signals until your hearts content without bothering neighbors, etc.

2. If you choose to mount "anything" in this attic, it will definitely interfere with all the usual electronic junk (cordless and hardwired phones, digital appliances [TVs, VCRs, Stereos, etc.] alarms [including smoke], etc., etc.) at anything greater than 10 watts. Your neighbors (or in some cases, your WIFE) WILL find you out and at the very least report you to the condo association who will threaten to evict you (DIVORCE in some cases) if you don't stay off the air. If you now become a QRP'r at 5 watts or less you should have no problem interfering with others at those close antenna-electronic junk distances.

3. Now comes the NEW problem. Your attic antenna, compared to a REAL outdoor antenna (dipole, beam, vertical, etc.) really SUCKS. So, between your inefficient antenna system and your 5 watts of power, your destined to become one of 2 things:

a. A super-frustrated ham operator, in good standing with your condo association (in some cases WIFE) with no signal, no QSOs and no QSL cards (DX will soon become a fantasy).

b. A very happy shortwave listener until the day you bite the bullet and buy your own piece of land.

Two-cents from a happy ham, now on solid ground with antennae and signals galore.

73, Lou N2JPR

----- Original Message -----
From: <tegwilym@my-deja.com>
Newsgroups: rec.radio.amateur.antenna
Sent: Wednesday, October 25, 2000 12:43 PM

Subject: HF attic antenna adivice

> I live in a condominium that has all the usual rules against antennas,
> color of curtains, pet....etc. I am trying to figure out what kind of
> antenna I could put in my attic that might work ok on the 10-20 meter
> bands. I currently have a vacant unit next door to me that was just
> sold, so I figure this would be a good time to sneak around up in the
> attic without anyone hearing me up there. I do have one of
> those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
> search) in the hallway and can't get it tuned up to transmit. I am
> thinking of maybe putting that up in the attic or maybe just a normal
> dipole up there. I am estimating that I have about 50 or 60 feet of
> room that I can play with up there. The attic is pretty short, only
> about 30 inches tall at the peak of the roof.
>
> I do have a QFH antanne up there right now for receving the NOAA
> satellite images on 137mhz and have had great results from that, so I
> know an antenna is possible up there.
>
> Any ideas from any of you condo dwellers?
>
> Tom KA7VIK
> Seattle
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1140. Re: Law suit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:51:45 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F853CE.53E83163@bellatlantic.net>
Source record: 177636

Is Fractenna - aka Nathan Cohen, PHD - a suer or not?

W4JLE wrote:

> Day three of the wait for the Fractal finger of fate to arrive at my door
> with no joy...

1141. Phasing double quad antenna (23cm band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:55:01 UTC
From: Ash <ash@gravitywell.org>
Message-ID: <39F8542B.1DA7F119@gravitywell.org>
Source record: 177638
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hey,
looking at a design at
http://home.t-online.de/home/dl5neg/23cm_ant/23cm_ant.htm
I get the feeling something this compact would suite my needs great,
altough I would like
to stack 2 or even 4 of theese, so what would be the best way to do
this?
This is only for reception and not transmission, I would really like to
use 75ohm low-loss
coax witch I have alot of here, instead of expensive RG-8 or similar.
Any suggestions?

Regards
//Ash

1142. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 15:58:06 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F85471.B0F72054@dvol.com>
Source record: 177639

BillN6VLR wrote:

> I mostly
> work with 75 ohm CATV hardline and we use flooded cable. The flooding
> compund helps if you should happen to nick the jacket.

>
What is "flooding" and "flooding compound"?
>
Tnx,
>
w3rv

1143. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 16:51:56 UTC
From: user
Message-ID: <cbngvss0pa0dvveac8c5qdlu18r5r5asrg@4ax.com>
Source record: 177641

>I have a couple of these things, but both have trouble reliably locking into
>the signal, maybe once every 3-5 days at best. I am located near San
>Francisco, CA., a hundred feet above sea level.
>
>Can I get your thoughts about enhancing the antenna/signal level? I don't
>have bad noise here that I am aware of.
>
Just bought one of these at the local Sam's Club for $21.95 - mine
says it updates at 0055 Eastern standard- this will be 3 hours earlier
on the coast. If yours is the same, it should try every 3 hours if it
cannot find a signal. Perhaps a # 30 wire looped in the attic feeding
past the clock with a couple of turns looped in the rear of the clock
will supply more signal. Could be a fluorescent light or a dimmer
causing noise also. These use a loopstick antenna which may be in a
null. Try a 90 degree wall.
Wish I could find a way to set mine to UTC but it only recognizes
Eastern, Central, Mountain and Pacific with a daylight savings
selector.
--
Eddie Seymour,WB4MLE
Delete the capital letters:
wb4mleAT@mindspringDOT.com

1144. where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 16:54:20 UTC
From: Joseph Liggett <joe@codefab.com>
Message-ID: <8t9njs$2i3l$1@shot.codefab.com>
Source record: 177642

I need to get info on amplifying the signal for TDMA and CDMA. I work in a place that does not have good cel service and the service providers could care less. So I need to find a way to boost what little signal I get. *if possible*

J|C|L

1145. Re: HF attic antenna adivice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 17:12:13 UTC
From: tegwilym@my-deja.com
Message-ID: <8t9ol5pfg1@nnrp1.deja.com>
Source record: 177643

Thanks for the advice guys! I am thinking maybe the best thing to do (short of buying one of those Isoloop things) would be to build a dipole as long as possible and just run it through my tuner. I am also figuring that I should also keep the power fairly low since I am sure if I put out a full 100 watts, I'll be heard through all the neighbor's TVs, toasters, phones and causing ripples in their toilets! :-)

I'll check out those web pages some of you mentioned and see what I can figure out from there.

Tom KA7VIK

Sent via Deja.com http://www.deja.com/
Before you buy.

1146. Re: Wanted: Stationmaster shipping tube...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 17:16:11 UTC
From: tom_bruhns@agilent.com
Message-ID: <8t9osjpqc1@nnrp1.deja.com>
Source record: 177644

Failing someone coming forth with one, you might just get a length of
PVC or ABS pipe to use as a shipping tube. Neither is terribly
expensive, and can be outfitted with a screw-plug end.

Cheers,
Tom

In article <39F76616.350B4D12@bright.net>,
"Adam T. Cately" <atcately@bright.net> wrote:
> I need the shipping tube for a Stationmaster antenna - our club 2m
> repeater antenna went south, and we need to ship it back to it's maker
> to fix or replace. We did not keep the original. If anyone has one
> of these, and you are a few hours from the Toledo, OH area and would
> like to see me pick it up, this would be most cool. Thanks bunches.
>
> Please reply direct - the address is good.
>
> - Adam - KB8MDF - atcately@bright.net
> - atcately@midport.com
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

1147. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 17:59:34 UTC
From: sideband <sideband@cac.net>
Message-ID: <76sgvssva2qivos717mlq9j3nlmo15utgq@4ax.com>
Source record: 177645

On or about 25 Oct 2000 01:09:42 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:Please quote the relevant statements that led to this bogus conclusion. We
:would like to understand your train of thought.
:
:73
:Chip n1IR

"We"? you mean you and the other personalities in your MPD drenched
brain?

The rest of us understood what he meant... Now go lay down by your
bowl! Bad dog!

-SSB

1148. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 18:21:57 UTC
From: sideband <sideband@cac.net>
Message-ID: <r8tgvs45vej4ffj7fu57ss45g59kp7cj9d@4ax.com>
Source record: 177646

On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:This is rapidly becoming the #1 topic of the antenna community. You seem to
:feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS and
:HONORING THE INTELLECTUAL PROPERTY OF OTHERS.

No, that's Ethics, and the fact that you wouldn't know that simply
shows that you don't know what ethics are, or what ethical behavior
is...

:
:Why would I possibly care if you posted 1000 files with alledly better FOM's
:than the ham Mi2 file? Don't you think that I enjoy the challenge myself?? You
:have made a perversion of it by HELPING AND ENCOURAGING LEWALLEN TO BREAK THE
:LAW.
:
:Nathan Cohen, Ph.D.

From my understanding, if someone distributes a file to a group of
people, with no strings attached, no EULA, and no payment, it becomes
public domain.

Furthermore, it is my understanding that the file Roy is distributing
is not a copy of the one that Fracky distributed, but a separate work,
which wouldn't be covered under any existing or implied copyright.

Just my two cents.

-SSB

1149. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 18:23:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8t9slq$1df$1@plutonium.btinternet.com>
Source record: 177647

Dear J/C/L

First of all you have to say what TDMA and CDMA is or are or
were or are about to be.

Joseph Liggett <joe@codefab.com> wrote in message
news:8t9njs$2i3l$1@shot.codefab.com...
> I need to get info on amplifying the signal for TDMA and
CDMA. I work in a
> place that does not have good cel service and the service
providers could
> care less. So I need to find a way to boost what little
signal I get. *if
> possible*
>
> J|C|L
>
>

1150. HAMFEST October 29 Lindenhurst LI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 18:37:50 UTC
From: GSBARC <info@gsbarc.org>
Message-ID: <2S_J5.139036$4d.20584133@news02.optonline.net>
Source record: 177648
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

HAMFEST October 29, 2000 - Lindenhurst, LI

GREAT SOUTH BAY AMATEUR RADIO CLUB
ARRL APPROVED LONG ISLAND HAMFEST - October 29, 2000

LINDENHURST, LI - NY

On October 29, 2000 the Great South Bay Amateur Radio Club will again sponsor an indoor Hamfest-Computer Show. The location will be at the:

Knights of Columbus
400 South Broadway, Lindenhurst, NY.
This is an ARRL approved Hamfest.

There will be radio equipment, electronic components, computers and accessories, software, books, technical manuals, ARRL information, Amateur Radio License Exams, Door Prizes.

Advanced registration is $15.00 each table. Tables at the door are $20.00 each. Contact Walter Wenzel KA2RGI at 631 957-0218 for table reservations. NO TABLES WILL BE RESERVED WITHOUT PRIOR PAYMENT due to the space available.

General admission is $ 6.00. Wife's and children under 12 admitted with no charge.

VE - ARRL - 12:00 NOON at Babylon Town Hall, 200 E Sunrise Hwy, Lindenhurst. For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID),
and the examination fee, to the exam session. Current ARRL/VEC fee is $ 6.65,
exact change is appreciated.

Talk-in will be via GSBARC Repeater on 146.685 -600 136.5 PL.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 PM following the Newsline Report on the W2GSB repeater, 146.685 -600 136.5 PL required. You may also write to:

Great South Bay ARC
P.O. Box 1356
West Babylon, NY 11704

E-mail GSBARC info@gsbarc.org or visit GSBARC online at
http://www.gsbarc.org/hamfest.htm

Hamfest Schedule - March 4, 2001 - Great South Bay ARC and Suffolk County
Radio Club

73,
GSBARC

1151. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 18:48:22 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F87D1D.5184F95E@bellatlantic.net>
Source record: 177649

Like the other poster, I don't think your problem is the battery.
I don't know for sure.

However, since you asked, here's some info about the battery.

There is a small board inside the 745 that plugs in and is also held
in place by 1 screw, if memory serves me. The board is easily
accessible by removing the top cover, and easily identifiable by
the size, and the fact that it hosts a lithium coin cell.

That board contains the memory (RAM memory) of the stuff you
store *plus* the stuff ICOM stored in there - the "brains" of the
rig. The stuff ICOM stored allows your radio to work. I have heard
that if that "stuff" is wiped out (due to battery failure) the radio
becomes a vegatable. Ok - that board has a 3 V lithium coin cell
soldered on. It is that battery that needs to be replaced before it
runs down. The replacement procedure requires providing 3 volts
to the board while you are unsoldering the old battery and soldering
in the new one.

What I do (I've replaced the battery twice) after removing the board
from the rig is as follows:
1) solder a couple of wires to the board before removing the battery;
2) run those wires to a brand new 3 V lithium cell;
3) unsolder the old battery;
4) solder in a second brand new lithium cell;
5) unsolder the wires installed in setp 1;
6) reinstall the board.

You need 2 new lithium batteries, some wire and about
ten minutes from start to finish. The first time you do it,
take an hour and be 100% sure of each move before you
make it. You need to solder those wires to the board such
that you can remove the old battery and still keep 3 V going
to the board - selecting the places on the board where you
will add the wires is both an electrical (so you get the polarity
right) and mechanical (so you leave yourself plenty of room
to unsolder the old battery without disturbing the "life support"
attachement of those 2 wires) consideration.

Al wrote:

> > Are you aware that the IC-745 uP program is stored in dynamic
> > RAM and if the battery runs down the transceiver stops working?
> > http://www.mindspring.com/~w6rca
>

> The picture of W6RCA and daughters is cool, but I did not find info about
> the Icom. Could you please be more specific as to the battery information. I
> too have a 745 and it is starting to jump frequency on me (about 3 kHz up
> for about 30 seconds, then back again). Perhaps the problem is the battery
> you are referring to.
>
> Thank you.
> Al

1152. Re: HAMFEST October 29 Lindenhurst LI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 18:55:10 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <8t9udq$nj7$1@slb6.atl.mindspring.net>
Source record: 177650
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

And the doors open and close time is ??

GSBARC wrote in message <2S_J5.139036$4d.20584133@news02.optonline.net>...
>HAMFEST October 29, 2000 - Lindenhurst, LI
>
>GREAT SOUTH BAY AMATEUR RADIO CLUB
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>E-mail GSBARC info@gsbarc.org or visit GSBARC online at
>http://www.gsbarc.org/hamfest.htm
>
>Hamfest Schedule - March 4, 2001 - Great South Bay ARC and Suffolk County
>Radio Club
>
>73,
>GSBARC
>
>
>

1153. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 19:05:54 UTC
From: Joseph Liggett <joe@codefab.com>
Message-ID: <8t9vaj$2lhq$1@shot.codefab.com>
Source record: 177651

TDMA and CDMA are cellular standards
TDMA Time Division/Demand Multiple Access
CDMA Code Division Multiple Access

AT&T uses tdma for their cel service and bellatlantic/verizon and sprint use cdma.

basically I am suffering because my cel phone does not work at work, the place that I spend most of the day. Since the phone company could care less I have to find someway to boost or amplify their cdma/tdma signal.

thanks

J|C|L

1154. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 19:10:15 UTC
From: rwclark@seanet.com
Message-ID: <39fa7a60.74923874@news.seanet.com>
Source record: 177652

On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:

>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:This is rapidly becoming the #1 topic of the antenna community. You seem to
>:feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS and
>:HONORING THE INTELLECTUAL PROPERTY OF OTHERS.
>
>No, that's Ethics, and the fact that you wouldn't know that simply
>shows that you don't know what ethics are, or what ethical behavior
>is...

Hi OM,

Odd how one can claim TRUTH, and OBEYING LAWS after having made fraudulent statements about technical issues that were "protected" by a patent pending. In TRUTH they were not. The simple fact of the matter is that these fraudulent statements were made intentionally as the patent process is one of full disclosure and the applicant is never surprised by what is issued. There are exceptions for idiot savants I suppose.

The same source also insisted that their login/account name was a registered trademark that we all had to identify as such. The same source is also ignorant of the fact that the enumeration of data is not protected by copyright. Let's see, topics range through Trade Secret, Patent, Trade Mark, Copyright - and everyone of these issues has been distorted or so thoroughly confused as to diminish any sense of intelligence. It is not unusual that this source also recommends the services of a lawyer (and by all appearances has no such aid for themselves).

But as the ethics of this source are so prostituted to ego, such issues as TRUTH and OBEYING LAWS are remote considerations serving only as wobbly crutches for a crippled logic.

#1 Topic of the antenna community:
DO NOT RESPOND TO TROLLS OR FRAUDS

This thread is closed ;->

73's
Richard Clark, KB7QHC

1155. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 19:19:56 UTC
From: richardharrison@webtv.net
Message-ID: <18848-39F883DC-67@storefull-118.iap.bryant.webtv.net>
Source record: 177653

Reg Edwards, G4FGQ wrote:
"And non-dissipative resistances are the invention of baffle-gabs."

A Class-C amplifier delivers no power into a short or open circuit. Experimenters have demonstrated a real impedance exists which extracts maximum power from the amplifier. The amplifier may not last long at maximum power output if it can even get there, but it is shown that the maximum power transfer theorem prevails.

The tank circuit makes the voltage across itself sinusoidal through its balanced reactances. This resulting sinusoidal voltage produces a sinusoidal current in the load resistance

The load resistance at maximum power transfer matches the internal resistance of the source.

Reg is right that it has nothing to do with plate or collector resistance. If these published values were in series with the source, there would be next to no voltage across the load.

The internal resistance has to do with how long the devices are switched off as a part of the electrical cycle, plus the unavoidable loss in the output circuit.

Entirely different are the "baffle-gabs" of "Zo" and the "377 ohms" of free space. But, these don`t dissipate either.

Best regards, Richard Harrison, KB5WZI

1156. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 19:45:55 UTC
From: fractenna@aol.com
Message-ID: <20001026154555.13348.00003071@ng-md1.aol.com>
Source record: 177654

>
>On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:
>
>>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
>>using the forum rec.radio.amateur.antenna did say:
>>:
>>:This is rapidly becoming the #1 topic of the antenna community. You seem to
>>:feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS and
>>:HONORING THE INTELLECTUAL PROPERTY OF OTHERS.
>>
>>No, that's Ethics, and the fact that you wouldn't know that simply
>>shows that you don't know what ethics are, or what ethical behavior
>>is...
>
>Hi OM,
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>Odd how one can claim TRUTH, and OBEYING LAWS after having made
>fraudulent statements about technical issues that were "protected" by
>a patent pending. In TRUTH they were not. The simple fact of the
>matter is that these fraudulent statements were made intentionally as
>the patent process is one of full disclosure and the applicant is
>never surprised by what is issued. There are exceptions for idiot
>savants I suppose.
>
>The same source also insisted that their login/account name was a
>registered trademark that we all had to identify as such. The same
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>not protected by copyright. Let's see, topics range through Trade
>Secret, Patent, Trade Mark, Copyright - and everyone of these issues
>has been distorted or so thoroughly confused as to diminish any sense
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>#1 Topic of the antenna community:
> DO NOT RESPOND TO TROLLS OR FRAUDS
>
>This thread is closed ;->
>
>73's

>Richard Clark, KB7QHC
>

Tell your lawyer you have some problems Mr. Clark:-) Your friendly post office will have a meaningful missive for you in the new month:-)

Hope this helps; I KNOW it will from my perspective:-)

Chip N1IR

1157. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 19:54:28 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.10010261952580.22301-100000@exp.bde-arc.ampr.org>
Source record: 177655
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Thu, 26 Oct 2000, Scott wrote:
> No, my new vehicle isn't possessed!
>
> I wanted to up the power in my HF Mobil setup in my truck. Is there any
> danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I
> have heard some bad things about running power in newer vehicles - does
> anyone have any insight/advice? I would being using 40 meters on up. Any
> bands cause more problems than others?

Some vehicles don't have sufficient shielding around their electronics when it comes to higher powered RF. What happens is one keys up on the radio and the computer which controls the engine gets RF overloaded, and as a result, the engine shuts off. I've heard that some 1980's Toyotas definently had this problem.

1158. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 20:05:27 UTC
From: rwclark@seanet.com
Message-ID: <39fb8e78.80067741@news.seanet.com>
Source record: 177656

On 26 Oct 2000 19:45:55 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:
>>
>>>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
>>>using the forum rec.radio.amateur.antenna did say:
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>>>:HONORING THE INTELLECTUAL PROPERTY OF OTHERS.
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>>>No, that's Ethics, and the fact that you wouldn't know that simply
>>>shows that you don't know what ethics are, or what ethical behavior
>>>is...
>>
>>Hi OM,
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>>Odd how one can claim TRUTH, and OBEYING LAWS after having made
>>fraudulent statements about technical issues that were "protected" by
>>a patent pending. In TRUTH they were not. The simple fact of the
>>matter is that these fraudulent statements were made intentionally as
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>>never surprised by what is issued. There are exceptions for idiot
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>>This thread is closed ;->

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>>73's
>>Richard Clark, KB7QHC
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>
>
>Tell your lawyer you have some problems Mr. Clark:-) Your friendly post office
>will have a meaningful missive for you in the new month:-)
>
>Hope this helps; I KNOW it will from my perspective:-)
>
>Chip N1IR

This thread is closed ;->

1159. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 20:31:32 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8ta4b7$pd8$1@bob.news.rcn.net>
Source record: 177658

"Brian Kelly" <kelly@dvol.com> wrote in message
news:39F85471.B0F72054@dvol.com...
>
> BillN6VLR wrote:
>
> > I mostly
> > work with 75 ohm CATV hardline and we use flooded cable. The flooding
> > compund helps if you should happen to nick the jacket.
>
> >
> What is "flooding" and "flooding compound"?
> >
> Tnx,
> >
> w3rv
>

Some CATV cables have the braid impregnated with a compound that prevents
water migration
through the length of the coaxial cable. A small slit or cut that would
normally allow water to wick
into to the braid if the braid wasn't flooded with this compound during
manufacture. You'll recognize
this type of cable if you ever see it, the braid looks like it was dipped
in ScotchKote or something similar.

Regards

Peter

1160. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 20:59:20 UTC
From: fractenna@aol.com
Message-ID: <20001026165920.04998.00001535@ng-fc1.aol.com>
Source record: 177659

>
>On 26 Oct 2000 19:45:55 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>>
>>>On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:
>>>
>>>>>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
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>>>>No, that's Ethics, and the fact that you wouldn't know that simply
>>>>shows that you don't know what ethics are, or what ethical behavior
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>>>Odd how one can claim TRUTH, and OBEYING LAWS after having made
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>>>Richard Clark, KB7QHC
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>>Tell your lawyer you have some problems Mr. Clark:-) Your friendly post
>office
>>will have a meaningful missive for you in the new month:-)
>>
>>Hope this helps; I KNOW it will from my perspective:-)
>>
>>Chip N1IR
>
>This thread is closed ;->
>

But now there is an open case. Get your attorney partner primed.

NC

1161. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 21:03:03 UTC
From: Birken Vogt <vogt@oro.net>
Message-ID: <39F89C07.E3D6E4B8@oro.net>
Source record: 177660
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

"D. Stussy" wrote:
>
> On Thu, 26 Oct 2000, Scott wrote:
> > No, my new vehicle isn't possessed!
> >
> > I wanted to up the power in my HF Mobil setup in my truck. Is there any
> > danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I
> > have heard some bad things about running power in newer vehicles - does
> > anyone have any insight/advice? I would being using 40 meters on up. Any
> > bands cause more problems than others?
>
> Some vehicles don't have sufficient shielding around their electronics when it
> comes to higher powered RF. What happens is one keys up on the radio and the
> computer which controls the engine gets RF overloaded, and as a result, the
> engine shuts off. I've heard that some 1980's Toyotas definently had this
> problem.

I have a friend who transmits with about 100 watts on 10 meters
sometimes and it will occasionally kill his 1980 Toyota Supra (EFI
I-6). But that is an old car too and the wiring is a rats nest as you
might expect. On my 1986 F-250 diesel truck the tach (electronic
reluctance pick up) drops to zero sometimes while transmitting on a
450-some odd MHz commercial channel with an HT, but on no other
frequency that I am aware of.

I would assume, (hope) that you could ramp up the power and if it
doesn't kill the engine or cause weird problems you would be safe. That
is my way of doing things. And then there is QST's mantra, namely,
"install six RF chokes over everything, 3 times over."

Birken

1162. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 21:04:10 UTC
From: rwclark@seanet.com
Message-ID: <39fc9c3c.83591818@news.seanet.com>
Source record: 177661

On 26 Oct 2000 20:59:20 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>On 26 Oct 2000 19:45:55 GMT, fractenna@aol.com (Fractenna) wrote:
>>
>>>>
>>>>On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:
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>>>>>>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
>>>>>>using the forum rec.radio.amateur.antenna did say:
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>>>>>:feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS
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>>>Tell your lawyer you have some problems Mr. Clark:-) Your friendly post
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>>>will have a meaningful missive for you in the new month:-)
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>>>Hope this helps; I KNOW it will from my perspective:-)
>>>
>>>Chip N1IR
>>
>>This thread is closed ;->
>>
>
>
>But now there is an open case. Get your attorney partner primed.
>
>NC

This thread is closed ;->

1163. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 21:17:13 UTC
From: fractenna@aol.com
Message-ID: <20001026171713.08570.00000497@ng-fc1.aol.com>
Source record: 177662

```
>Subject: Re: Fractal Geometry Insignificant ...
>From: rwclark@seanet.com (Richard Clark)
>Date: 10/26/00 5:04 PM Eastern Daylight Time
>Message-id: <39fc9c3c.83591818@news.seanet.com>
>
>On 26 Oct 2000 20:59:20 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>>
>>>On 26 Oct 2000 19:45:55 GMT, fractenna@aol.com (Fractenna) wrote:
>>>
>>>>>
>>>>>On Thu, 26 Oct 2000 14:21:57 -0400, sideband <sideband@cac.net> wrote:
>>>>>
>>>>>>On or about 25 Oct 2000 07:35:27 GMT, fractenna@aol.com (Fractenna),
>>>>>>using the forum rec.radio.amateur.antenna did say:
>>>>>>:
>>>>>>:This is rapidly becoming the #1 topic of the antenna community. You
>seem
>>>to
>>>>>>:feel that its a 'truth' issue. In fact it is; the TRUTH is OBEYING LAWS
>>>and
>>>>>>:HONORING THE INTELLECTUAL PROPERTY OF OTHERS.
>>>>>>
>>>>>>No, that's Ethics, and the fact that you wouldn't know that simply
>>>>>>shows that you don't know what ethics are, or what ethical behavior
>>>>>>is...
>>>>>
>>>>>Hi OM,
>>>>>
>>>>>Odd how one can claim TRUTH, and OBEYING LAWS after having made
>>>>>fraudulent statements about technical issues that were "protected" by
>>>>>a patent pending. In TRUTH they were not. The simple fact of the
>>>>>matter is that these fraudulent statements were made intentionally as
>>>>>the patent process is one of full disclosure and the applicant is
>>>>>never surprised by what is issued. There are exceptions for idiot
>>>>>savants I suppose.
>>>>>
>>>>>The same source also insisted that their login/account name was a
>>>>>registered trademark that we all had to identify as such. The same
>>>>>source is also ignorant of the fact that the enumeration of data is
>>>>>not protected by copyright. Let's see, topics range through Trade
>>>>>Secret, Patent, Trade Mark, Copyright - and everyone of these issues
>>>>>has been distorted or so thoroughly confused as to diminish any sense
>>>>>of intelligence. It is not unusual that this source also recommends
```

>>>>>the services of a lawyer (and by all appearances has no such aid for
>>>>>themselves).
>>>>>
>>>>>But as the ethics of this source are so prostituted to ego, such
>>>>>issues as TRUTH and OBEYING LAWS are remote considerations serving
>>>>>only as wobbly crutches for a crippled logic.
>>>>>
>>>>>#1 Topic of the antenna community:
>>>>> DO NOT RESPOND TO TROLLS OR FRAUDS
>>>>>
>>>>>This thread is closed ;->
>>>>>
>>>>>73's
>>>>>Richard Clark, KB7QHC
>>>>>
>>>>
>>>>
>>>>Tell your lawyer you have some problems Mr. Clark:-) Your friendly post
>>>office
>>>>will have a meaningful missive for you in the new month:-)
>>>>
>>>>Hope this helps; I KNOW it will from my perspective:-)
>>>>
>>>>Chip N1IR
>>>
>>>This thread is closed ;->
>>>
>>
>>
>>But now there is an open case. Get your attorney partner primed.
>>
>>NC
>
>This thread is closed ;->
>
>
>
>
>
>

1164. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 22:56:45 UTC
From: Jules J-Omega <j-omegaNO@SPAMTHANKSpubliconline.co.uk>
Message-ID: <39f8b705_4@news.bizonline.net>
Source record: 177663

Cam - how do you know?
It would be a litle difficult to measure. I'd say, find two dummy loads of different resistances, say 50 and 75 ohm, measure the resistances and measure the (relative) RF
voltages, and you could calculate the output impedance of the rig.
As to what that should be - for a small Tx of a few watts, the output matching is designed for a 50ohm match to get max pwr, meaning that the same amount of RF power is dissipated in the power amplifier - that's no problem, and I've done this on an old CB set and found it to be 50ohm. For a professional Tx of some hundresd of kW, it makes sense to match for best efficiency, (and you certainly wouldn't want to conjugate match a power station to its load!) But, I wouldn't like to predict what it would be for your IC-706. Does it vary with power setting? Let me know when you've tried it. Regards - Jules

CAM <cam2338@bigfoot.com> wrote in message
news:39F65AD4.E0DF686A@bigfoot.com...
>
> My IC-706 outputs maximum power into 50 ohms. Its power output
> falls off on each side of 50 ohms.
> --
> http://www.mindspring.com/~w6rca

1165. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 22:58:41 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <5Lb4OXiQvvgOptW9=Pu7U1CUhHeu@4ax.com>
Source record: 177664

"hasan schiers" <schiers@netins.net> wrote:

>Uhhh...he seems to be talking about the 60 Khz wwvb signal, not wwv on 2.5,
>5, 10 Mhz.
>
>Totally different ballgame.

Pardone moi... :-)

Bob
k5qwg

1166. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:02:09 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F8B8AF.DDC00E14@bellatlantic.net>
Source record: 177665

The permanent modification you suggest would be better, if
it could be done. My recollection of the way things look in
there is that there isn't enough room on the board to do it that
way easily. But I did not spend any time investigating it either
time I replaced the battery, so it may be possible.

KB9WFK@mindspring.com wrote:

> wouldn't it be better to solder on the wires, run them to a lithium battery holder
> and then just leave them in place? You could then just add the battery to the
> holder, replace the old battery and then remove the battery from the holder until
> next time. If there is enough room for this it would reduce wear and tear on the
> pcb and make the change next time much easier as there is less to remember 5 years
> down the road..
>
> ehsjr@bellatlantic.net wrote:
>
> > Like the other poster, I don't think your problem is the battery.
> > I don't know for sure.
> >
> > However, since you asked, here's some info about the battery.
> >
> > There is a small board inside the 745 that plugs in and is also held
> > in place by 1 screw, if memory serves me. The board is easily
> > accessible by removing the top cover, and easily identifiable by
> > the size, and the fact that it hosts a lithium coin cell.
> >
> > That board contains the memory (RAM memory) of the stuff you
> > store *plus* the stuff ICOM stored in there - the "brains" of the
> > rig. The stuff ICOM stored allows your radio to work. I have heard
> > that if that "stuff" is wiped out (due to battery failure) the radio
> > becomes a vegatable. Ok - that board has a 3 V lithium coin cell
> > soldered on. It is that battery that needs to be replaced before it
> > runs down. The replacement procedure requires providing 3 volts
> > to the board while you are unsoldering the old battery and soldering
> > in the new one.
> >
> > What I do (I've replaced the battery twice) after removing the board
> > from the rig is as follows:
> > 1) solder a couple of wires to the board before removing the battery;
> > 2) run those wires to a brand new 3 V lithium cell;
> > 3) unsolder the old battery;
> > 4) solder in a second brand new lithium cell;
> > 5) unsolder the wires installed in setp 1;
> > 6) reinstall the board.

> >
> > You need 2 new lithium batteries, some wire and about
> > ten minutes from start to finish. The first time you do it,
> > take an hour and be 100% sure of each move before you
> > make it. You need to solder those wires to the board such
> > that you can remove the old battery and still keep 3 V going
> > to the board - selecting the places on the board where you
> > will add the wires is both an electrical (so you get the polarity
> > right) and mechanical (so you leave yourself plenty of room
> > to unsolder the old battery without disturbing the "life support"
> > attachement of those 2 wires) consideration.
> >
> > Al wrote:
> >
> > > > Are you aware that the IC-745 uP program is stored in dynamic
> > > > RAM and if the battery runs down the transceiver stops working?
> > > > http://www.mindspring.com/~w6rca
> > >
> > > The picture of W6RCA and daughters is cool, but I did not find info about
> > > the Icom. Could you please be more specific as to the battery information. I
> > > too have a 745 and it is starting to jump frequency on me (about 3 kHz up
> > > for about 30 seconds, then back again). Perhaps the problem is the battery
> > > you are referring to.
> > >
> > > Thank you.
> > > Al

1167. Re: Supprt Roy, get a great tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:22:38 UTC
From: k1bqt@aol.com
Message-ID: <20001026192238.04896.00001691@ng-cc1.aol.com>
Source record: 177666

>WHERE DOES IT SAY THAT I NEVER TRANSFERED COPYRIGHT--EVER?<

Hmmm--you said you DID trasfer the copyright to FAS in 1995 and only got it back last week! Does anyone else have reason to think you did otherwise? I don't.

.

>What does a non-existent transfer of rights to CQ Communications--the topic so described--have to do with a transfer to anyone else?<

You delivered a manuscript to a journal with a promise of first North American publication rights. Your manuscript would not have been accepted without that promise. Moreover, you were (eventually) paid for your contracted services. Are you denying this transaction ever took place?

If the transfer of First American publication rights was a "nonexistant exchange", than it was "nonexistant" on your part only.

If I were you, I wouldn't admit that on a public forum because it could only mean you provided the material for compensation under false pretense because it didn't belong to you. The obligation and expectation that you controlled this material was surely there. But, you say you collected that money for something "nonexistant"--and you may be right. If FAS owned the copyright, they were the only entity entitled to release the meterial to a magazine--and the only entity entitled to receive compensation for it. Unless, of course, they gave you express consent to publish their material--which it would have been unethical not to report. It was not reported.

Are we talking cogency or voracity? The meanings are very different, but often confused.

Rick K1BQT

1168. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:27:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F8BDD5.44B08933@dvol.com>
Source record: 177667

Joseph Liggett wrote:

> TDMA and CDMA are cellular standards
> TDMA Time Division/Demand Multiple Access
> CDMA Code Division Multiple Access
>
> AT&T uses tdma for their cel service and bellatlantic/verizon and sprint use
> cdma.
>
> basically I am suffering because my cel phone does not work at work, the
> place that I spend most of the day. Since the phone company could care less
> I have to find someway to boost or amplify their cdma/tdma signal.
>
> thanks
>
> J|C|L

>
I suspect you're out of luck. Most cell comms are line of sight, an amp is not gonna raise your antenna height. Plus telephones are duplex devices, how would you switch between "send" and "receive" with just an amp?
>
w3rv

1169. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:29:40 UTC
From: Eddie Bryant N4UMJ <N4UMJ@carolina.rr.com>
Message-ID: <E73K5.2662$%j.202845@typhoon.southeast.rr.com>
Source record: 177668

I have the Oregon Scientific Time Machine model and it has
worked flawlessly for several years.
It initially took a while for it to update though.
At first I had my antenna laying on the floor and it refused to update.
Moving the detached antenna up off the floor onto the rear of the
nightstand with velcro cured the problem.
The model I have also has a signal stength indicator for optimizing
the reception.
This is the only clock in my house(besides my Heathkit GC-1000)
that I don't have to bother with when the daylight savings time change
occurs.
Now if they were only all that way...!!

On another note check the website out below.
Lots of information there on WWVB in Colorado.
Nice pictures too !

http://www.boulder.nist.gov/timefreq/stations/wwvb.htm

Eddie Bryant
N4UMJ

Gray Frierson Haertig <gfh@haertig.com> wrote in message
news:39F7D330.7D84E4AF@haertig.com...
>
> I am not familiar with the Atomic Clock construction, but the Rat Snack
> clocks made by Oregon Scientific have a short pendant that contains both
> the loopstick and the receiver. The cable has four wires - V+, Vcommon,
> turn on, and signal. The signal is 1 Hz square waves of varying duty
> cycle, so extending the cable is not an issue. Perhaps the Atomic Clock
> has a similar arrangement where the receiver and antenna circuit are
> separate from the clock circuit, even if they are in the same case.
>
> Signal strength doesn't seem to be the main concern as to whether these
> clocks synch up or not. The prime culprit is noise. TV's, computers,
> dimmers, touch lamps etc seem to be the biggest offenders. Perhaps
> relocating the clock will help.
>
> I have no trouble with my Rat Snack clock here in Portland.
>
> Gray
>
>
> Mike Camp wrote:
> >

> > Hello-
> >
> > I have a couple of these things, but both have trouble reliably locking
into
> > the signal, maybe once every 3-5 days at best. I am located near San
> > Francisco, CA., a hundred feet above sea level.
> >
> > Can I get your thoughts about enhancing the antenna/signal level? I
don't
> > have bad noise here that I am aware of.
> >
> > Maybe a Fractal for 60 KHz?
> >
> > Thanks
> > 73 Mike Camp KI7FQ
>
> --
> Telecommunications Engineering
> Gray Frierson Haertig & Assoc.
> 820 North River Street, Suite 100
> Portland, Oregon 97227
> 503-282-2989
> 503-282-3181 FAX
> gfh@haertig.com

1170. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:43:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F8C1A0.E9857874@dvol.com>
Source record: 177669
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

CAM wrote:

>
> I've got a GMC1500. When I tune my HS1600 on 40m, the speedometer
> goes full scale past 100 mph. This is with only 100w and a rear
> bumper mount. Only seems to happen on 40m. I haven't gotten my
> SGC-500 installed yet but I plan to avoid 40m with 500w.
> --
> http://www.mindspring.com/~w6rca

>
The bigger problem with 90s vehicles might be the ampacity of the
increasingly
lame batteries and alternators. With a 100w xcvr and a 500w out amp you
have
to be pulling 75-80 amps key down. Assuming a 50% duty cycle even 35
amps
average might fry something, never mind the lousy voltage regulation.
>
w3rv

1171. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:50:04 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F8C3E2.F570728B@bellatlantic.net>
Source record: 177670

My opinion: you are wrong to post this, which appears to be an
attempt to discredit (to say the least) someone you bought something
from over the internet.

As to the facts you present: my opinion - you were wrong to expect or
demand any sort of change in the deal you agreed to, based on a slight
odor. Nevertheless, he did make several avenues open to you to pursue.

Like the other respondent, I've no wish to get into the middle of this -
just answering your request for others' opinions.

RadioFreq0 wrote:

> All,
> Please read this thread and tell me who has a problem with whom.
> This guy has made it impossible for me to buy anything on the web, I've had to
> stop buying, as my wife and children have come to the conclusion that its too
> much a gamble.
> How is it this guy gets favorable reports, did he threaten the people he
> screwed? As he did me? He threatened me, should I post this, yet he has the
> audacity to try to back out of his word by harrasing me.
> The follwing is the thread of emails.
> You be the judge.
> In my opinion, this guy is a dangerous, unstable individual who needs to be
> dealt with through the legal process.
> Any feedback, ideas on how to deal with him and this matter is appreciated.
> He seems to believe he can and threaten people into submission.
> Is there a type of syndicate on the web of people who procure for each other,
> thus having a vestid interest in falsly
> recomending,falsly giving favorable comments on a trader for their own personal
> gain?
> Lets see who comes out in his defense! There is a disturbing pattern
> CAVEAT EMTOR!
>
> Jeff
>
>
> Subj: Re: AT50 dispute
> Date: 10/25/2000 9:08:56 PM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> If you want your money back Im sure we can come to an agreement, if you
> want another tuner...Im afraid, we cant...Because Im not going to buy another

> one......and Im not going to buy that one back, til Im assured that is in
> proper
> condition like it was when it left.....that is the only option you have at this
> point...DO YOU UNDERSTAND THAT?...I could not..fail to pay you if I wanted to
> stay here doing what I do like I have for the past 6 years...do you understand
> that too?...So if you are afraid you wont get your money, arrange an escrow
> account and we will go thru the motions...you figure out how you wanna do
> it....If you talked to any real regular traders , they all told you the same
> thing...Murry does what he say and is a man of honor...Now lets hear you plan
> Jeff. If you have any contacts with KNOWN hamtraders, we will use them to go
> between if that helps your feeling...Ive paid more than 225 to watch a monkey
> fuck a football, but I ll be damned if I will do it for a weasel...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > After talking to several hams involved in trading, I must again demand this
> > be resolved by a third party. I will not 'send you the AT50,' on your
> > 'promise; to 'send me the money.' I have made it plain I expected you to keep
> > your word and trade this unit out for another. I do not want the money, as I
> > have made clear.
> > Now we must come to an agreement as to who shall be that third party.
> > You said you use someone, who?
> > Jeff
> >
> > In a message dated 10/21/2000 11:33:06 AM Eastern Daylight Time,
> > RadioRanch@qth.com writes:
> >
> > > Subj: Re: AT50 dispute
> > > Date: 10/21/2000 11:33:06 AM Eastern Daylight Time
> > > From: RadioRanch@qth.com (Murray Neece)
> > > Reply-to: radioranch@qth.com
> > > To: RadioFreq0@aol.com
> > >
> > > After talking with several other ham traders last nite, we are of the
> > > opinion
> > > that even though it makes no sense and is certainly petty on your
> > part...the
> > > best
> > > I can do is take it back, if its in the same shape and whether it smells
> > or
> > > not,
> > > refund your money....So I offer you this one time only opportunity...Send
> > it
> > > back
> > > where it came from, insure it, pack it well...when it arrives I will
> > refund
> > > your
> > > money. Anyfurther rhetoric from you will result in your continued
> > > ownership of

> > > said tuner....You wont have to worry about trading with me again Jeff, you
> > > cant...I await your reply...my reputation is good, NO ONE and I mean NO
> > ONE
> > > can
> > > say Ive ripped em off, I will not send the money first, but I WILL send
> > > the
> > > money and you know it...Ive paid more than 225 to to "See a monkey play
> > > football",
> > > its not a about money...73 Murray
> > >
> Subj: Re: AT50 dispute
> Date: 10/21/2000 11:33:06 AM Eastern Daylight Time
> From: RadioRanch@qth.com (Murray Neece)
> Reply-to: radioranch@qth.com
> To: RadioFreq0@aol.com
>
> After talking with several other ham traders last nite, we are of the opinion
> that even though it makes no sense and is certainly petty on your part...the
> best
> I can do is take it back, if its in the same shape and whether it smells or
> not,
> refund your money....So I offer you this one time only opportunity...Send it
> back
> where it came from, insure it, pack it well...when it arrives I will refund
> your
> money. Anyfurther rhetoric from you will result in your continued ownership
> of
> said tuner....You wont have to worry about trading with me again Jeff, you
> cant...I await your reply...my reputation is good, NO ONE and I mean NO ONE can
> say Ive ripped em off, I will not send the money first, but I WILL send the
> money and you know it...Ive paid more than 225 to to "See a monkey play
> football",
> its not a about money...73 Murray
>
> RadioFreq0@aol.com wrote:
>
> > Murray,
> > I am not going to let you try to weasle your way out of your word, threats
> > will get you know where, and I am not going to let you commit any kind of
> > similar perpitration against others under the pretense.
> > My only dealings with you will have to be with a third party.
> > Clearly you cannot be trusted.
> > I must post this publically as I take your thinly vailed threat as very
> > serious and I think you are possibly dangerous, and I must protect myself
> > form your bazzarr behaivior. You are unstable!!!!
> > FIRST, WE WILL LET THE COURT OF PUBLIC OPINION RENDER ITS VERDICT !!!!!!
> > Thanks to you Murray, my wife has protested my purchasing anything of value
> > over the web from individuals!!!! Maybe for good reason!!!
> > Jeff
> >

> > Subj: Re: AT50
> > Date: 10/20/2000 11:01:11 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > --------------------
> > READ MY LIPS>..not buying it back at any price...swap if I get the
> > chance...dont
> > need any questioable PR but I can handle it much better than you...you will
> > be
> > deemed picky pricky anal idiot...get it? EVEN if I was wrong, which Im not,
> > you couldnot win this still argument...just be cause you "DONT WANT IT ' now,
> > doesnt mean you get your way...wait 24 hours til I see if I trade, if not, do
> > not contact me again...just go fore, be prepard...to be belittled. Im not
> > nuts,
> > Im just tired of little pricks like you that whine when they find they didnt
> > do
> > the right thing and want the seller to take it back...even when its GREAT!!
> > I
> > would offer you $150 for it if that will help you out...thats what I thing
> > wholesale price would be.....That is all, you need not contact me further...I
> > will let you know if we are trading...if not, by monday you can "have at
> > it"....KMA Murray
> >
> > Subj: Re: AT50
> > Date: 10/20/2000 10:13:23 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > In response to this particular and the previous email, let me
> > say....BULLSHIT....If I get the other tuner I willl send it to
> > you...otherewise
> > you are on your own...I will let you know either way by tomorrow, then do as
> > you
> > will and Ill do as I will...You are correct , Im under too much stress and
> > dont
> > need petty bull shit like this to even think about...Your story is all crap
> > in my
> > book...ive been clearing up smelly radios half mylife..... its easily done
> > using
> > common sense and common practice' that I KNOW...so I will let you know by
> > sunday
> > or as soon as I get it done, that I got one and and will send it, OR I will
> > advise you to sell it, say what you will, we both know it doesnt smell much,
> > you
> > could say , "slight smoke odor" and I wouldnt argue....much...though I dont
> > think
> > so...anything more will get you what YOU deserve...73 Murray

> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > I do not know why you are reacting like you are. I said, it was a problem,
> > my
> > > wife is far more sensitive then I. I am less sensitive. In actuality, I am
> > > just more willing to make things work at my expense.
> > > I WANT an AT50. I do NOT want to sell it if I do not have to.
> > > I am not at all anal-retentive! -:)
> > > Your under too much stress Murray.
> > > Really, if you have another one, lets just swap! (so long as its in the
> same
> > > excellent shape) Please have someone else check it out regarding the smell.
> > > Really Murray, no need to become so angry. Heck, I am not angry at all.
> > > I just do not feel comfortable selling it, as I will not be able to say its
> > a
> > > nonsmokers unit.
> > > I do not know how to otherwise explain it.
> > > I do not know why you are angry with me. Just swap me out.
> > > I need an AT50. I WANT an AT50.
> > > What else can I say?
> > > The fact that my wife has more a problem with it then me, is irrelevant.
> The
> > > Darn smell, though not strongly of cigarettes.
> > > Why does this have to be such a big deal?
> > > Jeff
> >
> > ------------
> >
> > Subj: Re: AT50
> > Date: 10/20/2000 10:07:09 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > The swap is an IF....if I get the other one...Ill let you
> > know.....Meanwhile you try to sell it...73 Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > You tell me how you want to do the swap.
> > > Jeff
> > Subj: Re: AT50
> > Date: 10/20/2000 8:56:28 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >

> > ---------------------
> > Remeber this?
> > << previous in search ï¿½ next in search >>
> >
> > I have an AT50 auto tuner for sale. I just bought it used, it works a looks
> > great.
> > I have no need for it. I now have an HS1500 screwdriver and have no need
> > for it.
> > $250.00 plus shipping
> >
> > ------
> >
> > ubj: Re: AT50
> > Date: 10/20/2000 8:46:03 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Jeff, just put it on the internet for sale for $250, sell and I will take
> > care of
> > any difference you have to cut for the so called smell, OK...no use making a
> > federal case of...my tempers pretty short but its not your fault...You will
> > go on
> > my list as "anal retentive' but I have lots of those and once I know , I know
> > to
> > "check closer"....if the other one comes thru in the meantime...WE WILL
> > SWAP!!...I still dont think you "want the tuner"..If this is not
> satisfactory,
> > then refer to my previous message OR call my company at 1 800 888 3999.. and
> > when
> > you get to option #7...press that number...you should do that anyway...you
> can
> > always use an option #7....73 Murray
> >
> > --------
> > ubj: Re: AT50
> > Date: 10/20/2000 8:46:03 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Jeff, just put it on the internet for sale for $250, sell and I will take
> > care of
> > any difference you have to cut for the so called smell, OK...no use making a
> > federal case of...my tempers pretty short but its not your fault...You will
> > go on
> > my list as "anal retentive' but I have lots of those and once I know , I know
> > to
> > "check closer"....if the other one comes thru in the meantime...WE WILL
> > SWAP!!...I still dont think you "want the tuner"..If this is not

> satisfactory,
> > then refer to my previous message OR call my company at 1 800 888 3999.. and
> > when
> > you get to option #7...press that number...you should do that anyway...you
> can
> > always use an option #7....73 Murray
> >
> > --------
> > Subj: Re: AT50
> > Date: 10/20/2000 8:33:40 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Well Jeff, that does it...I just bought a TS50 and AT 50 with good
> intenetions
> > but YOU Threatened me so Im gonna show what that will do for you...I think
> > youre
> > a whiner and pickly little asshole, but i was trying to help...HELP
> > YOURSELF>>>
> > BUt speak bad of me on the internet, and I will retaliate 10 times...I sent
> > you
> > a great tuner...I know it was clean as a pin, Icouldnt smell anything, first
> > you
> > blame it on your wife, now you say its YOU....WHats the real story guy...???
> > IF
> > you wanna cool your little whimpering jets for a few days, Ill try to get
> this
> > other one and trade...but at this point Im not so inclined.......For all I
> > know ,
> > your wife smokes cigars and blew em in the tuner....Id have known if it was
> > BAD,
> > and I have ,in two weeks ,cleaned two amps that WERE BAD, to the point that
> MY
> > wife cant smell em...or me either, you know....I quit singing after 35 years
> > cause of smoke...dont tell me about it. Press this, and youll be very
> > sorry...no
> > threat...just a promise...buck up , you whined for a better price, you
> > hurried,
> > . and you were stupid to buy a tuner anyway...you just want me to take it
> back
> > cause youve found out you dont need...I can make that case too...so go for
> > it. Im
> > in the mood!!
> >
> > RadioFreq0@aol.com wrote:
> >
> > > No, Murray I really do not know what you mean.
> > > I have not been able to use the AT50 Its been in the garage in the plastic
> > > bag, as you told me to do. Ive done more then anyone would when there was a

> > > promise made. You told me it a nonsmokers, it may not have been, but you
> > > rapped it in smelly plastic, or the person you got it from, just did a good
> > > job of cleaning it up, and you must have an allergy or something as because
> > > it was not that bad. I just have no tolerance for the smell.
> > > I will sell it on the web, and say why. I will say it smells of cigarette
> > > smoke even though Murray said it was from a nonsmoker. Ive bent over
> > backward
> > > hoping this would be OK.
> > > At this point I think you are not a man of your word. And have no problem
> > > making my case, or substantiating it.
> > > Your loss.
> > > Jeff
> >
> > ------
> >
> > Subj: Re: AT50
> > Date: 10/20/2000 7:26:12 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Put it on the net and sell it Jeff, thats just a little tooooo long to
> > wait.
> > and I sold it to you cheap enuff to advance anyway... there is one
> > possibilty,
> > Im try to trade for a TS 50 at 50 pkg...will be happy to swap em out...sorry
> > but
> > I just cant imagine.....know what I mean? Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > Well, Ive had the AT50 in a plastic bag now for weeks, Ive tried everything
> > I
> > > know to get that odor to leave.
> > > While it is better, and not strong, it is present and does cause a problem
> > > Can you find another buyer who wont notice it?
> > > Can you find another mint AT50 to replace this one?
> > > I really do need it for my TS50.
> > > Thanks,
> > > Jeff
> >
> > Subj: Re: FS: AT50 autotuner (Kenwood)
> > Date: 10/4/2000 10:44:32 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Cooooooool!!! I m goin to fest this weekend, if I find a want for at 50 we
> > will 'off it"...CUL Murray

> >
> > RadioFreq0@aol.com wrote:
> >
> > > Its in a big baggy w/ the dryer sheets in the garage. think it will be just
> > > fine
> > > Thanks
> > > Jeff
> > >
> >
> > -------
> > Subj: Re: FS: AT50 autotuner (Kenwood)
> > Date: 10/4/2000 10:40:35 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > I must be missing something.....yes? M
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Its in a b
> >
> > Subj: Re: FS: AT50 autotuner (Kenwood)
> > Date: 10/4/2000 10:33:51 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: radiofreq0@aol.com (RadioFreq0)
> >
> > I just went back thru correspondence...im assuming , OH I
> > remmeber...gigged you on the AT 50....Dont take me to seriously, that
> > was just jab!! How does it smell now? M
> >
> > RadioFreq0 wrote:
> >
> > > Wrong.
> >
> > Subj: Re: FS: AT50 autotuner (Kenwood)
> > Date: 10/4/2000 10:30:07 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: radiofreq0@aol.com (RadioFreq0)
> >
> > WHat does that mean....spit it out..... Jeff? M
> >
> > RadioFreq0 wrote:
> >
> > > Wrong.
> >
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/29/2000 9:03:35 PM Eastern Daylight Time

> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > --------------------
> > Could be, I really did "smell the radio" to check...but somedays , with my
> > sinus'
> > that could be inaccurate...also put the radio in a plastic back with a few
> > more
> > sheets or FABREEZE on a washrag, ive cured them easily with those deals as
> > long as it wasnt "greasy " with nicotene hi hi...
> > eBay Buying and Selling Tools <<this is the page that tells you about the
> > mediation service....Ive been there once on a a buy that was totally "wrong"
> > and
> > the fellow didnt agree...and didnt go along with the mediation either so was
> > kicked off Ebay...dont think ours would go that far..if you try and can get
> it
> > smelling good...I will try to do something...73 Murray
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > Let me try your suggestion about the fabric softener sheet.
> > > Its not a bad smell at all, just egnouph to cause a problem.
> > > Lets see if it works.
> > > Ill let you know.
> > > By the way, who is the mediation outfit, how are they contacted? Oh yes, It
> > > seems the packaging you used may have been contaminated with the smell. I
> > say
> > > this because I was reusing it, and I notice just one piece of the air
> bubble
> > > sheets smelled. The others did not.
> > > It may have been contaminated from another radio.
> > >
> > > Jeff
> >
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/29/2000 7:15:11 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > PS...I will be glad to swap if I come across one , and its a good
> > possibilty...I
> > buy and sell them regularly but mostly just the radios....dont find many
> > experieced mobileers who use auto tuners...73...let me know your thinking, I
> > dont
> > want and hard feelings.... Murray
> >
> > RadioFreq0@aol.com wrote:
> >

> > > Murray,
> > > Just thought I would let you know Ive got the AT50 up for sale.
> > > Aside from my having a High Sierra screwdriver, it definitely smells as if
> > it
> > > was owned by a smoker. It smell as if was cleaned up well.
> > > My wife got in from out of town and noticed it right away. Ive got a bad
> > cold
> > > so it was not noticeable to me. I had it in the garage for several days,
> > > thinking maybe it was the cleaning fluid or something you or the previous
> > > owner used.
> > > I asked you if was exposed to a smoker, you said you did not believe it
> was.
> > > If you get another one in, that absolutely did not get exposed to cigarette
> > > smoke and looks as good, Ill swap you.
> > > Anyway, I must get rid of it.
> > > Do you offer any kind of satisfaction guarantee?
> > > I really do want to have an AT50, so I would like to swap for another one.
> > > thanks
> > > Jeff
> > >
> >
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/29/2000 7:12:02 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Jeff, as best Icould tell it didnt smell and Im pretty particular too....I do
> > know how to clean it up to impossible to tell if you are interested...put a
> > fabric softener sheet in side it for four or five days......I went back and
> > looked at our converstions and in fact said it didnt appear or seem to me
> > that it
> > had been smoked...and that is true, I see nowhere that I gauranteed it had
> not
> > been smoked around..I know that could be considered weaseling out but Ive
> been
> > doing this a long time and dont weasel as any will tell you. If you feel that
> > you
> > have been duped, lets go to the mediation service and let them solve it. I
> > dont
> > feel I should be required to do anything, it works and looks good...but I
> dont
> > have ANY unhappy customers and dont want any....if you feel something should
> > be
> > done, I will give you the email for the company which mediates ebay and
> > newsgroup dis agreements, and we will go from there with whatever they say.
> > Just let me know what you wish to do. OR before anything else gets
> > started...short of taking it back which I dont think will happen, what do
> you
> > feel should be done? Thanks 73 Murray

> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > Just thought I would let you know Ive got the AT50 up for sale.
> > > Aside from my having a High Sierra screwdriver, it definitely smells as if
> > it
> > > was owned by a smoker. It smell as if was cleaned up well.
> > > My wife got in from out of town and noticed it right away. Ive got a bad
> > cold
> > > so it was not noticeable to me. I had it in the garage for several days,
> > > thinking maybe it was the cleaning fluid or something you or the previous
> > > owner used.
> > > I asked you if was exposed to a smoker, you said you did not believe it
> was.
> > > If you get another one in, that absolutely did not get exposed to cigarette
> > > smoke and looks as good, Ill swap you.
> > > Anyway, I must get rid of it.
> > > Do you offer any kind of satisfaction guarantee?
> > > I really do want to have an AT50, so I would like to swap for another one.
> > > thanks
> > > Jeff
> > >
> > >
> > Subj: Re: Mobile use of AT50 w/TS50
> > Date: 9/20/2000 9:36:23 AM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: radiofreq0@aol.com (RadioFreq0)
> >
> > HI Jeff, saw your question so I thought Id add to the info....it works great
> > with
> > a hamstick "FOR the individual band" to give you more frequency
> > coverage...using it
> > with any fixed antenna other than a long wire, will probably un acceptable,
> at
> > least that was my experience with the ICom tuners....I use 706 and tuner to
> > work
> > ALL of 40 and 80 meters as well as 17...but use a hamstick tuned in the
> > middle of
> > the band for each band. JUst thought Id drop that on ya...I love hamsticks
> > and
> > it does give them much more coverage but you do have to switch antennas...no
> > much
> > trouble with quik disconnects though....A screwdriver pretty much eliminate
> > the
> > need for tuner BUT they shift and drift enough that a tuner is handy...I
> > broke so
> > many screwdrivers and bug catcher that I now just use a ham stick...gonna try
> > that

> > expesive OUT BACKER when I find a good used one...73 I will look for
> > something to
> > hang it with today in my "backroom hobby shack" . CUL Murray
> >
> > RadioFreq0 wrote:
> >
> > > Any of you using an AT50 with a TS50 in a mobile setup? How are you
> > configuring
> > > it and with what type antenna?
> > > Can I put my AT50 in the trunk? Is it a waist to use a 20 mtr hamstick for
> > > multiband ops?
> > > Aside from using a screwdriver, what can I do with the AT50 in my mobile?
> > Or is
> > > it really for base/portable ops?
> > > tnx,
> > > Jeff
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/19/2000 11:20:38 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > IF you will look in the manual, I think you will see, that is not so...I
> didnt
> > really know either way, but thats how I got it "as complete" and the manual
> > said nothing about it that I can recall, nor does my ad...I know I dont have
> > one, but dont mind trying to find one, I have lots of lite weight mounts
> > (unknown varieties) lying around, measure side to side for me and let me see
> > if
> > I can find something that looks good and may work. OK? Thanks Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > I was under the impression the AT50 came with a mobile mount. This one has
> > > the mobile mounting bracket bolts screwed into it, but not mounting bracket
> > > itself.
> > > Might you have it laying. around, or one from another?
> > > I believe its the same as comes with the TS50.
> > > tnx
> > > Jeff
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/17/2000 11:43:07 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Got the money Jeff, thanks a bunch...enjoy...Murray
> >
> > RadioFreq0@aol.com wrote:

> >
> > > OK,
> > > Ship it.
> > > MO out in the morning.
> > > Let me know the tracking #
> > > Thanks,
> > > Jeff
> > >
> > > Ship to me at:
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/17/2000 4:57:23 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Got the money Jeff, thanks....let me know when you get the tuner...73
> > Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Thanks.
> > > You should receive your MO tomorrow or certainly Friday.
> > > Let me know when it is received
> > > Jeff
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/13/2000 9:48:47 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranch@qth.com
> > To: RadioFreq0@aol.com
> >
> > Tuner out today UPS # 1Z 752 X71 03 1336 105 8...ready to work on your
> > TS 50 , worked fine on mine to day!!! Enjoy, I think you should be
> > happy..73 Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > OK,
> > > Ship it.
> > > MO out in the morning.
> > > Let me know the tracking #
> > > Thanks,
> > > Jeff
> > >
> > > Ship to me at:
> > >
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/12/2000 5:03:35 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranchNOSPAM@qth.com>
> > To: RadioFreq0@aol.com

> >
> > Ill ship it tomorrow no sweat, Id forgotten I said that...will get i right
> > out...73 Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > In a message dated 9/10/2000 10:29:07 PM Eastern Daylight Time,
> > > RadioRanch@qth.com writes:
> > >
> > > > No smoke that I can tell...credit card thru paypal is fine, all cables
> > > > necessary
> > > > are with it!! OK? IF you want to pay with Ccard go to www.paypal.com,
> > > > sign up
> > > > and give em your card # I think(not sure) you can do it all at once, but
> > > may
> > > > be
> > > > wrong..OK??.73 murray ps if you are just in a hurry, send me the money
> > > > order and
> > > > give me your address now, Ill ship tomorrow...no sweat...M
> > > >
> > > Murray,
> > > As I anticipated your shipping the at50 out as soon as i let you know i
> sent
> > > out the MO,(per your words) would you please ship the at50 1st or 2nd day,
> > > upon the receipt of the MO. I would really like to have it by the weekend
> or
> > > at least the first of next week if possible.
> > > I am in a rush :-)
> > > thanks Murray,
> > > Jeff
> > > >
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/12/2000 4:52:05 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranchNOSPAM@qth.com>
> > To: RadioFreq0@aol.com
> >
> > I will ship when it arrives and let you know...73 Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > The USPS MO for $225.00 is on its way Priority Mail. (return receipt)
> > > You should have it in 2 or 3 days) maybe less)
> > > Let me know when you ship the AT50, include the tracking #]
> > > Thanks
> > > Jeff
> >
> > -----Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/11/2000 6:33:56 PM Eastern Daylight Time

> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranchNOSPAM@qth.com>
> > To: RadioFreq0@aol.com
> >
> > Looks fine serial # is 50200596 Let me know if its on...have a nother
> > request for it now...73 Murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > OK, email me the info and Ill send you the MO
> > > Thanks, Jeff
> > ubj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/11/2000 1:46:17 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranchNOSPAM@qth.com>
> > To: RadioFreq0@aol.com
> >
> > Tried it this morning at the shop....works fine...its at the shop and Im
> > not!! dont know serial number as I recall it was a 1995 unit...will check
> > tonite if I get back...73 murray
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Murray,
> > > Before I put the MO in the mail to you, please give me serial # and also
> > > confirm with me that you have tested the AT50, and its 100% OK, both
> > > operationally and cosmetically.
> > > Thanks, Jeff
> > Subj: Re: WTB:Kenwood AT50 (matches TS50)
> > Date: 9/10/2000 10:29:07 PM Eastern Daylight Time
> > From: RadioRanch@qth.com (Murray Neece)
> > Reply-to: radioranchNOSPAM@qth.com>
> > To: RadioFreq0@aol.com
> >
> > No smoke that i can tell...credit card thru paypal is fine, all cables
> > necessary
> > are with it!! OK? IF you want to pay with Ccard go to www.paypal.com, sign
> > up
> > and give em your card # I think(not sure) you can do it all at once, but may
> > be
> > wrong..OK??.73 murray ps if you are just in a hurry, send me the money order
> > and
> > give me your address now, Ill ship tomorrow...no sweat...M
> >
> > RadioFreq0@aol.com wrote:
> >
> > > Sounds good,
> > > Oh, just want to make sure it comes with the appropriate cables, etc., to
> >

1172. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:55:50 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <XP3leDAGSM+5EwvE@g3ohx.demon.co.uk>
Source record: 177673

In article <8t94h9$kg7$1@neptunium.btinternet.com>, Reg Edwards
<g4fgq.regp@btinternet.com> writes
>CAM wrote -
>> My IC-706 outputs maximum power into 50 ohms. Its power
>output
>> falls off on each side of 50 ohms.
>======================
>Left and right ? What about above and below ?
>---
>Reg.
>
>

This is almost certainly because it turns down the power when the load
is not 50 ohms. I doubt if it is connected with the concept of 'max
power out when the load equals the source impedance'.

Is the output impedance of your audio HI-FI amplifier equal to the
impedance of the speakers (eg 8 ohms)? No. It is ~ zero.

Is the output impedance of your car battery equal to the combined load
impedance of the lightbulbs? No. It is ~ zero.

Is the output impedance of your mains electrical supply equal to the
load of your electrical system? No. It is ~ zero.

Is the output impedance of your transmitter equal to the load of your
antenna feedpoint (ie 50 ohms)? ....

Ian.

1173. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-26 23:56:18 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F8C479.FCD3D727@dvol.com>
Source record: 177671

Peter Bertini wrote:

> . . . You'll recognize
> this type of cable if you ever see it, the braid looks like it was dipped
> in ScotchKote or something similar.

OK, good. I was conjuring up visions of somebody pumping some kind of goo into
an underground PVC coax conduit. Understood. Tnx.

>
> Regards
>
> Peter

>
w3rv

1174. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 00:02:50 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <cPMnuFAqYM+5Ewv1@g3ohx.demon.co.uk>
Source record: 177674

In article <tpVvNEAp+u95EwTR@invest.fsbusiness.co.uk>, Philip de Cadanet
<phil@invest.fsbusiness.co.uk> writes
>Many thanks to everyone who responded to my 50/75 ohm question.
>
>Phil G4ZOW

Simple question, many complicated answers!
Ian.

1175. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 00:08:48 UTC
From: woodsglen
Message-ID: <39F8C790.6488206B@attglobal.net>
Source record: 177672

It Will NEVER WORK......! I think most of these guys live just to bust his balls... It's hilarious sometimes. I was off the group for about a week (or two?) and I had a lot of Fraking reading to do...

Wayne

Pete wrote:

> Folks ignore all this fractenna posting crap and it will die on the vine if
> all of you quit paying attention to it.
> I'm tired of seeing it all the time. Let's get back to what this NG is
> supposed to be all about, - providing help and good information to promote
> our hobby.
> My 2 cents worth

email wgvideo at attglobal dot net

1176. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 00:53:46 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39F8D21A.1FA76260@dialpoint.net>
Source record: 177680

The output impedance of the audio hi-fi is not zero. It will be specified for the speaker impedance it is made for just as your transmitter is. The output circuit is designed using similar methods.

The car battery impedance is not zero. It does have an internal impedance. It is related to the voltage under load and the maximum current it can put out. If batteries were not this way then a flashlight battery could put out the same ammount of current , just for a shorter duration. There is a definate load where the battery will supply the maximum ammount of power to a load. Batteries are thought of as a perfect power source with a series resistor equal to the impedance of them. If you can do the calculations then you will see how it will take a certain load resistance to get the most power out of a given battery. Not the total over a period of time, but the maximum ammount in a surge.

The AC mains are the same way, they just hapen to have a very low impedance, almost equal to zero. You will loose alot of power in the wiring compaired to the ammount they can supply. That usually explains why the lights dim when a big moter starts up.

>
> This is almost certainly because it turns down the power when the load
> is not 50 ohms. I doubt if it is connected with the concept of 'max
> power out when the load equals the source impedance'.
>
> Is the output impedance of your audio HI-FI amplifier equal to the
> impedance of the speakers (eg 8 ohms)? No. It is ~ zero.
>
> Is the output impedance of your car battery equal to the combined load
> impedance of the lightbulbs? No. It is ~ zero.
>
> Is the output impedance of your mains electrical supply equal to the
> load of your electrical system? No. It is ~ zero.
>
> Is the output impedance of your transmitter equal to the load of your
> antenna feedpoint (ie 50 ohms)? ....
>
> Ian.

1177. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 00:59:08 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39f8c55b@news.planetc.com>
Source record: 177676

Now, here's a thought. How about we all migrate over to the CB newsgroups and tell them what a great piece of work the fractal antenna is -- we could all praise the fractal, recommend that they all get themselves one. You know how the CBers are -- they'll flock to the fractal as The Latest Thing (excuse me, in CB lingo that would be "Th' Latest Thang").

This would be beneficial because, as the fractal antenna becomes the standard on 11 meters, none of them would get any RF out of their own backyards, thereby silencing the whole crowd.

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

Heath <radiovintage@hotmail.com> wrote in message
news:RxqJ5.18547$Xc.956073@nntp2.onemain.com...
> URGENT NEWS FLASH !!!!
>
> Fractenna has now made the ultimate move to silence all of the people
> with half a brain by now posting his crap to the C.B. newsgroup.

snipped

1178. RE: GAP ground mount

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 01:12:15 UTC
From: k9sqg@aol.com
Message-ID: <20001026211215.18319.00000067@ng-cm1.aol.com>
Source record: 177675

I have a brand new one I was planning on putting on Ebay. Before I do that, would you like me to copy the instructions for you?

73s,

Evan

1179. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 01:20:34 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F8D862.A9CC94B7@bigfoot.com>
Source record: 177677

Ian Jackson wrote:
> Is the output impedance of your transmitter equal to the load of your
> antenna feedpoint (ie 50 ohms)? ....

If it delivers its maximum available power into a 50 ohm load, isn't
that a conjugate match by definition? :-)
--
http://www.mindspring.com/~w6rca

1180. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 01:30:07 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F8DA9F.5D1215B0@bigfoot.com>
Source record: 177679

Jules J-Omega wrote:
>
> Cam - how do you know?
> It would be a litle difficult to measure.

I have a bunch of 600 ohm 50w non-inductive resistors removed from old military SWR meters and I have paralleled 8, 12, and 16 of them. The power output of my IC-706 is greatest at 50 ohms. Until 12 watts reflected power is reached, the IC-706 obeys the following rule: Forward power equals 100 watts minus reflected power. The power output of the PA is reduced by the magnitude of the reflected power until 12 watts reflected is reached. After that, the power output of the PA is reduced to maintain a constant 12 watts reflected. ICOM obviously detects reflected power internally using a 50 ohm circuit.

So the question is: Since the IC-706 outputs its maximum available power only into a 50 ohm load, is it by definition, conjugately matched at 50 ohms? :-)
--
http://www.mindspring.com/~w6rca

1181. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 01:36:56 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <7tlhvs0r8gb6ukq20ldk2ti94p871ivoal@4ax.com>
Source record: 177678

That's not a bad idea if there's enough room. When I replaced the
battery in my IC-271 (same battery) I used those tiny clip leads with
the wire hook at the end to attach to the battery circuit at the
easiest point. I used a second battery to power the circuit and
unsoldered and replaced the existing battery. Was fairly easy to do,
but wish I had thought of your idea. Of course I have solved the
problem in my IC-745 with the Willco board. BTW, the battery in the
IC-745 was still going at 15 years. Lucky I suppose.

Dick - W6CCD

On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:

>wouldn't it be better to solder on the wires, run them to a lithium battery holder
>and then just leave them in place? You could then just add the battery to the
>holder, replace the old battery and then remove the battery from the holder until
>next time. If there is enough room for this it would reduce wear and tear on the
>pcb and make the change next time much easier as there is less to remember 5 years
>down the road..

1182. lawsuit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 01:45:27 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tamp7$l3e$1@iac5.navix.net>
Source record: 177681

Lawsuit watch day 7...

Once again the sun sets with no appearance of the process server, Even in the days of the pony express it did not take a week from Mass to Georgia. From this point forward I will only post weekly watch reports and then later on monthly and yearly. Fractenna is a loud boorish fraud, he enjoys bulling folks that just enter the group and don't know that he is just a keyboard Rambo.

You had your chance Fracky, don't ever in this or any other life time threaten me with a law suit unless you have the balls to go forward with it. I hope that Roy and all the others on the newsgroup take note of your bombastic bleating for exactly what it is, an aging boy genius seeking attention by any means possible...

1183. Re: Why does N1IR cancel NG postings so often?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 02:10:01 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8tao55bhp1@bob.news.rcn.net>
Source record: 177682

Look at the emotional response below !! I must have hit a
sensitive spot....Get some help doughboy...I understand that
you have a severe weight problem...
.
You REALLY need to see a
shrink...(for your brain and body) I suspect that you are on the verge
of a meltdown...so do it soon...are you really as FAT as they say? Also,
why is your immune system so compromised?..given your last
widely publicized "sickness",...many AIDS patients have similar problems.
What is your problem? Are you well yet or still sick?...:>) Is this the
reason
for your irrational attack on Roy? Are you a victim of some insidious
disease
that is causing your stupid behavior? We would like to know.
This may help you in your defense in the counter suits you will receive
when you sue everyone you have promised to sue...

BTW...what does monoganmous mean? The closest thing I could
find indicates that the added "N" means a negation or opposite
meaning of your original statement...are you gay or do you screw
around on your wife?

Hope this helps...

Path:
reader4.news.rcn.net!feed1.news.rcn.net!rcn!europa.netcrusader.net!152.163.2
39.131!portc03.blue.aol.com!audrey04.news.aol.com!not-for-mail
From: fractenna@aol.com (Fractenna)
Newsgroups: rec.radio.amateur.antenna
Message-ID: <20001024072323.23687.00000428@ng-ff1.aol.com>
Xref: reader4.news.rcn.net rec.radio.amateur.antenna:140569

>You are a sick fellow. I am a married monoganmous homosexual. The date is
for
>the 10M Contest.
>
>Are you divorced? Why did your marriage break up?
>
>Just out of curiousity, do you own a toupee? Does it help for the older
guys
>out dating again? What about getting rid of the coke bottle glasses?
>
>I'm just curious to know as I do have some friends out on the prowl again
>looking for tips.
>

>What works for you Chuck?
>
>
>73
>Chip N1IR
>
>

1184. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 02:14:05 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <duT4ObTsVtI25jIyDm3ujasysyjI@4ax.com>
Source record: 177683

On Thu, 26 Oct 2000 20:30:07 -0500, CAM
<cam2338@bigfoot.com> wrote:

>So the question is: Since the IC-706 outputs its maximum available
>power only into a 50 ohm load, is it by definition, conjugately matched
>at 50 ohms? :-)
>--
>http://www.mindspring.com/~w6rca

Hi Cecil,

Willing to clip that internal detector out and repeat your
measurements?

73's
Richard Clark, KB7QHC

1185. Has N1IR finally lost "it" ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 02:52:32 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8taqmprha1@bob.news.rcn.net>
Source record: 177685

Look at the emotional response below:

Path:
reader4.news.rcn.net!feed1.news.rcn.net!rcn!europa.netcrusader.net!152.163.2
39.131!portc03.blue.aol.com!audrey04.news.aol.com!not-for-mail
From: fractenna@aol.com (Fractenna)
Newsgroups: rec.radio.amateur.antenna
Message-ID: <20001024072323.23687.00000428@ng-ff1.aol.com>
Xref: reader4.news.rcn.net rec.radio.amateur.antenna:140569

>You are a sick fellow. I am a married monoganmous heterosexual. The date is
for
>the 10M Contest.
>
>Are you divorced? Why did your marriage break up?
>
>Just out of curiousity, do you own a toupee? Does it help for the older
guys
>out dating again? What about getting rid of the coke bottle glasses?
>
>I'm just curious to know as I do have some friends out on the prowl again
>looking for tips.
>
>What works for you Chuck?
>
>
>73
>Chip N1IR

chirpster, you REALLY need to see a
shrink...(for your brain and body) I suspect that you are on the verge
of a meltdown...so do it soon...are you really as FAT as they say? Also,
why is your immune system so compromised?..given your latest
widely publicized "sickness"...many AIDS patients have similar problems.
What is your problem? Are you well yet or still sick?...:>) Is this the
reason for your irrational attack on Roy? Are you a victim of some
insidious
disease that is causing your stupid behavior? We would like to know.
This may help you in your defense in the counter suits you will receive
when you sue everyone you have promised to sue...

BTW...what does monoganmous mean? The closest thing I could
find indicates that the added "N" means a negation or opposite
meaning in your original statement...are you gay or do you screw
around on your wife?

Hope this helps...

1186. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 02:55:01 UTC
From: radiofreq0@aol.com
Message-ID: <20001026225501.23319.00003390@ng-ch1.aol.com>
Source record: 177686

Your response does not surprise me!!!!

1187. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 03:46:34 UTC
From: John Peterson <jpeterson@optushome.com.au>
Message-ID: <39f8fb31@turakina.six.asn.au>
Source record: 177688

mmmm......

I was a CBer for about 3 years before I got my amateur license (that was over 20 years ago). Since then I have been a radio tradesman, technical officer and scientist.

The implication in your post is that CBers are somehow stupid and you are somehow superior.

Putting yourself on a holy grail as you do only makes YOU look like a a contemptuous old has-been.

Why don't you just leave it alone and start discussing amatuer antennas (as per the newsgroup title) instead of posting you personal vendettas for the world to see.

Heath wrote in message ...
>URGENT NEWS FLASH !!!!
>
> Fractenna has now made the ultimate move to silence all of the people
>with half a brain by now posting his crap to the C.B. newsgroup.
> Expected results and reports are as follows:
>(1)YOU'RE WALL TO WALL AND TREETOP TALL(technical fractal lingo for I can
>hear you across the street as well as with your $5 Wal Mart antenna.)
>(2)YOU'RE HITTING ME WITH 40 POUNDS(technical fractal lingo for you are
just
>as loud as when on your dummy load.)
> (3) JUST WAIT TILL I GET THIS THING 100 FEET IN THE AIR.(That will of
>course have to wait till I can get my anechoic chamber up there too)(hmmm
>Chip never told me if I needed to run a feedline too)
> (4)THE REAL TEST WILL BE TO SEE HOW MUCH POWER IT CAN HANDLE BEFORE
>MELTING.(after all if Chip is legal he can not even begin to approach the
>output power of a C.B. station.)
> (5) Chip publishes all of thes words and descriptions about it but I have
>never once read what the overpass clearance is for it on an 18 wheeler.

1188. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 03:47:34 UTC
From: reklaw.m@juno.COM
Message-ID: <20001027.034112.-4161501.1.reklaw.m@juno.com>
Source record: 177687

Maxine,
Thank you for the information.
I don't like either Algor or Bush and was going to "throw my vote away" and vote for
Pat Buchanon. Now that you have shown how Bush is not a Lawyer and he is for
personal freedoms, right to life and pro-gun laws, I have changed my mind.
I will not throw my vote away. I hope you show others the error of their ways.

GO GEORGE BUSH !!

Thanks again,
Mike

1189. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 03:51:52 UTC
From: John Peterson <jpeterson@optushome.com.au>
Message-ID: <39f8fc6f@turakina.six.asn.au>
Source record: 177689

I'll stick out my chest and be a real man.

Its a bit of a worry for the rest of the world when you Americans are the only ones to ever (a) drop a nuclear bomb on a civilian city or (b) threatened to start a nuclear war and yet you haven't learnt your lesson. Still brooding around trying to prove what "real men" you are.

I wish you guys would get rid of your arsenal before you get too much into this macho 'real man' business.

Brian Kelly wrote in message <39F6D439.4B7D590A@dvol.com>...
>
>Heath wrote:
>
>> Put it on the antenna range at the VHF
>> conferences and show us some real world results that are of more
substance
>> than theory and then I will be interested.If you are not willing to do
that
>> then please don't waste the time of honest intelligent people who are
here
>> to learn and help others in the spirit of amateur radio.
>
>>
>I'd like to run against him on 20m in the CQ WW cw bash with 100 watts and
a
>dipole . . . separate the men from the boys real quick like.
>>
>w3rv
>
>

1190. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 04:10:40 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F90040.EE9F9AF5@bigfoot.com>
Source record: 177691

Richard Clark wrote:
> Willing to clip that internal detector out and repeat your
> measurements?

Of course not. The internal detector is what allows the IC-706
to satisfy the definition of a conjugate match. :-)
--
http://www.mindspring.com/~w6rca

1191. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 04:13:33 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8taodi$v6f$1@nntp9.atl.mindspring.net>
Source record: 177684

The Revolution put Richard Clark <rwclark@seanet.com> in the Driver's Seat
for writing in part:

> The revolution will not be brought to you by the
> Schaefer Award Theatre and will not star Natalie
> Woods and Steve McQueen or Bullwinkle and Julia.
> The revolution will not give your mouth sex appeal.
> The revolution will not get rid of the nubs.
> The revolution will not make you look five pounds thinner,
> because the revolution will not be televised, Brother.
> ...
>
> Thanks (and apologies to) Gil Scott-Heron

You read the strangest things on this group!

Alright, OT, for 500 points and the new set of luggage, complete the
following: A rat done bit my sister Nell......

Okay, time to go back and work on my own invention - fractal poetry.

Corry
--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

1192. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 04:18:36 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tavoc$p91$1@iac5.navix.net>
Source record: 177690

The troll meter barely hit a 3, you will have to do a lot better than this
to stir this group up...

"John Peterson" <jpeterson@optushome.com.au> wrote in message
news:39f8fc6f@turakina.six.asn.au...
> I'll stick out my chest and be a real man.
>
> Its a bit of a worry for the rest of the world when you Americans are the
> only ones to ever (a) drop a nuclear bomb on a civilian city or (b)
> threatened to start a nuclear war and yet you haven't learnt your lesson.
> Still brooding around trying to prove what "real men" you are.
>
> I wish you guys would get rid of your arsenal before you get too much into
> this macho 'real man' business.
>
>
>
> Brian Kelly wrote in message <39F6D439.4B7D590A@dvol.com>...
> >
> >Heath wrote:
> >
> >> Put it on the antenna range at the VHF
> >> conferences and show us some real world results that are of more
> substance
> >> than theory and then I will be interested.If you are not willing to do
> that
> >> then please don't waste the time of honest intelligent people who are
> here
> >> to learn and help others in the spirit of amateur radio.
> >
> >>
> >I'd like to run against him on 20m in the CQ WW cw bash with 100 watts
and
> a
> >dipole . . . separate the men from the boys real quick like.
> >>
> >w3rv
> >
> >
>
>

1193. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 04:22:56 UTC
From: John Peterson <jpeterson@optushome.com.au>
Message-ID: <39f903bb@turakina.six.asn.au>
Source record: 177692

I would suggest you be VERY careful modelling a fractal design in EZNEC and comparing it with an arbitary shape design.

As we know EZNEC splits the antenna up into segments. As soon as you do this you are giving your random design structure and I would expect it to be modeled more as if it were fractal shape (well, that is if you call the 10m antenna on frac's site a fractal shape - personally I would argue that is is not truely fractal - or fractal to three levels only)

It does say something that your model of the frac design performed as he claimed his practical version did, however.

It really goes against a lot of other posts I have seen. The real question is "what is a fractal shape" and how many times the basic unit has to be repeated inside itself to be classed a "fractal antenna".

Given that there has only been personal attacks to try to discredit this design and your modelling agrees with the designers specs I am considering building one. I don't yet have an antenna for 6m so you like to get the design (i.e. the length of one edge of the outside box) for it for 52MHz.

Perhaps I could just scale it to be about 60% smaller? That would make it abot 3 feet square - not a bad size 6m antenna.

VE9SRB wrote in message ...
>Although there is no dispute that the MI2 Fractal Loop performs or works as
>claimed and offers this performance in a reduced aperture, it is evident
>that the Fractal nature of the antenna geometry is not the significant
>factor in determining the antenna's performance. To verify this, an EZNEC
>model of the MI2 antenna was created as a method to determine the baseline
>performance of the MI2. The baseline MI2 performance at first resonance is
>as follows:

1194. Re: Calibration of Bird Wattmeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 05:09:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8tb2ll$bg8$8@bashir.peak.org>
Source record: 177695

Richard Clark <rwclark@seanet.com> wrote:

: Finally! Corroborating testimony from another who has worked at the
: bench with these instruments.

: The 5% specification was always a fantasy and as you indicate even for
: BRAND NEW.

Not surprising - as they contain analog meters, and most meters are not
accurate to better than 10% FSD.

--
Bill Nelson (billn@peak.org)

1195. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 05:16:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39F90F9A.7C39322C@eznec.com>
Source record: 177693

John Peterson wrote:
>
> I would suggest you be VERY careful modelling a fractal design in EZNEC and
> comparing it with an arbitary shape design.
>
> As we know EZNEC splits the antenna up into segments. As soon as you do
> this you are giving your random design structure and I would expect it to be
> modeled more as if it were fractal shape (well, that is if you call the 10m
> antenna on frac's site a fractal shape - personally I would argue that is is
> not truely fractal - or fractal to three levels only)
> . . .

I don't quite follow this. Are you saying that EZNEC analyzes any
antenna as though it were a fractal, or that it will convert any antenna
into a fractal form for calculation?

Roy Lewallen, W7EL

1196. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 05:35:44 UTC
From: spam_me_not@azstarnet.com
Message-ID: <39f9109f.53955694@news.azstarnet.com>
Source record: 177694

On Thu, 26 Oct 2000 20:30:07 -0500, CAM <cam2338@bigfoot.com> wrote:

>Jules J-Omega wrote:
>>
>> Cam - how do you know?
>> It would be a litle difficult to measure.
>
>I have a bunch of 600 ohm 50w non-inductive resistors removed from
>old military SWR meters and I have paralleled 8, 12, and 16 of them.
>The power output of my IC-706 is greatest at 50 ohms. Until 12 watts
>reflected power is reached, the IC-706 obeys the following rule:
>Forward power equals 100 watts minus reflected power. The power output
>of the PA is reduced by the magnitude of the reflected power until
>12 watts reflected is reached. After that, the power output of the
>PA is reduced to maintain a constant 12 watts reflected. ICOM obviously
>detects reflected power internally using a 50 ohm circuit.
>
>So the question is: Since the IC-706 outputs its maximum available
>power only into a 50 ohm load, is it by definition, conjugately matched
>at 50 ohms? :-)

High quality lab signal generators use feedback to improve source match, ie, maintain a 50 ohm output impedance. In the bad old days, it was common to install a directional coupler and diode detector in a test setup and feed the detected signal back into the "leveling" input on the generator. Often the detector was placed some distance from the generator output spigot.

I think we should put the alc detector at the antenna and we wouldn't have to worry about swr any more. Just turn up the wick until you get 1500 W at the antenna and call CQ DX.

Also, (and this isn't just in response to Cecil's post but a general comment on this thread) there are high power amplifiers designed for antenna and susceptibility testing that put out 1KW+ and are true 50 ohm output devices. They use distributed amplifier techniques to achieve excellent linearity, wide instantaneous bandwidth, good source match and they tolerate running into open or short circuits. Efficiency is poor, but what the hey, we're rated on output power these days so who cares:))

Just line up a dozen 8877's and have at it.

73,

Wes

>--
>http://www.mindspring.com/~w6rca

1197. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 06:40:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39F92379.C7E7388F@oio.net>
Source record: 177696

reklaw.m@juno.COM wrote:
>
> Maxine,
> Thank you for the information.
> I don't like either Algor or Bush and was going to "throw my vote away"
> and vote for
> Pat Buchanon. Now that you have shown how Bush is not a Lawyer and he is
> for
> personal freedoms, right to life and pro-gun laws, I have changed my
> mind.
> I will not throw my vote away. I hope you show others the error of their
> ways.
>
> GO GEORGE BUSH !!
>
> Thanks again,
> Mike

Sort of 'off topic' isn't it?
'Doc

1198. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 09:54:07 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39F950A0.D0520610@dvol.com>
Source record: 177697

John Peterson wrote:

> I'll stick out my chest and be a real man.

>
My comment is about the effectiveness of antennnas in amateur radio dx
contests. Radiosport. Amateur radio olympics of sorts. Sort of like Australia
just hosted. Australian dx contesters are just a "macho" as us Yanks.
>

> Its a bit of a worry for the rest of the world when you Americans are the
> only ones to ever (a) drop a nuclear bomb on a civilian city or (b)
> threatened to start a nuclear war and yet you haven't learnt your lesson.
> Still brooding around trying to prove what "real men" you are.

>
You're academically a bit weak in history, son.
>

> I wish you guys would get rid of your arsenal before you get too much into
> this macho 'real man' business.

>
Also take your lament to the Russians, French, Pakis, etc.
>

1199. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 10:06:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tbjteflt1@neptunium.btinternet.com>
Source record: 177698

Cecil, as usual your comment, if not entirely correct, is in
the right ball park.

As you are almost 1/4 of the way round the globe from me,
even when both of us are standing upright (ie., both sober)
we are at right angles to each other.
--

Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

CAM wrote
>
> Reg, You must be asleep (horizontal) while I'm still wide
> awake and vertical.

1200. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 10:18:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tbkl4$9ij$1@uranium.btinternet.com>
Source record: 177699

Fortunately it is NOT a conjugate match delivering maximum
available power into 50 ohms. Japanese designers have more
sense.

Cecil, just a suggestion, go ahead and vary the load for
maximum output with maximum available PA drive, with ALC
disabled, and report your results on this newsgroup. ;o)
--

Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

CAM wrote ..
> Ian Jackson wrote:
> > Is the output impedance of your transmitter equal to the
load of your
> > antenna feedpoint (ie 50 ohms)? ....
>
> If it delivers its maximum available power into a 50 ohm
load, isn't
> that a conjugate match by definition? :-)

1201. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 11:29:07 UTC
From: woodsglen
Message-ID: <39F96703.4191CDF0@attglobal.net>
Source record: 177700

I borrowed my father's MFJ and I hope he forgets where he put it! Good
little tool

Kirby wrote:

> I'm considering purchasing an antenna analyzer - the MFJ or something in
> that price range. Yeah, I know what MFJ stands for .... ;) . Have
> there been any comparison reviews done?
>
> Kirby

email wgvideo at attglobal dot net

1202. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 11:37:58 UTC
From: w1rfi@aol.com
Message-ID: <20001027073758.10143.00000658@ng-cd1.aol.com>
Source record: 177701

>From: richardharrison@webtv.net (Richard Harrison)

>"Recent measurements using antennas somewhat below treetop level in
>densely wooded areas indicate that with both the transmitting and
>receiving antennas so situated, the loss is about 3 or 4 db for
>frequencies in the 20- to 40-mc band, and 10 db in the 70- to 100-mc
>band. With horizontal polarization, the losses are negligible at 20 to
>40 mc and quite small at 70 to 100 mc."
>
>There is more about dense rain forests and scattered trees, but the
>trends are clear from the above.

There may be a word missing in that paragraph -- is that 3-4 dB/mile? On HF, it certainly can't be 3-4 dB/tree. :-)

Too, this would be for propagation between two stations located on the ground -- direct or ground wave. The typical HF antenna located in the trees would be launching energy skyward for most paths, passing through about 0.002 mile of tree, typically.

73,
Ed Hare, W1RFI

1203. Re: PUBLIC NOTICE Fractenna flauts Federal Law

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 11:38:02 UTC
From: "Wayne N3TNS"
Message-ID: <39F9691A.359B8E8D@attglobal.net>
Source record: 177702

I agree and have said the same in the past. He seems like a bright guy
but his childish behavior sort of negates any credibility. He may very
well have made a huge breakthrough in antennas, but I'll never know
because I'm not one to judge, I know relatively little compare to the
others here, but it's the behavior and constant arguing that sends up a
big red flag. He just does things that lack good judgement.

Wayne

Gerald Schmitt wrote:

> In the furtherance of his Jihad against Roy Lewallen some person
> using the Fractenna@aol email address has violated the CFRs by
> knowingly publishing Official Use Only information in a general news
> area of usenet. The page that contains this information is clearly
> labled prohibiting use of any of the information for any non-official
> purpose as well as the appropriate CFR citation.
>
> It is highly unlikely that any legal action will be taken in this case
>
> but this behavior does speak clearly to the moral climate at
> Fractenna.
>
> To paraphrase George Orwell in 'Animal Farm' ,"All the animals in
> this newsgroup are equal some are just more equal." Since Chip
> will undoubtedly try to twist this let me interpret for his
> edification. What I mean exactly is, that while trying to enforce
> pseudoleagal bafflegab against any and all who do not worship
> at the alter of the Fractal God Chip feels no obligation to follow
> either the law of the land or the standards of decent human behavior.
>
> Having had significant dealings with small children I am familiar with
>
> Chip's behavior but my kids outgrew it by their 4th birthday it would
> seem that the Cohen's kids did not, at least in Nathan's case.
>
> When a grown man acts in public like a spoiled 3-year-old I don't
> think it unreasonable to call in to question his metal state. This
> type of constant addictive need for attention is not a usual or
> common thing and my understanding of common usage American
> English the term for this is abnormal.
>
> Please spare us the tirade about trying to protect your copyright.
> This has nothing to do with your copyright it everything to do with
> your abnormal, unnatural need for attention and acceptance. Get

> some professional help I'm worried about you. If you lived closer
> and/or had any history of doing more than blustering I would be
> worried about me.

email wgvideo at attglobal dot net

1204. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 11:40:29 UTC
From: "Wayne N3TNS"
Message-ID: <39F969AC.2660233B@attglobal.net>
Source record: 177703

AHoy Mate! That ought'a blow a fuzz at the Fractal Factory
Wayne

Roy Lewallen wrote:

> More MI2 'challenge' files have been uploaded to my site. They are
> random4.EZ, random4.txt, random5.EZ, and random5.txt, all submitted by
> Steve Best, VE9SRB. You can get them from ftp://eznec.com/pub/MI2/, or
> you can go to http://eznec.com and click the "FTP Site" link. The text
> files give more information about the corresponding .EZ files, and the
> 0Notes.txt file at the same URL has more information about all files.
> All files submitted to date are compressed into MI2.ZIP.
>
> More information about the purpose of these files and why they're posted
> can be found at the deja.com archive at
> http://x76.deja.com/[ST_rn=ps]/getdoc.xp?AN=673944577&CONTEXT=972449784.1468334083&hitnu
m=11.
> Chip's original "Challenge" posting is archived at
> http://x67.deja.com/[ST_rn=ps]/getdoc.xp?AN=657467296&CONTEXT=972215956.414253064&hitnum
=17.
>
> Caution: If you click either of the above links while viewing with your
> browser, it might not take you to the desired location if the displayed
> link is wrapped onto more than one line.
>
> Although the 'challenge' officially ended on September 30, the questions
> it raises are still relevant to the subject of this newsgroup.
>
> Roy Lewallen, W7EL

email wgvideo at attglobal dot net

1205. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 11:47:00 UTC
From: "Wayne N3TNS"
Message-ID: <39F96B34.6AADC83A@attglobal.net>
Source record: 177704

It was a joke you idiot... lighten up!

John Peterson wrote:

> mmmm......
>
> I was a CBer for about 3 years before I got my amateur license (that was
> over 20 years ago). Since then I have been a radio tradesman, technical
> officer and scientist.
>
> The implication in your post is that CBers are somehow stupid and you are
> somehow superior.
>
> Putting yourself on a holy grail as you do only makes YOU look like a a
> contemptuous old has-been.
>
> Why don't you just leave it alone and start discussing amatuer antennas (as
> per the newsgroup title) instead of posting you personal vendettas for the
> world to see.
>
> Heath wrote in message ...
> >URGENT NEWS FLASH !!!!
> >
> > Fractenna has now made the ultimate move to silence all of the people
> >with half a brain by now posting his crap to the C.B. newsgroup.
> > Expected results and reports are as follows:
> >(1)YOU'RE WALL TO WALL AND TREETOP TALL(technical fractal lingo for I can
> >hear you across the street as well as with your $5 Wal Mart antenna.)
> >(2)YOU'RE HITTING ME WITH 40 POUNDS(technical fractal lingo for you are
> just
> >as loud as when on your dummy load.)
> > (3) JUST WAIT TILL I GET THIS THING 100 FEET IN THE AIR.(That will of
> >course have to wait till I can get my anechoic chamber up there too)(hmmm
> >Chip never told me if I needed to run a feedline too)
> > (4)THE REAL TEST WILL BE TO SEE HOW MUCH POWER IT CAN HANDLE BEFORE
> >MELTING.(after all if Chip is legal he can not even begin to approach the
> >output power of a C.B. station.)
> > (5) Chip publishes all of thes words and descriptions about it but I have
> >never once read what the overpass clearance is for it on an 18 wheeler.

email wgvideo at attglobal dot net

1206. Re: lawsuit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 12:31:25 UTC
From: fractenna@aol.com
Message-ID: <20001027083125.14694.00000269@ng-cb1.aol.com>
Source record: 177705

>Lawsuit watch day 7...
>
>Once again the sun sets with no appearance of the process server, Even in
>the days of the pony express it did not take a week from Mass to Georgia.
>From this point forward I will only post weekly watch reports and then later
>on monthly and yearly. Fractenna is a loud boorish fraud, he enjoys bulling
>folks that just enter the group and don't know that he is just a keyboard
>Rambo.
>
>You had your chance Fracky, don't ever in this or any other life time
>threaten me with a law suit unless you have the balls to go forward with it.
>I hope that Roy and all the others on the newsgroup take note of your
>bombastic bleating for exactly what it is, an aging boy genius seeking
>attention by any means possible...
>
>
>

Mr. Hambrecht:

I stay true to form sir; IF you post a copyright file which belongs to me then you will be subject to lawsuit.

Nathan Cohen, Ph.D.

1207. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 12:37:22 UTC
From: fractenna@aol.com
Message-ID: <20001027083722.14694.00000271@ng-cb1.aol.com>
Source record: 177706

>
>I would suggest you be VERY careful modelling a fractal design in EZNEC and
>comparing it with an arbitary shape design.
>
>As we know EZNEC splits the antenna up into segments. As soon as you do
>this you are giving your random design structure and I would expect it to be
>modeled more as if it were fractal shape (well, that is if you call the 10m
>antenna on frac's site a fractal shape - personally I would argue that is is
>not truely fractal - or fractal to three levels only)
>
>It does say something that your model of the frac design performed as he
>claimed his practical version did, however.
>
>It really goes against a lot of other posts I have seen. The real question
>is "what is a fractal shape" and how many times the basic unit has to be
>repeated inside itself to be classed a "fractal antenna".
>
>Given that there has only been personal attacks to try to discredit this
>design and your modelling agrees with the designers specs I am considering
>building one. I don't yet have an antenna for 6m so you like to get the
>design (i.e. the length of one edge of the outside box) for it for 52MHz.
>
>Perhaps I could just scale it to be about 60% smaller? That would make it
>abot 3 feet square - not a bad size 6m antenna.
>
>VE9SRB wrote in message ...
>>Although there is no dispute that the MI2 Fractal Loop performs or works as
>>claimed and offers this performance in a reduced aperture, it is evident
>>that the Fractal nature of the antenna geometry is not the significant
>>factor in determining the antenna's performance. To verify this, an EZNEC
>>model of the MI2 antenna was created as a method to determine the baseline
>>performance of the MI2. The baseline MI2 performance at first resonance is
>>as follows:
>

John--

The very first fractal antenna article shows a 6M MI2, in 1995.

I would be happy to send you the MI2 file EZNEC for 6M, so that you can build and see the impedance is very close to 50 ohms. The file is copyright and can only be used as a personal one under "fair use", and not published or distributed elsewhere.

Drop me e-mail and I will send it out.

73
Chip N1IR

1208. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 12:39:01 UTC
From: fractenna@aol.com
Message-ID: <20001027083901.14694.00000273@ng-cb1.aol.com>
Source record: 177707

Murray Neece has a history of libel and character assassination, documented publicly on this NG. Nothing he does would surprise me.

If you need copies of his libelous posts, let me know.

I would never have anything to do with this person.

73
Chip N1IR

1209. Re: Why does N1IR cancel NG postings so often?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 12:44:11 UTC
From: fractenna@aol.com
Message-ID: <20001027084411.14694.00000276@ng-cb1.aol.com>
Source record: 177709

>
>Look at the emotional response below !! I must have hit a
>sensitive spot....Get some help doughboy...I understand that
>you have a severe weight problem...
>.
>You REALLY need to see a
>shrink...(for your brain and body) I suspect that you are on the verge
>of a meltdown...so do it soon...are you really as FAT as they say? Also,
>why is your immune system so compromised?..given your last
>widely publicized "sickness",...many AIDS patients have similar problems.
>What is your problem? Are you well yet or still sick?...:>) Is this the
>reason
>for your irrational attack on Roy? Are you a victim of some insidious
>disease
>that is causing your stupid behavior? We would like to know.
>This may help you in your defense in the counter suits you will receive
>when you sue everyone you have promised to sue...
>
>BTW...what does monoganmous mean? The closest thing I could
>find indicates that the added "N" means a negation or opposite
>meaning of your original statement...are you gay or do you screw
>around on your wife?
>
>Hope this helps...
>
>
>Path:
>reader4.news.rcn.net!feed1.news.rcn.net!rcn!europa.netcrusader.net!152.163.2
>39.131!portc03.blue.aol.com!audrey04.news.aol.com!not-for-mail
>From: fractenna@aol.com (Fractenna)
>Newsgroups: rec.radio.amateur.antenna
>Message-ID: <20001024072323.23687.00000428@ng-ff1.aol.com>
>Xref: reader4.news.rcn.net rec.radio.amateur.antenna:140569
>
>>You are a sick fellow. I am a married monoganmous homosexual. The date is
>for
>>the 10M Contest.
>>
>>Are you divorced? Why did your marriage break up?
>>
>>Just out of curiousity, do you own a toupee? Does it help for the older
>guys
>>out dating again? What about getting rid of the coke bottle glasses?
>>

>>I'm just curious to know as I do have some friends out on the prowl again
>>looking for tips.
>>
>>What works for you Chuck?
>>
>>
>>73
>>Chip N1IR
>>
>

Chuck O'Neal has modified the above post to make it exactly the opposite of what I said.

Here's what I said:

"You are a sick fellow. I am a married monoganmous heterosexual. The date is for
the 10M Contest."

I still feel you are a sick fellow Chuck.

I have colleagues who have died of AIDS. It is a horrible death and tragic for all who know those who die in this untimely way, and for those who love and cherish their friendship and talents.

I miss them.

I do not have AIDS Chuck. Also, I am not gay and I am not fat.

73
Chip N1IR

1210. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 12:44:54 UTC
From: Al <ABurzynski@swri.edu>
Message-ID: <sviu6785drmu67@corp.supernews.com>
Source record: 177708

Thanks to all for all the tips and information. My xcvr battery has been up for about 11 years now so I better replace it. The board does sound a bit pricy especially if the battery can be replaced. Looks like the weekend is planned.
Thanks again.
Al

"Dick Hughes" <rhughes33@cableone.net> wrote in message news:7tlhvs0r8gb6ukq20ldk2ti94p871ivoal@4ax.com...
> That's not a bad idea if there's enough room

1211. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 13:01:36 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Q0fK5.7670$MR3.424967@bgtnsc04-news.ops.worldnet.att.net>
Source record: 177710

"John Peterson" <jpeterson@optushome.com.au> wrote in message
news:39f903bb@turakina.six.asn.au...
> I would suggest you be VERY careful modelling a fractal design in EZNEC
and
> comparing it with an arbitary shape design.
>
> As we know EZNEC splits the antenna up into segments. As soon as you do
> this you are giving your random design structure and I would expect it to
be
> modeled more as if it were fractal shape (well, that is if you call the
10m
> antenna on frac's site a fractal shape - personally I would argue that is
is
> not truely fractal - or fractal to three levels only)
>

Hi John:

I don't quite follow your statements regarding EZNEC modeling a "random" shape as a Fractal. Perhaps the word "random" is a bit ambiguous. "Arbitrary" is clearly a better choice of wording. The only point in the comparisons is that taking the same total length of wire as in the MI2 and rearranging it into a non-fractal shape within the same physical aperture, you will get similar or in some cases better performance. The only constraint that I maintain in the arbitrary arrangement is keeping the shape symmetrical. Although Fractal loop antennas are always symmetrical, all symmetrical loop antennas are not Fractals. This distinction needs to be recognized in the discussion.

Steve

1212. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 13:23:57 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8tbvl6$hl8$1@nnrp1.deja.com>
Source record: 177711

In article <39F8C479.FCD3D727@dvol.com>,
Brian Kelly <kelly@dvol.com> wrote:
>
>
> Peter Bertini wrote:
>
> > . . . You'll recognize
> > this type of cable if you ever see it, the braid looks like it was
dipped
> > in ScotchKote or something similar.
>
> OK, good. I was conjuring up visions of somebody pumping some kind of
goo into
> an underground PVC coax conduit. Understood. Tnx.
>
> >
> > Regards
> >
> > Peter
>
> >
> w3rv
>
>
Peter is correct,CATV hardline designed for underground use also has
the sticky stuff. Wicking is less of an issue with hardline, but
corrosion of the aluminum shield is still a concern. Especially in
alkaline soils, the aluminum can become a white powder is in short
order.
-- BillN6VLR

Sent via Deja.com http://www.deja.com/
Before you buy.

1213. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 13:34:50 UTC
From: richardharrison@webtv.net
Message-ID: <4655-39F9847A-3@storefull-117.iap.bryant.webtv.net>
Source record: 177712

Ed Hare, W1RFI wrote:
"---is that 3-4 dB/mile?"

Good question.

The quotation is from the War Department`s engineering manual. I think the authors were measuring loss between two points on the ground within line of sight distance. The military used frequencies between 20 MHz and 100 MHz for vehicular communications in WW-2. Old timers will remember the "tank sets" with chromium push-buttons, etc.. We used the same radios aboard our navy ship to communicate with other ships in convoy, and tanks on shore, or on our tank deck. We didn`t consider FM communications at VHF a violation of radio silence except when the times were considered perilous, like dawn, dusk and night.

What is missing from the War Department data is the distance between measurement sites. The authors probably wanted to give a feel for the problem without being held responsible for exact numbers. There is wide variation in foliage and density. Terrain variations could obviate the foliage problem. Radio users could be on opposite sides of a valley or on opposite sides of a mountain.

The data show that lower frequencies are less affected by foliage than higher frequencies. Also, horizontally polarized waves are less affected than vertically polarized waves as would be expected, unless tree growth were primarily horizontal instead of vertical.

From the trend of the measurements, I think trees are of little concern if you are using horizontally polarized sky-waves for short and medium distances, and not too serious a problem at low elevation angles for great distances.

Best regards, Richard Harrison, KB5WZI

1214. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 13:39:44 UTC
From: "Louis A. Bellock" <lbellock@hoflink.com>
Message-ID: <8tc0gp01ae9@enews4.newsguy.com>
Source record: 177714

Hi Tom, My reply to your email was bounced back, here's my general reply to the group. I thought all in the group could be helped by this advice.

Regards, Lou N2JPR

Hello Tom,

My name is Lou, callsign N2JPR. Unfortunately, I had the same situation twice in my life, a condo and an upstairs apartment, both with attics. My nightmare has been over for years. My advice is as follows:

1. The only, and ultimate, solution is to permenantly move to your own house on a minimum 1/2 acre wooded plot. There, you can play "antenna" and put out KW level signals until your hearts content without bothering neighbors, etc.

2. If you choose to mount "anything" in this attic, it will definitely interfere with all the usual electronic junk (cordless and hardwired phones, digital appliances [TVs, VCRs, Stereos, etc.] alarms [including smoke], etc., etc.) at anything greater than 10 watts. Your neighbors (or in some cases, your WIFE) WILL find you out and at the very least report you to the condo association who will threaten to evict you (DIVORCE in some cases) if you don't stay off the air. If you now become a QRP'r at 5 watts or less you should have no problem interfering with others at those close antenna-electronic junk distances.

3. Now comes the NEW problem. Your attic antenna, compared to a REAL outdoor antenna (dipole, beam, vertical, etc.) really SUCKS. So, between your inefficient antenna system and your 5 watts of power, your destined to become one of 2 things:

a. A super-frustrated ham operator, in good standing with your condo association (in some cases WIFE) with no signal, no QSOs and no QSL cards (DX will soon become a fantasy).

b. A very happy shortwave listener until the day you bite the bullet and buy your own piece of land.

Two-cents from a happy ham, now on solid ground with antennae and signals galore.

73, Lou N2JPR

----- Original Message -----
From: <tegwilym@my-deja.com>
Newsgroups: rec.radio.amateur.antenna
Sent: Wednesday, October 25, 2000 12:43 PM

Subject: HF attic antenna adivice

> I live in a condominium that has all the usual rules against antennas,
> color of curtains, pet....etc. I am trying to figure out what kind of
> antenna I could put in my attic that might work ok on the 10-20 meter
> bands. I currently have a vacant unit next door to me that was just
> sold, so I figure this would be a good time to sneak around up in the
> attic without anyone hearing me up there. I do have one of
> those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
> search) in the hallway and can't get it tuned up to transmit. I am
> thinking of maybe putting that up in the attic or maybe just a normal
> dipole up there. I am estimating that I have about 50 or 60 feet of
> room that I can play with up there. The attic is pretty short, only
> about 30 inches tall at the peak of the roof.
>
> I do have a QFH antanne up there right now for receving the NOAA
> satellite images on 137mhz and have had great results from that, so I
> know an antenna is possible up there.
>
> Any ideas from any of you condo dwellers?
>
> Tom KA7VIK
> Seattle
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1215. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 14:16:10 UTC
From: richardharrison@webtv.net
Message-ID: <4655-39F98E2A-4@storefull-117.iap.bryant.webtv.net>
Source record: 177715

Wes Stewart, N7WS wrote:
"---they tolerate running into open and short circuits."

Easy to determine their internal impedance?
Divide the open circuit voltage by the short circuit current.

Best regards, Richard Harrison, KB5WZI

1216. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 14:17:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tc2qj$j60$0@208.207.71.133>
Source record: 177713

ehsjr@bellatlantic.net wrote:
>
> What you don't seem
> to realize is how pathetic you make yourself look in so doing.
> It is sad to see you - a grown man - babbling foolishly.
> You do yourself a horrible disservice.

But he certainly does the rest of us a great service in that he reveals his calibre exactly for all the world to see in cyrstal clear detail. As an appendage to that display, he also reveals the truth about his Fractal nonsense, which is to say that there is NO truth to any claim of the superiority of any design based on fractal shapes. They just LOOK differnt, and it sure appears that his scam is based on that fact plus references to others' writings which prove no such nonsense. Steve's analysis finished dispelling that myth. Now all he can do is whine abouit how "wrong" Steve is, still without support whatever, only those vague references to others obscure writings which do NOT support his conslusions. Blaaaaaaashhhhhh..

1217. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 14:48:38 UTC
From: richardharrison@webtv.net
Message-ID: <4654-39F995C6-24@storefull-117.iap.bryant.webtv.net>
Source record: 177570

I wrote:
"There is wide variation in foliage and density."

Of course, there is seasonal variation. An afterthought is that generals refight the last war. The military schemers probably emphasized Europe in their tree thoughts. Forests in Europe tend to be swept clean of underbrush. The practice is to gather everything for fuel and other uses. Even the lower branches are plucked.

A relatively clean wooded area was probably used for the War Department`s tests of foliage attenuation. Attenuation from trees outside Europe is probably worse. Just speculation.

Best regards, Richard Harrison, KB5WZI

1218. Re: lawsuit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 14:52:58 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <as4ct8.qgs.ln@mail.specsol.com>
Source record: 177716

Fractenna <fractenna@aol.com> wrote:
>>Lawsuit watch day 7...
>>
>>Once again the sun sets with no appearance of the process server, Even in
>>the days of the pony express it did not take a week from Mass to Georgia.
>>From this point forward I will only post weekly watch reports and then later
>>on monthly and yearly. Fractenna is a loud boorish fraud, he enjoys bulling
>>folks that just enter the group and don't know that he is just a keyboard
>>Rambo.
>>
>>You had your chance Fracky, don't ever in this or any other life time
>>threaten me with a law suit unless you have the balls to go forward with it.
>>I hope that Roy and all the others on the newsgroup take note of your
>>bombastic bleating for exactly what it is, an aging boy genius seeking
>>attention by any means possible...
>>
>>
>>

> Mr. Hambrecht:

> I stay true to form sir; IF you post a copyright file which belongs to me then
> you will be subject to lawsuit.

> Nathan Cohen, Ph.D.

Sounds to me like someone is backpeddling on their lawsuit threats.

Is reality slooooowly sinking into the fractaled brain of the Chipster?

Did he actually contact a real lawyer only to be told he's stuffed like
a Thanksgiving turkey?

Stay tuned for the next exciting episode of "Dr InCoherent and his Magic
Lawsuit Machine" appearing on every usenet newsgroup.

Jim Pennino

1219. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 15:03:13 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80524607B@www.indianarep.com>
Source record: 177718

Don't be too discouraged. I ran with a 20 M dipole in my attic for quite a while and it worked reasonably well (down an S unit or two from the one I have now at 40 feet (outside, of course). It is a bit noisier that being outside (I've got dimmers on practically every light, and these are mostly recessed in the ceiling below).

You don't need a kilowatt. 100 or 200 gets me through even thereally tough pileups. Read the Oct QST article on the difference between different power levels.

Consider an Alpha-Delta DX-CC and "trim off" the 80/40 meter portion (it's longer than you have room for) - and you'll have 20, 15, 12 and 10M.

You should do fine. Just remember to do your RF eval

I put eye-hooks into the ridge beam and suspended the wire from that so it was as high as possible.
Louis A. Bellock <lbellock@hoflink.com> wrote in message news:8tc0gp01ae9@enews4.newsguy.com...
> Hi Tom, My reply to your email was bounced back, here's my general reply to
> the group. I thought all in the group could be helped by this advice.
>
> Regards, Lou N2JPR
>

> _____
>
> Hello Tom,
>
> My name is Lou, callsign N2JPR. Unfortunately, I had the same situation
> twice in my life, a condo and an upstairs apartment, both with attics. My
> nightmare has been over for years. My advice is as follows:
>
> 1. The only, and ultimate, solution is to permenantly move to your own house
> on a minimum 1/2 acre wooded plot. There, you can play "antenna" and put out
> KW level signals until your hearts content without bothering neighbors, etc.
>
> 2. If you choose to mount "anything" in this attic, it will definitely
> interfere with all the usual electronic junk (cordless and hardwired phones,
> digital appliances [TVs, VCRs, Stereos, etc.] alarms [including smoke],

> etc., etc.) at anything greater than 10 watts. Your neighbors (or in some
> cases, your WIFE) WILL find you out and at the very least report you to
the
> condo association who will threaten to evict you (DIVORCE in some cases)
if
> you don't stay off the air. If you now become a QRP'r at 5 watts or less
you
> should have no problem interfering with others at those close
> antenna-electronic junk distances.
>
> 3. Now comes the NEW problem. Your attic antenna, compared to a REAL
outdoor
> antenna (dipole, beam, vertical, etc.) really SUCKS. So, between your
> inefficient antenna system and your 5 watts of power, your destined to
> become one of 2 things:
>
> a. A super-frustrated ham operator, in good standing with your condo
> association (in some cases WIFE) with no signal, no QSOs and no QSL cards
> (DX will soon become a fantasy).
>
> b. A very happy shortwave listener until the day you bite the bullet
and
> buy your own piece of land.
>
> Two-cents from a happy ham, now on solid ground with antennae and signals
> galore.
>
> 73, Lou N2JPR
>
> ----- Original Message -----
> From: <tegwilym@my-deja.com>
> Newsgroups: rec.radio.amateur.antenna
> Sent: Wednesday, October 25, 2000 12:43 PM
> Subject: HF attic antenna adivice
>
>
> > I live in a condominium that has all the usual rules against antennas,
> > color of curtains, pet....etc. I am trying to figure out what kind of
> > antenna I could put in my attic that might work ok on the 10-20 meter
> > bands. I currently have a vacant unit next door to me that was just
> > sold, so I figure this would be a good time to sneak around up in the
> > attic without anyone hearing me up there. I do have one of
> > those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
> > search) in the hallway and can't get it tuned up to transmit. I am
> > thinking of maybe putting that up in the attic or maybe just a normal
> > dipole up there. I am estimating that I have about 50 or 60 feet of
> > room that I can play with up there. The attic is pretty short, only
> > about 30 inches tall at the peak of the roof.
> >
> > I do have a QFH antanne up there right now for receving the NOAA

> > satellite images on 137mhz and have had great results from that, so I
> > know an antenna is possible up there.
> >
> > Any ideas from any of you condo dwellers?
> >
> > Tom KA7VIK
> > Seattle
> >
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
>

1220. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 15:07:49 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8052462A1@www.indianarep.com>
Source record: 177569

I'll take that luggage in Samsonite, please....

A rat done bit my sister Nell

With whitey on the moon

Her face and arms began to swell

And whitey's on the moon

I can't pay no doctor bills

And whitey's on the moon

Ten years from now, I'll be payin' still

While whitey's on the moon

You know, the man just upped my rent last night

'Cos whitey's on the moon

No hot water, no toilets, no lights

But whitey's on the moon

I wonder why he's uppin' me

'Cos whitey's on the moon?

Well, I was already givin' him fifty a week

And now whitey's on the moon

Taxes takin' my whole damn check

The junkies make me a nervous wreck

The price of food is goin' up

And as if all that crap wasn't enough

A rat done bit my sister Nell

With whitey on the moon ...

Unclaimed Mysteries <k4doh@mindspring.com> wrote in message
news:8taodi$v6f$1@nntp9.atl.mindspring.net...
, OT, for 500 points and the new set of luggage, complete the
> following: A rat done bit my sister Nell......
>

1221. Re: Fractenna Gets the REAL EXPERTS Involved now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 15:11:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tc5u8$1gh$0@208.207.71.133>
Source record: 177717

John Peterson wrote:
>
> I'll stick out my chest and be a real man.

Sorry John, it takes more than just a preening display. Fractenna has proved that, yet once again as has been done so many times throughout history.

>
> Its a bit of a worry for the rest of the world when you Americans are the
> only ones to ever (a) drop a nuclear bomb on a civilian city or (b)
> threatened to start a nuclear war and yet you haven't learnt your lesson.

Yeah, didn't Harry Truman show real intestinal fortitude when he did that? What if Hitler'd had that technology? Your dear old Iles would still be red hot and unihabitable. Of course, illiterates like you can't see what Truman saw clearly- that it was either a large number of them, or a large number of us that had to go, in settling the issue. He clearly saw that the best, cheapest way - for *both* sides- to settle it was to do exactly what he did. Pleasant it was not. Very applicable it was indeed.
I can't help wondering where the brainpower is centered in the Isles- can't you people understand that the best way to change the mind of warlords and their committed followers is to simply give them far more of their favorite subject than they could ever want? Quickly and decisively? That was probably the ONLY way to ever change the Japanese mindset and change it quickly and permanently. Anything less would have served only to stiffen their resolve, prolonging the conflict with far greater numbers of casualties on both sides.

> Still brooding around trying to prove what "real men" you are.

Here in the Colonies we oh so often in the past century have had reason to wish fervently that you Islanders had a much better supply of gonads.

> I wish you guys would get rid of your arsenal before you get too much into
> this macho 'real man' business.

Ah, and you'd rather succumb to the likes of Saddam etc or the late not so great Red Square inhabitants than to tolerate the "presense" of our defensive hardware? Truth to tell, we HAVE elimnated much of our arsenal. I know a bunch of former Minuteman sites that are now vacant lots. But hopefully we can survive the Clinton/Gore era with enough of it intact to keep YOU free, too.

Hang in there, Pal. I'd bet whoever is left overe here with any sense of responsibility will come to your rescue yet again when it becomes necessary. And your post makes it quite clear that it WILL again someday be necessary. Some folks just never learn......

1222. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 15:26:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tc6qc$1gh$1@208.207.71.133>
Source record: 177571

There's an aftermarket RAM board made in Spain, I believe which uses no battery, has better features than the original, according to users, and costs much less, shipped. I don't have the details in front of me but they can be gotten from others on the Icom list and the Icom net.

Dick

Dick Hughes wrote:
>
> That's not a bad idea if there's enough room. When I replaced the
> battery in my IC-271 (same battery) I used those tiny clip leads with
> the wire hook at the end to attach to the battery circuit at the
> easiest point. I used a second battery to power the circuit and
> unsoldered and replaced the existing battery. Was fairly easy to do,
> but wish I had thought of your idea. Of course I have solved the
> problem in my IC-745 with the Willco board. BTW, the battery in the
> IC-745 was still going at 15 years. Lucky I suppose.
>
> Dick - W6CCD
>
> On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
>
> >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> >and then just leave them in place? You could then just add the battery to the
> >holder, replace the old battery and then remove the battery from the holder until
> >next time. If there is enough room for this it would reduce wear and tear on the
> >pcb and make the change next time much easier as there is less to remember 5 years
> >down the road..

1223. Re: lawsuit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 15:30:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tc73f$1gh$2@208.207.71.133>
Source record: 177572

Fractenna wrote:
>
> >Lawsuit watch day 7...
> >
> >Once again the sun sets with no appearance of the process server, Even in
> >the days of the pony express it did not take a week from Mass to Georgia.
> >From this point forward I will only post weekly watch reports and then later
> >on monthly and yearly. Fractenna is a loud boorish fraud, he enjoys bulling
> >folks that just enter the group and don't know that he is just a keyboard
> >Rambo.
> >
> >You had your chance Fracky, don't ever in this or any other life time
> >threaten me with a law suit unless you have the balls to go forward with it.
> >I hope that Roy and all the others on the newsgroup take note of your
> >bombastic bleating for exactly what it is, an aging boy genius seeking
> >attention by any means possible...

> Mr. Hambrecht:
>
> I stay true to form sir;

That you surely do, but that's not the problem. That form is the
problem.

> IF you post a copyright file which belongs to me then
> you will be subject to lawsuit.

So sue him and shut up! You are nothing more than a huge bag of wind.
Hot air balloons anyone?

1224. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 17:14:39 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F9B7FF.E23B642@bigfoot.com>
Source record: 177573

Reg Edwards wrote:
> As you are almost 1/4 of the way round the globe from me,
> even when both of us are standing upright (ie., both sober)
> we are at right angles to each other.

That's interesting, Reg. If the end of your horizontal antenna
is pointing toward my vertical antenna, your horizontal antenna
is parallel to my vertical antenna. Parallel antennas are
usually best case, but in our case, it is worst case. :-)
--
http://www.mindspring.com/~w6rca

1225. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 17:25:36 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39F9BA90.1E9897B@bigfoot.com>
Source record: 177575

Al wrote:
> Thanks to all for all the tips and information. My xcvr battery has been up
> for about 11 years now so I better replace it. The board does sound a bit
> pricy especially if the battery can be replaced. Looks like the weekend is
> planned.

Good luck and remember, one false slip and it loses its smarts.
--
http://www.mindspring.com/~w6rca

1226. Re: lawsuit watch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 17:32:13 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tce8m$di0$1@iac5.navix.net>
Source record: 177574

I guess you are now saying that Steve Best's file does not belong to you.
Thank you, that is what all the group was saying in the first place. You
could have avoided a lot of grief with that one simple statement.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001027083125.14694.00000269@ng-cb1.aol.com...
> >Lawsuit watch day 7...

> Mr. Hambrecht:
>
> I stay true to form sir; IF you post a copyright file which belongs to me
then
> you will be subject to lawsuit.
>
> Nathan Cohen, Ph.D.

1227. Amplifiers and High Sierra Screwdriver

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 17:48:12 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <39f9c77f$0$35012$44a10c7e@news.net-link.net>
Source record: 177576

Any one using amplifiers with High Sierra screwdriver antennas? If so, how many watts, what kind of amp and how do you have the antenna grounded (bonded) to the frame of the vehicle (more than one braid, solid copper strap, other)? Do you use any type of cap hat? If so, what kind? How big? Do you need to tweak the tuning from barefoot position when you engage the amplifier? Ever have any corona?

1228. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 18:31:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <ERjK5.9789$mC.669979@monger.newsread.com>
Source record: 177577

Hello all,

Thanks to Richard C for referencing Reflections for this procedure. However, I'd like to clarify a point Richard made concerning 1/8 wl lines for the measurement.

There are two programs in Reflections, one for measuring and calibrating the feed line of any length for use at any frequency, including the effect of attenuation. The second program is for actually measuring the antenna feedpoint impedance through the line calibrated with the first program.

The reason for using 1/8 wl line for the feed line calibration only is that this length produces the most accurate data concerning the constants of the feed line, minimizing the errors as Richard explained.

Once the desired measurement line is calibrated at the frequency where it's 1/8 wl, it can then be used at any frequency, whatever its length, because the calibration procedure allows it to be used at any frequency, with the effect of attenuation included in the calibration measurement.

To confirm the accuracy of the measurements with this procedure I measured my 125-foot dipole with two different calibrated lines, one 1/4 wl at 3.797 MHz and the other 1/2 wl at 3.782 MHz. This difference in line length will yield the maximum error available for comparison.

The measurements were made with a General Radio GR-1606-A RF Impedance Bridge (years before I obtained more modern digital RF impedance measuring equipment), measuring line input resistance, reactance, and SWR, and then transforming the data through the calibrated line to the antenna terminals. Plots of resistance, reactance and SWR at the antenna terminals with each feed line resulted in almost perfect overlays, as can be seen in Fig 15-1 in Reflections. The overlapping plots also confirm the efficacy of the W2DU balun, because if common mode currents were flowing on the feed line the impedances appearing at the input of the feed line would not have transformed to nearly identical plots of antenna impedance using 1/4 wl and 1/2 wl feed lines.

Walt, W2DU

1229. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 18:46:17 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <39f9ced1$0$35012$44a10c7e@news.net-link.net>
Source record: 177578

Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for
free is solid center and solid skin, covered by a rubber coating, and it is
direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2 years
now with no problems, and last fall I even had a lot of fill dirt brought in
via 5 ton dump truck that drove over the hardline that was only burried
about a foot below the driveway with no ill effects.
Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
>
>"Brian Kelly" <kelly@dvol.com> wrote in message
>news:39F85471.B0F72054@dvol.com...
>>
>> BillN6VLR wrote:
>>
>> > I mostly
>> > work with 75 ohm CATV hardline and we use flooded cable. The flooding
>> > compund helps if you should happen to nick the jacket.
>>
>> >
>> What is "flooding" and "flooding compound"?
>> >
>> Tnx,
>> >
>> w3rv
>>
>
>Some CATV cables have the braid impregnated with a compound that prevents
>water migration
>through the length of the coaxial cable. A small slit or cut that would
>normally allow water to wick
>into to the braid if the braid wasn't flooded with this compound during
>manufacture. You'll recognize
>this type of cable if you ever see it, the braid looks like it was dipped
>in ScotchKote or something similar.
>
>Regards
>
>Peter
>
>

1230. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 19:25:18 UTC
From: rwclark@seanet.com
Message-ID: <3a07d55d.163752663@news.seanet.com>
Source record: 177579

On Fri, 27 Oct 2000 18:31:00 GMT, "Walter Maxwell" <w2du@journey.com>
wrote:

>
>The reason for using 1/8 wl line for the feed line calibration only is that
>this length produces the most accurate data concerning the constants of the
>feed line, minimizing the errors as Richard explained.
>
>Once the desired measurement line is calibrated at the frequency where it's
>1/8 wl, it can then be used at any frequency, whatever its length, because
>the calibration procedure allows it to be used at any frequency, with the
>effect of attenuation included in the calibration measurement.
>

Hi Walt,

Thanks for the clarification. I would like to point out that my
technique employs a variable length transmission line (much like
Cecil's except mine is switch selectable binary progressions of coax).

Due to your compelling logic for the line calibration, I typically set
my variable length line so that it is always establishes an odd 8th
wave long, length during measurements (ie. in combination with all
line lengths between the source and the load).

73's
Richard Clark, KB7QHC

1231. Re: Trying to measure antenna Z through feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 19:58:11 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <n7lK5.9824$mC.671135@monger.newsread.com>
Source record: 177580

Walter Maxwell <w2du@journey.com> wrote in message
news:ERjK5.9789$mC.669979@monger.newsread.com...
> Hello all,
>
> Thanks to Richard C for referencing Reflections for this procedure.
However,
> I'd like to clarify a point Richard made concerning 1/8 wl lines for the
> measurement.
>
> There are two programs in Reflections, one for measuring and calibrating
the
> feed line of any length for use at any frequency, including the effect of
> attenuation. The second program is for actually measuring the antenna
> feedpoint impedance through the line calibrated with the first program.
>
> The reason for using 1/8 wl line for the feed line calibration only is
that
> this length produces the most accurate data concerning the constants of
the
> feed line, minimizing the errors as Richard explained.
>
> Once the desired measurement line is calibrated at the frequency where
it's
> 1/8 wl, it can then be used at any frequency, whatever its length, because
> the calibration procedure allows it to be used at any frequency, with the
> effect of attenuation included in the calibration measurement.
>
> To confirm the accuracy of the measurements with this procedure I measured
> my 125-foot dipole with two different calibrated lines, one 1/4 wl at
3.797
> MHz and the other 1/2 wl at 3.782 MHz. This difference in line length will
> yield the maximum error available for comparison.
>
> The measurements were made with a General Radio GR-1606-A RF Impedance
> Bridge (years before I obtained more modern digital RF impedance measuring
> equipment), measuring line input resistance, reactance, and SWR, and then
> transforming the data through the calibrated line to the antenna
terminals.
> Plots of resistance, reactance and SWR at the antenna terminals with each
> feed line resulted in almost perfect overlays, as can be seen in Fig 15-1
in
> Reflections. The overlapping plots also confirm the efficacy of the W2DU
> balun, because if common mode currents were flowing on the feed line the
> impedances appearing at the input of the feed line would not have

> transformed to nearly identical plots of antenna impedance using 1/4 wl
and
> 1/2 wl feed lines.
>
> Walt, W2DU

I sent a PDF copy of Chapter 15 from Reflections to Jerry, using the email address: jbhall1282@my-deja.com, but it was returned 'user unknown'. Can anyone please help me in getting this PDF file to Jerry? And would anyone else like a copy of this data I described in the above post? Let me know and I'll send it.

Walt, W2DU

1232. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 20:05:58 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tcn7i$m01$1@bob.news.rcn.net>
Source record: 177582

"Rudy Marcelletti" <rudym@net-link.net> wrote in message
news:39f9ced1$0$35012$44a10c7e@news.net-link.net...
> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for
> free is solid center and solid skin, covered by a rubber coating, and it
is
> direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2
years
> now with no problems, and last fall I even had a lot of fill dirt brought
in
> via 5 ton dump truck that drove over the hardline that was only burried
> about a foot below the driveway with no ill effects.
> Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
> >
> >Some CATV cables have the braid impregnated with a compound that prevents
> >water migration
> >through the length of the coaxial cable. A small slit or cut that would
> >normally allow water to wick
> >into to the braid if the braid wasn't flooded with this compound during
> >manufacture. You'll recognize
> >this type of cable if you ever see it, the braid looks like it was
dipped
> >in ScotchKote or something similar.
> >
> >Regards
> >
> >Peter
> >
> >
Alas Rudy, NOWHERE did I say or mention HARDLINE 75 coaxial cable; my
experience has been with RG59 and RG6 that have had flooded braids. Some
other posters have
confirmed that hardlines may also have the flooding compound to protect the
aluminum
sheath from corrosive conditions--that is news to me but I certainly dispute
their claims.

I have never seen "a rubber coating" used on any type of CATV
cable, so you are indeed one up on me..

73

Peter K1ZJH

1233. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 20:05:58 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tcnk2ohs1@bob.news.rcn.net>
Source record: 177583

"Rudy Marcelletti" <rudym@net-link.net> wrote in message
news:39f9ced1$0$35012$44a10c7e@news.net-link.net...
> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for
> free is solid center and solid skin, covered by a rubber coating, and it
is
> direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2
years
> now with no problems, and last fall I even had a lot of fill dirt brought
in
> via 5 ton dump truck that drove over the hardline that was only burried
> about a foot below the driveway with no ill effects.
> Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
> >
> >Some CATV cables have the braid impregnated with a compound that prevents
> >water migration
> >through the length of the coaxial cable. A small slit or cut that would
> >normally allow water to wick
> >into to the braid if the braid wasn't flooded with this compound during
> >manufacture. You'll recognize
> >this type of cable if you ever see it, the braid looks like it was
dipped
> >in ScotchKote or something similar.
> >
> >Regards
> >
> >Peter
> >
> >
Alas Rudy, NOWHERE did I say or mention HARDLINE 75 coaxial cable; my
experience has been with RG59 and RG6 that have had flooded braids. Some
other posters have
confirmed that hardlines may also have the flooding compound to protect the
aluminum
sheath from corrosive conditions--that is news to me but I certainly dispute
their claims.

I have never seen "a rubber coating" used on any type of CATV
cable, so you are indeed one up on me..

73

Peter K1ZJH

1234. Re: If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 20:06:07 UTC
From: Gunner Dave Kc6old <gunnerd@earthlink.net>
Message-ID: <39F9E04E.AD623390@earthlink.net>
Source record: 177581

Would your SECOND product be a JIM BEAM?
Dave
"David J. Windisch" wrote:
>
> ... is a phallic symbol, what is the Pentagon?
>
> Mark keith wrote:
>
> SNIP
>
> Hummm, I wonder if that applies to the Washington monument. I was
> thinking about starting a new antenna company called frectenna. My first
> project I had in mind was to cover the Washington monument with thick
> tin foil. I think I will name it the Frectal Probe. I wonder if any
> infringements need to be contemplated? MK
> --
> http://web.wt.net/~nm5k

--
GUNS, KITES, RADIOS, ROCKETS, TREBUCHET---

DARN! She's Right! I DO Play ALL The Time!

1235. Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 20:37:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39F9E7A5.69CF@wt.net>
Source record: 177584

Announcing the latest in frectal technology!!! The frectal probe. In a blur of shiny activity the latest in antenna design is nearly complete! After bribing a few law enforcement officers I was able to scale this massive structure last night and completely cover with tin foil. Actually, it may not have been needed as the monument is covered with scaffolding. But I like the smooth shiny look. So does the President. He sent one of his lackeys over to see what I was up to this morning. "No it wasn't Al Gore". The prez notified me that he had a few of those in his bathroom medicine cabinet. The matching device is not yet complete, but hopefully will be able to get on the air before the next 10m contest. An ez. file of this antenna can be had maybe next week. Then again, maybe not. To see this technological marvel click here:

http://web.wt.net/~nm5k/frecpro2.jpg

MK

--
http://web.wt.net/~nm5k

1236. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 21:00:23 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <2NvNeBAnze+5Ewr5@g3ohx.demon.co.uk>
Source record: 177593

In article <39F8D21A.1FA76260@dialpoint.net>, Ralph Mowery
<rmowery@dialpoint.net> writes
>
>The output impedance of the audio hi-fi is not zero. It will be
>specified for the speaker impedance it is made for just as your
>transmitter is. The output circuit is designed using similar methods.
>
No Ralph. You are wrong. The output impedance of HI-FI amplifiers IS
almost zero, whereas the speaker impedance is usually 4 or 8 ohms.

>The car battery impedance is not zero. It does have an internal
>impedance.

Of course it has an internal impedance. It's almost zero!

> It is related to the voltage under load and the maximum
>current it can put out. If batteries were not this way then a
>flashlight battery could put out the same ammount of current , just for
>a shorter duration. There is a definate load where the battery will
>supply the maximum ammount of power to a load. Batteries are thought of
>as a perfect power source with a series resistor equal to the impedance
>of them. If you can do the calculations then you will see how it will
>take a certain load resistance to get the most power out of a given
>battery. Not the total over a period of time, but the maximum ammount
>in a surge.
>
>
>The AC mains are the same way, they just hapen to have a very low
>impedance, almost equal to zero. You will loose alot of power in the
>wiring compaired to the ammount they can supply. That usually explains
>why the lights dim when a big moter starts up.

Agreed!
>

(my original bit left in below).

Ian.

>>
>> This is almost certainly because it turns down the power when the load
>> is not 50 ohms. I doubt if it is connected with the concept of 'max
>> power out when the load equals the source impedance'.
>>
>> Is the output impedance of your audio HI-FI amplifier equal to the
>> impedance of the speakers (eg 8 ohms)? No. It is ~ zero.

>>
>> Is the output impedance of your car battery equal to the combined load
>> impedance of the lightbulbs? No. It is ~ zero.
>>
>> Is the output impedance of your mains electrical supply equal to the
>> load of your electrical system? No. It is ~ zero.
>>
>> Is the output impedance of your transmitter equal to the load of your
>> antenna feedpoint (ie 50 ohms)? ....
>>
>> Ian.

1237. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 21:18:53 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <AsJQ2EA9Ef+5Ewe8@g3ohx.demon.co.uk>
Source record: 177594

In article <39F8D862.A9CC94B7@bigfoot.com>, CAM <cam2338@bigfoot.com>
writes
>Ian Jackson wrote:
>> Is the output impedance of your transmitter equal to the load of your
>> antenna feedpoint (ie 50 ohms)? ....
>
>If it delivers its maximum available power into a 50 ohm load, isn't
>that a conjugate match by definition? :-)

No. I don't think so. I couldn't even attempt an analysis of the
situation, but my understanding is that most power amplifiers are
essentially VOLTAGE sources. Yes, you are supposed to get max power out
when the load is a conjugate match for the source, but the efficiency of
such a system could never exceed 50%. Regarding the impedance of the
electricity supply, I don't think that the electrical company would want
to lose 1kW for every kW you were using. Where a TX gives max O/P into
50 ohms, I suspect that this work of the SWR protection circuit rather
than proving that the TX output impedance is 50 ohms.

Ian.

1238. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 21:53:07 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <jM2YOPADIf+5Ew5e@g3ohx.demon.co.uk>
Source record: 177595

In article <4655-39F98E2A-4@storefull-117.iap.bryant.webtv.net>, Richard Harrison <richardharrison@webtv.net> writes
>Wes Stewart, N7WS wrote:
>"---they tolerate running into open and short circuits."
>
>Easy to determine their internal impedance?
>Divide the open circuit voltage by the short circuit current.
>
>Best regards, Richard Harrison, KB5WZI
>

That's OK if you have a 'well-behaved' source impedance. However, I think that the Q of the PA tank circuit (even if this is 'disguised' as a multi-section lowpass filter instead of the good-old simple pi-tank) will change with the load impedance (highest Q when the load is low, and vice versa?).

Yes, with a generator having a constant source resistance you can determine the O/P impedance by the ratio of O/C volts to the S/C current (but don't try to measure a car battery this way!!). Another easy way is to load the generator until the O/C voltage is halved, then measure the resistance of the load. For the daring, you can simply use any load which gives a measurable voltage drop (say, by 5%) then do a simple calculation. But not, I think, with an RF PA stage.

Ian.

1239. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 21:58:32 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39F9F93F.DEA370A3@bellatlantic.net>
Source record: 177585

There's at least 2 different sources for replacement boards without
batteries - both in the over $100 range. So - you go for the battery
in the $5 range (for 2 batteries). If you're careful, you just bought
another ten years of life for about 5 bucks, you have an extra 3V
coin cell on hand, and you save over 100 bucks.. If you aren't
careful, you buy the expensive board to correct your error.

The replacement board approach is great when the original
board loses its brains. And it provides extra memories, if
that feature is of interest. Anyone contemplating replacing the
battery should look into the replacement board before opening
the radio. go to the following url:
http://www.ameritech.net/users/willco788/index.html

Dick Carroll wrote:

> There's an aftermarket RAM board made in Spain, I believe which uses no
> battery, has better features than the original, according to users, and
> costs much less, shipped. I don't have the details in front of me but
> they can be gotten from others on the Icom list and the Icom net.
>
> Dick
>
> Dick Hughes wrote:
> >
> > That's not a bad idea if there's enough room. When I replaced the
> > battery in my IC-271 (same battery) I used those tiny clip leads with
> > the wire hook at the end to attach to the battery circuit at the
> > easiest point. I used a second battery to power the circuit and
> > unsoldered and replaced the existing battery. Was fairly easy to do,
> > but wish I had thought of your idea. Of course I have solved the
> > problem in my IC-745 with the Willco board. BTW, the battery in the
> > IC-745 was still going at 15 years. Lucky I suppose.
> >
> > Dick - W6CCD
> >
> > On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
> >
> > >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> > >and then just leave them in place? You could then just add the battery to the
> > >holder, replace the old battery and then remove the battery from the holder until
> > >next time. If there is enough room for this it would reduce wear and tear on the
> > >pcb and make the change next time much easier as there is less to remember 5 years
> > >down the road..

1240. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:26:07 UTC
From: k1bqt@aol.com
Message-ID: <20001027182607.13514.00000718@ng-cd1.aol.com>
Source record: 177586

I've asked Chip some important guestions he's chosen to totally ignore in favor of trivial persuits. Personally, I don't care if he ever answers them on here. However, if he gets rambunctious with registered mail, I'm sure they'll be asked again by more persistent professionals.

Rick K1BQT

1241. Re: Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:39:28 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <WmnK5.37$OG1.618@newsfeed.slurp.net>
Source record: 177587

Hi, Mark:

I've a variable-power hyfrecator from a past life in case your probe becomes imbedded.

73, Dave, K3BHJ

1242. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:43:46 UTC
From: hawaiisbigsignal@aol.com
Message-ID: <20001027184346.08447.00001386@ng-cj1.aol.com>
Source record: 177588

```
you got it backwards faggot, murray
would never have anything to do
with you
```

1243. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:48:21 UTC
From: fractenna@aol.com
Message-ID: <20001027184821.28075.00000135@ng-da1.aol.com>
Source record: 177589

>
>I've asked Chip some important guestions he's chosen to totally ignore in
>favor
>of trivial persuits. Personally, I don't care if he ever answers them on
>here.
> However, if he gets rambunctious with registered mail, I'm sure they'll be
>asked again by more persistent professionals.
>
>Rick K1BQT
>

Mr. Littlefield:

You have asked me whether I assigned any rights for publication or otherwise of the Commications Quarterly articles. I answered your questions several times.

The answer is N O .

There was no transfer or assignment of copyright explicitly or implicit in the publications of said articles.

If that does not answer your question then I suggest you corroborate with the defendant(s) in aiding them with more concrete information. Keep in mind that if you are withholding information you may need to be subpoenaed, but that is not my decision or protocol to initiate.

Cordially,

Nathan Cohen, Ph.D.

1244. Re: Wanted: Stationmaster shipping tube...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:52:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <ogb6OfzcWem082sxDOHw4N3Ro+3C@4ax.com>
Source record: 177590

tom_bruhns@agilent.com wrote:

Either that, or just look in your Yellow Pages under "Mail" or
"Mailing" -- there's quite a few stores that sell sturdy mailing
containers. Check your office supply stores, too.

Bob
k5qwg

>Failing someone coming forth with one, you might just get a length of
>PVC or ABS pipe to use as a shipping tube. Neither is terribly
>expensive, and can be outfitted with a screw-plug end.
>
>Cheers,
>Tom
>
>In article <39F76616.350B4D12@bright.net>,
> "Adam T. Cately" <atcately@bright.net> wrote:
>> I need the shipping tube for a Stationmaster antenna - our club 2m
>> repeater antenna went south, and we need to ship it back to it's maker
>> to fix or replace. We did not keep the original. If anyone has one
>> of these, and you are a few hours from the Toledo, OH area and would
>> like to see me pick it up, this would be most cool. Thanks bunches.
>>
>> Please reply direct - the address is good.
>>
>> - Adam - KB8MDF - atcately@bright.net
>> - atcately@midport.com
>>

1245. Lafayette HA50 Receiver for auction on ebay

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:56:49 UTC
From: AHMED HUMAYUN <humayuna@home.com>
Message-ID: <39FA07E5.51F524EC@home.com>
Source record: 177591
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

hi,
I have for sale a Lafayette FM Communication receiver on ebay. If
interested please take a look.
thank you.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=480093052

1246. Re: Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 22:58:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Agj6OfnotcTymR1AaY17uXOMLG9v@4ax.com>
Source record: 177592

Mark Keith <nm5k@wt.net> wrote:

>Announcing the latest in frectal technology!!! The frectal probe. In a
>blur of shiny activity the latest in antenna design is nearly complete!
>After bribing a few law enforcement officers I was able to scale this
>massive structure last night and completely cover with tin foil.
>Actually, it may not have been needed as the monument is covered with
>scaffolding. But I like the smooth shiny look. So does the President. He
>sent one of his lackeys over to see what I was up to this morning. "No
>it wasn't Al Gore". The prez notified me that he had a few of those in
>his bathroom medicine cabinet. The matching device is not yet complete,
>but hopefully will be able to get on the air before the next 10m
>contest. An ez. file of this antenna can be had maybe next week. Then
>again, maybe not. To see this technological marvel click here:
>
>http://web.wt.net/~nm5k/frecpro2.jpg
>
>MK

Well, damn, Mark, thanks to your unusual spelling of the "f" word,
using an "e" rather than an "a" you managed to sneak by all my filters
for Mister F-word. Sigh.

Bob
kqwg

1247. Re: 50 or 75 ohm ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 23:24:54 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <4jHuVbAG7g+5EwJT@g3ohx.demon.co.uk>
Source record: 177596

In article <39F90040.EE9F9AF5@bigfoot.com>, CAM <cam2338@bigfoot.com>
writes
>Richard Clark wrote:
>> Willing to clip that internal detector out and repeat your
>> measurements?
>
>Of course not. The internal detector is what allows the IC-706
>to satisfy the definition of a conjugate match. :-)

The SWR protection circuit is there to prevent you from damaging the PA
from excess voltages when the load is high, and from excess currents
when it is low. Either side of 50 ohms, it cuts back the drive to the
PA, and thereby cuts back the power. If it's really doing its job well,
it WILL give the effect of obtaining max power out when the load is 50
ohm, but this has nothing to do with matching the load to the source.

Ian.

1248. Lifespan of Hardline Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 23:39:05 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8td3mu$e32$1@bob.news.rcn.net>
Source record: 177599

I have several spools of old Alumafoam (Times Wire) that have been in storage for about 25 years, both 7/8" and 1/2" sizes. I have heard these products have a finite lifespan, and I was wondering what the failure modes for these cables normal are--increasing losses, etc.? And, I am was wondering what causes these cables to deteriorate with age. I am planning to use the cables next year on a new tower installation, and I am wondering if I should worry about the cable because of its age; or is it worth the bother of going through the motions to measure the losses using a signal generator and my Boonton microwattmeter? What experiences have others on the group had with aging hardline?

Pete

1249. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 23:39:11 UTC
From: matjake@aol.com
Message-ID: <20001027193911.08023.00002842@ng-cs1.aol.com>
Source record: 177597

Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for free is solid center and solid skin, covered by a rubber coating, and it is direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2 years now with no problems, and last fall I even had a lot of fill dirt brought in via 5 ton dump truck that drove over the hardline that was only burried about a foot below the driveway with no ill effects.

Braid is the wrong term it is a sheath that is aluminum and wraps around the aluminum jacket. And man is that sheath like a knife, it will cut your hands up so be careful!! If it is CATV hardline that is for burial it is "flooded" and has an armor coating as well. If it does not have the armor coating it ain't for burying but it can be buried if it has the plastic outside sheath. The armor is to protect the cable from being crushed by rocks etc.

This hardline can take a hell of amount of abuse.

Hope this helps.

73,
Matt
Lineman 5 yrs

1250. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 23:40:15 UTC
From: matjake@aol.com
Message-ID: <20001027194015.08023.00002843@ng-cs1.aol.com>
Source record: 177598

you got it backwards faggot, murray
would never have anything to do
with you

Wow nice language does your Mommy know you talk like that?

1251. Re: Lifespan of Hardline Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-27 23:55:22 UTC
From: rwclark@seanet.com
Message-ID: <3a0913de.179753612@news.seanet.com>
Source record: 177600

On Fri, 27 Oct 2000 19:39:05 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>I have several spools of old Alumafoam (Times Wire) that have been in
>storage for about 25 years, both 7/8" and 1/2" sizes. I have heard these
>products have a finite lifespan, and I was wondering what the failure modes
>for these cables normal are--increasing losses, etc.? And, I am was
>wondering what causes these cables to deteriorate with age. I am planning
>to use the cables next year on a new tower installation, and I am wondering
>if I should worry about the cable because of its age; or is it worth the
>bother of going through the motions to measure the losses using a signal
>generator and my Boonton microwattmeter? What experiences have others on
>the group had with aging hardline?
>
>Pete
>
>

Hi Pete,

On first pass, the principle mode of deterioration is the migration of jacket impurities into the center conductor insulator. This is usually performed through water as the vector of transport (rain or ground water when in the environment). The jacket and center insulator both being plastic based means that this migration takes some time to occur - unless it is in an extremely distressed environment.

This of course is a theoretical explanation. There may be other considerations (like the center conductor uses air insulation). It would be far simpler to connector up both ends, connect a good dummy load and measure the power into the cable and the power out of the cable (use the same power meter at both ends). Compare the dB loss to the published figures and you should have a pretty good picture of the condition regardless of service or age.

73's
Richard Clark, KB7QHC

1252. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 00:06:59 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <39FA18A3.1780B59E@qadas.com>
Source record: 177601
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

W9NTP has been running a KW on SSTV in his trucks, recently a Suburban, for a number of years, mostly on 20. using a Heathkit SB220. Contact him for details on
problems & solutions found.

A number of years ago I could shut down the electronic ignition on a Renault Fuego by keying my 25 watt 2M FM rig if the ground contact on the antenna was not making a good contact with the metal car body.

Ford used to hire people to keep track of what make of car had its ignition system killed by getting too close to the Voice of America antennas. They were also concerned that the ABS brakes could lock up or airbags might deploy!

Nissans put out a spurious signal on 146.985 Mhz which opens the squelch on a 2M FM receiver.

Robert W0LMD

Scott wrote:

> No, my new vehicle isn't possessed!
>
> I wanted to up the power in my HF Mobil setup in my truck. Is there any
> danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I
> have heard some bad things about running power in newer vehicles - does
> anyone have any insight/advice? I would being using 40 meters on up. Any
> bands cause more problems than others?
>
> Scott.

1253. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 00:21:36 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <39FA1C10.E0294495@qadas.com>
Source record: 177602

I have both the MFJ 259 & the AEA CIA-HF. I never use the MFJ any more except when tuning a 2M antenna. Wanna buy it? The AEA is especially helpful with the PC software feature. I disconnect my antennas from the rig and run a graphic plot which I print out & save. In case of trouble (or a solar flare total dropout), I rerun the graphic plot from the AEA and see if the antenna has a problem. It also shows me the SWR curve when the antenna is wet or Icy (beam moves down about 70 KHZ on 20M when icy or frosty.)

I am waiting for a new VHF/UHF version due out last June.

Robert W0LMD

Kirby wrote:

> I'm considering purchasing an antenna analyzer - the MFJ or something in
> that price range. Yeah, I know what MFJ stands for .... ;) . Have
> there been any comparison reviews done?
>
> Kirby

1254. Re: Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 00:56:56 UTC
From: X@Y.Z.net
Message-ID: <slrn8vk92m.doi.X@animas.frontier.net>
Source record: 177603

On Sat, 28 Oct 2000 00:40:45 GMT, F6BOM scribbled:
>
> Fri, 27 Oct 2000 22:58:16 GMT dans l'article
> <Agj6OfnotcTymR1AaY17uXOMLG9v@4ax.com>
> l'honorable Bob Miller <bamiller@texas.net> escrivit :
>
>:Well, damn, Mark, thanks to your unusual spelling of the "f" word,
>:using an "e" rather than an "a" you managed to sneak by all my filters
>:for Mister F-word. Sigh.
>
>Sorry. Maybe it is time to learn how to use wildmat or regexp.

Ya, but -- enough ALREADY!! The next troll will spell it PREAKTILE
or the such. I'd like to spend time reading 'real' postings --
instead of constantly update my killfile.

1255. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 01:28:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tda38$sr9$0@208.207.71.161>
Source record: 177604

From postings by users, the Spanish made board is better and much
cheaper than the Ameritech. It would be worth researching for anyone who
needed to resolve a failure.

ehsjr@bellatlantic.net wrote:
>
> There's at least 2 different sources for replacement boards without
> batteries - both in the over $100 range. So - you go for the battery
> in the $5 range (for 2 batteries). If you're careful, you just bought
> another ten years of life for about 5 bucks, you have an extra 3V
> coin cell on hand, and you save over 100 bucks.. If you aren't
> careful, you buy the expensive board to correct your error.
>
> The replacement board approach is great when the original
> board loses its brains. And it provides extra memories, if
> that feature is of interest. Anyone contemplating replacing the
> battery should look into the replacement board before opening
> the radio. go to the following url:
> http://www.ameritech.net/users/willco788/index.html
>
> Dick Carroll wrote:
>
> > There's an aftermarket RAM board made in Spain, I believe which uses no
> > battery, has better features than the original, according to users, and
> > costs much less, shipped. I don't have the details in front of me but
> > they can be gotten from others on the Icom list and the Icom net.
> >
> > Dick
> >
> > Dick Hughes wrote:
> > >
> > > That's not a bad idea if there's enough room. When I replaced the
> > > battery in my IC-271 (same battery) I used those tiny clip leads with
> > > the wire hook at the end to attach to the battery circuit at the
> > > easiest point. I used a second battery to power the circuit and
> > > unsoldered and replaced the existing battery. Was fairly easy to do,
> > > but wish I had thought of your idea. Of course I have solved the
> > > problem in my IC-745 with the Willco board. BTW, the battery in the
> > > IC-745 was still going at 15 years. Lucky I suppose.
> > >
> > > Dick - W6CCD
> > >
> > > On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
> > >

> > > >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> > > >and then just leave them in place? You could then just add the battery to the
> > > >holder, replace the old battery and then remove the battery from the holder until
> > > >next time. If there is enough room for this it would reduce wear and tear on the
> > > >pcb and make the change next time much easier as there is less to remember 5 years
> > > >down the road..

1256. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 01:29:41 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <39FA2C05.75A3B402@netdoor.com>
Source record: 177605

This was a rather ugly and pretentiously "low" peice of advice for a man with a problem Louis. I live in a fairly exclusive area on the Mississippi Gufl coast, with all the restrictions one could ask for and my 80/40 attic dipoles do a pretty good job for me on all bands (less 160). I'm a County Hunter Louis, I listen to weak signals all day and the mobiles are hearing me just as well as most of the stations with outdoor antennas, dipoles, verticals and beams. I put my 3 element 2mtr beam on TV rotor up in the attic and a 2 mtr/440 mobile vertical (mag mount taped to AC duct work, it's alluminum, to get as much of a counterpoise as I could. It works very well with my 2 mtr/440 HT.

I might note to all that I do not run an amplifier now, but will when I figure out how to keep the garage door from going up and down when I run my amp. Other than the door I don't interfere with anything that we are aware of, 'cept for that darned door. The feed point of the dipoles are just about in the center of the attic and I just stapled the wire in several places along the rafters, making what ever turns I needed to in order to have the configuration of the 80 with as balanced a set of bends on either side of the center feed point as I could. The 40 was a no sweat inverted "V" just stapled to the roof joists.

I may try my Screwdriver up there and feed my TS450 with it. Iv'e never used the screwdriver, it's still brand new. I only mobile ocassionally nowdays, so I have that rig by my bed to enjoy when resting or just feeling lousy or lazy :o) ....

My wife really wanted this house, so I solved the restriction problem to let her have the house that she has allways dreamed of us retiring to.

People have antenna problems and antenna restrictions placed on them all the time, but are not financially able to "buy some acreage" and put up an antenna farm. They are forced to do the best they can with what they have. Just like we did once upon a time. We need to be more thoughtfull of our buddies that do have problems but not the funds to do the best, just need something workable to enjoy as much of the hobby as they can..

Take care my friend, may God continue showering us all with his blessings,

Butch Magee KF5DE

"Louis A. Bellock" wrote:

> Hi Tom, My reply to your email was bounced back, here's my general reply to
> the group. I thought all in the group could be helped by this advice.
>
> Regards, Lou N2JPR
> _____
> _____
>

> Hello Tom,
>
> My name is Lou, callsign N2JPR. Unfortunately, I had the same situation
> twice in my life, a condo and an upstairs apartment, both with attics. My
> nightmare has been over for years. My advice is as follows:
>
> 1. The only, and ultimate, solution is to permenantly move to your own house
> on a minimum 1/2 acre wooded plot. There, you can play "antenna" and put out
> KW level signals until your hearts content without bothering neighbors, etc.
>
> 2. If you choose to mount "anything" in this attic, it will definitely
> interfere with all the usual electronic junk (cordless and hardwired phones,
> digital appliances [TVs, VCRs, Stereos, etc.] alarms [including smoke],
> etc., etc.) at anything greater than 10 watts. Your neighbors (or in some
> cases, your WIFE) WILL find you out and at the very least report you to the
> condo association who will threaten to evict you (DIVORCE in some cases) if
> you don't stay off the air. If you now become a QRP'r at 5 watts or less you
> should have no problem interfering with others at those close
> antenna-electronic junk distances.
>
> 3. Now comes the NEW problem. Your attic antenna, compared to a REAL outdoor
> antenna (dipole, beam, vertical, etc.) really SUCKS. So, between your
> inefficient antenna system and your 5 watts of power, your destined to
> become one of 2 things:
>
> a. A super-frustrated ham operator, in good standing with your condo
> association (in some cases WIFE) with no signal, no QSOs and no QSL cards
> (DX will soon become a fantasy).
>
> b. A very happy shortwave listener until the day you bite the bullet and
> buy your own piece of land.
>
> Two-cents from a happy ham, now on solid ground with antennae and signals
> galore.
>
> 73, Lou N2JPR
>
> ----- Original Message -----
> From: <tegwilym@my-deja.com>
> Newsgroups: rec.radio.amateur.antenna
> Sent: Wednesday, October 25, 2000 12:43 PM
> Subject: HF attic antenna adivice
>
> > I live in a condominium that has all the usual rules against antennas,
> > color of curtains, pet....etc. I am trying to figure out what kind of
> > antenna I could put in my attic that might work ok on the 10-20 meter
> > bands. I currently have a vacant unit next door to me that was just
> > sold, so I figure this would be a good time to sneak around up in the
> > attic without anyone hearing me up there. I do have one of
> > those "Cliff Dweller" slinky antennas (You can see one on Ebay if you

> > search) in the hallway and can't get it tuned up to transmit. I am
> > thinking of maybe putting that up in the attic or maybe just a normal
> > dipole up there. I am estimating that I have about 50 or 60 feet of
> > room that I can play with up there. The attic is pretty short, only
> > about 30 inches tall at the peak of the roof.
> >
> > I do have a QFH antanne up there right now for receving the NOAA
> > satellite images on 137mhz and have had great results from that, so I
> > know an antenna is possible up there.
> >
> > Any ideas from any of you condo dwellers?
> >
> > Tom KA7VIK
> > Seattle
> >
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

1257. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 01:35:30 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tdah2$sr9$1@208.207.71.161>
Source record: 177606

I've had two runs of 9913 buried for over 10 years and I don't perceive
any change in their operational characheristics. Surely critical
measurment would show some changes. Nothing lasts forever, but if hard
line or even coax with a good quality cover is buried carefully -the
comment about rocks is certainly on target- it CAN last a long time.
There are no guarantees.

Dick

Rudy Marcelletti wrote:
>
> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for
> free is solid center and solid skin, covered by a rubber coating, and it is
> direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2 years
> now with no problems, and last fall I even had a lot of fill dirt brought in
> via 5 ton dump truck that drove over the hardline that was only burried
> about a foot below the driveway with no ill effects.
> Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
> >
> >"Brian Kelly" <kelly@dvol.com> wrote in message
> >news:39F85471.B0F72054@dvol.com...
> >>
> >> BillN6VLR wrote:
> >>
> >> > I mostly
> >> > work with 75 ohm CATV hardline and we use flooded cable. The flooding
> >> > compund helps if you should happen to nick the jacket.
> >>
> >> >
> >> What is "flooding" and "flooding compound"?
> >> >
> >> Tnx,
> >> >
> >> w3rv
> >>
> >
> >Some CATV cables have the braid impregnated with a compound that prevents
> >water migration
> >through the length of the coaxial cable. A small slit or cut that would
> >normally allow water to wick
> >into to the braid if the braid wasn't flooded with this compound during
> >manufacture. You'll recognize
> >this type of cable if you ever see it, the braid looks like it was dipped
> >in ScotchKote or something similar.
> >

> >Regards
> >
> >Peter
> >
> >

1258. Re: MURRAY NEECE:common THUG? you be the judge in his own words!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 01:39:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tdap4$sr9$2@208.207.71.161>
Source record: 177607

Fractenna wrote:
>
> Murray Neece has a history of libel and character assassination, documented
> publicly on this NG. Nothing he does would surprise me.
>
> If you need copies of his libelous posts, let me know.
>
> I would never have anything to do with this person.
>
> 73
> Chip N1IR

Nor, I would imagine, would he with you.

1259. Scanner antenna connection problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 01:56:46 UTC
From: MEL <melnadja@sisqtel.net>
Message-ID: <8tdbp101dik@enews3.newsguy.com>
Source record: 177612

I have a problem with an external antenna connection for my new desk top VHF/Air/UHF Scanner and am looking for the most appropriate News Group to post a message with the problem. Can anyone tell me what NG I should try? This NG is the closest I could come up with.

Here is the problem: I am running RG-8 coax cable antenna from the scanner to the antenna. Today I bought a PL-259 UHF - Solder Type Connector at Radio Shack to replace and existing connector. I put the new connector on the cable per the instructions that came with it but found that when I first put the connector center prod) in the center hole of antenna receptacle on the scanner, the scanner works OK. But as soon as I attempt to secure the scanner and the cable by threading the connector to the scanner the transmissions stop. They stop as soon as I touch the two metal parts together. If I pull the threaded coupling back and just leave the center prod sticking in the scanner, the transmissions start again.

If you can help I would appreciate it. If there a more appropriate NG to post this please advise. Thanks

1260. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 02:15:47 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <nFqK5.129099$g6.59533604@news2.rdc2.tx.home.com>
Source record: 177609

I agree, for example I have a 10m 1/4 in my attic, compared to a A-99 (1/2 wave end feed) outside, the attic 1/4 wave is only down about 3/4 S unit down. (both antennas feed at about the same height, the "99" is about 8 ft taller at the top). As for interference to others people equipment chose your modes, power and bands wisely. Test all on you own phones ect. Also check out you covenant agreement carefully, If there is no provision against "radio transmission from inside dwelling" (most covenants only cover "outside antennas") or something similar the issue will be between you and your neighbors and you not your association.
Good Luck and Have Fun!

Cliff N0HC
"jimmy john" <jj@sandwitch.org> wrote in message
news:4A8A59F2BDCDD311BFC800508BA36AC80524607B@www.indianarep.com...
> Don't be too discouraged. I ran with a 20 M dipole in my attic for quite
a
> while and it worked reasonably well (down an S unit or two from the one I
> have now at 40 feet (outside, of course). It is a bit noisier that being
> outside (I've got dimmers on practically every light, and these are mostly
> recessed in the ceiling below).
>
> You don't need a kilowatt. 100 or 200 gets me through even thereally
tough
> pileups. Read the Oct QST article on the difference between different
power
> levels.
>
> Consider an Alpha-Delta DX-CC and "trim off" the 80/40 meter portion (it's
> longer than you have room for) - and you'll have 20, 15, 12 and 10M.
>
> You should do fine. Just remember to do your RF eval
>
> I put eye-hooks into the ridge beam and suspended the wire from that so it
> was as high as possible.
> Louis A. Bellock <lbellock@hoflink.com> wrote in message
> news:8tc0gp01ae9@enews4.newsguy.com...
> > Hi Tom, My reply to your email was bounced back, here's my general reply
> to
> > the group. I thought all in the group could be helped by this advice.
> >
> > Regards, Lou N2JPR
> >
>

> > _____
> >
> > Hello Tom,
> >
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> > twice in my life, a condo and an upstairs apartment, both with attics.
My
> > nightmare has been over for years. My advice is as follows:
> >
> > 1. The only, and ultimate, solution is to permenantly move to your own
> house
> > on a minimum 1/2 acre wooded plot. There, you can play "antenna" and put
> out
> > KW level signals until your hearts content without bothering neighbors,
> etc.
> >
> > 2. If you choose to mount "anything" in this attic, it will definitely
> > interfere with all the usual electronic junk (cordless and hardwired
> phones,
> > digital appliances [TVs, VCRs, Stereos, etc.] alarms [including smoke],
> > etc., etc.) at anything greater than 10 watts. Your neighbors (or in
some
> > cases, your WIFE) WILL find you out and at the very least report you to
> the
> > condo association who will threaten to evict you (DIVORCE in some cases)
> if
> > you don't stay off the air. If you now become a QRP'r at 5 watts or less
> you
> > should have no problem interfering with others at those close
> > antenna-electronic junk distances.
> >
> > 3. Now comes the NEW problem. Your attic antenna, compared to a REAL
> outdoor
> > antenna (dipole, beam, vertical, etc.) really SUCKS. So, between your
> > inefficient antenna system and your 5 watts of power, your destined to
> > become one of 2 things:
> >
> > a. A super-frustrated ham operator, in good standing with your condo
> > association (in some cases WIFE) with no signal, no QSOs and no QSL
cards
> > (DX will soon become a fantasy).
> >
> > b. A very happy shortwave listener until the day you bite the bullet
> and
> > buy your own piece of land.
> >
> > Two-cents from a happy ham, now on solid ground with antennae and
signals
> > galore.
> >

> > 73, Lou N2JPR
> >
> > ----- Original Message -----
> > From: <tegwilym@my-deja.com>
> > Newsgroups: rec.radio.amateur.antenna
> > Sent: Wednesday, October 25, 2000 12:43 PM
> > Subject: HF attic antenna adivice
> >
> >
> > > I live in a condominium that has all the usual rules against antennas,
> > > color of curtains, pet....etc. I am trying to figure out what kind of
> > > antenna I could put in my attic that might work ok on the 10-20 meter
> > > bands. I currently have a vacant unit next door to me that was just
> > > sold, so I figure this would be a good time to sneak around up in the
> > > attic without anyone hearing me up there. I do have one of
> > > those "Cliff Dweller" slinky antennas (You can see one on Ebay if you
> > > search) in the hallway and can't get it tuned up to transmit. I am
> > > thinking of maybe putting that up in the attic or maybe just a normal
> > > dipole up there. I am estimating that I have about 50 or 60 feet of
> > > room that I can play with up there. The attic is pretty short, only
> > > about 30 inches tall at the peak of the roof.
> > >
> > > I do have a QFH antanne up there right now for receving the NOAA
> > > satellite images on 137mhz and have had great results from that, so I
> > > know an antenna is possible up there.
> > >
> > > Any ideas from any of you condo dwellers?
> > >
> > > Tom KA7VIK
> > > Seattle
> > >
> > >
> > > Sent via Deja.com http://www.deja.com/
> > > Before you buy.
> >
> >
>
>

1261. Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 02:22:05 UTC
From: Adam <radar_radio@yahoo.com>
Message-ID: <svkds86f2oolfa@corp.supernews.com>
Source record: 177610
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hello everyone. I'm fairly new to HF and have a few questions about my antenna setup.

1. I have a G5RV Dipole up about 40' set up as an inverted "v", and use it on 10-80 meters with an external tuner. I just got a new rig with a built-in autotuner. My question is: will the autotuner handle the SWR of the G5RV as well as my manual tuner does, or will I be better off to continue using the manual tuner? II have heard that autotuners have a low tolerance to high SWR, and in some spots, the SWR on the G5RV is very high (3.1+).

2. How far should the ladderline and coax be from the leg of my tower? Do the "arms" of the antenna have to be in a V shape, or can I string them to fit my lot (If I do a V config., one arm hangs about 10' above my telephone line, and I don't want to do that).

3. I notice that on 40 and especially 80 meters, I get RFI on our TV's and phones as well as radios, but only on occasion. Would installing a good low-pass filter help to resolve this situation, or should I look into installing line and high-pass filters on the effected equipment?

Any information would be greatly appreciated!

Thanks
Adam

1262. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 02:33:50 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8tddue$pp9$1@nnrp1.deja.com>
Source record: 177611

In article <20001027193911.08023.00002842@ng-cs1.aol.com>,
matjake@aol.com (MatJake) wrote:
> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I
get for
> free is solid center and solid skin, covered by a rubber coating, and
it is
> direct burial stuff. Have had 3 runs of 230+ feet in the ground for
2 years
> now with no problems, and last fall I even had a lot of fill dirt
brought in
> via 5 ton dump truck that drove over the hardline that was only
burried
> about a foot below the driveway with no ill effects.
>
> Braid is the wrong term it is a sheath that is aluminum and wraps
around the
> aluminum jacket. And man is that sheath like a knife, it will cut
your hands up
> so be careful!! If it is CATV hardline that is for burial it
is "flooded" and
> has an armor coating as well. If it does not have the armor coating
it ain't
> for burying but it can be buried if it has the plastic outside
sheath. The
> armor is to protect the cable from being crushed by rocks etc.
>
> This hardline can take a hell of amount of abuse.
>
> Hope this helps.
>
> 73,
> Matt
> Lineman 5 yrs
>
Matt is correct. The stuff designed for direct burial is armored. The
corrugated armor is REALLY sharp. The sheath is not that bad. If you
can find it the flooded really is the way to go.It is a little messy to
splice but some solvent will remove the flooding compound. Odds are a
little talking to the guys at the local cable company will get you some
for free. There are always partial reels left over and frequently they
have to pay to get rid of it.Try to talk them into giving or trading
you some pin connectors and spice blocks also. Then you're going to
need a coring tool also. Actually maybe offering either a few beeers or
dollars would probably get one of the guys to splice it for you. There

is a fair chance one of them there is a ham. The .750 is really low loss. P3 .750 cable only loses 1.74 dB per 100 ft. @ 1 ghz. If you go for the .500 cable you're looking at 2.52 dB per 100 ft at 1 ghz. The non armored cable will work direct buried. It will be better protected in conduit though. I am somewhat lazy too, I don't like to have to dig a long trench but once.
73,
--
BillN6VLR

Sent via Deja.com http://www.deja.com/
Before you buy.

1263. Re: If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 03:44:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FA4B88.294A@wt.net>
Source record: 177614

Gunner Dave Kc6old wrote:
>
> Would your SECOND product be a JIM BEAM?

Nope, I've been considering the Frectal Throne. A small loop that would be used from 20-10 m. Much like your AEA, MFJ small loops. The clincher in my design is it could easily double as a copper toilet seat. But due to rf concerns I don't think I'll advise QSO while SOP. MK
--
http://web.wt.net/~nm5k

1264. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 03:46:15 UTC
From: matjake@aol.com
Message-ID: <20001027234615.20968.00000308@ng-fi1.aol.com>
Source record: 177615

Matt is correct. The stuff designed for direct burial is armored. The corrugated armor is REALLY sharp. The sheath is not that bad. If you can find it the flooded really is the way to go.It is a little messy to splice but some solvent will remove the flooding compound. Odds are a little talking to the guys at the local cable company will get you some for free. There are always partial reels left over and frequently they have to pay to get rid of it.Try to talk them into giving or trading you some pin connectors and spice blocks also. Then you're going to need a coring tool also. Actually maybe offering either a few beeers or dollars would probably get one of the guys to splice it for you. There is a fair chance one of them there is a ham. The .750 is really low loss. P3 .750 cable only loses 1.74 dB per 100 ft. @ 1 ghz. If you go for the .500 cable you're looking at 2.52 dB per 100 ft at 1 ghz. The non armored cable will work direct buried. It will be better protected in conduit though. I am somewhat lazy too, I don't like to have to dig a long trench but once.
73,

If anyone needs 75 ohm hardline. I would advise people to speak to their local CATV company. We always had partial reels and if you talk to a technical supervisor you just might get all you need. It is best to go in person since if you call the gals on the phone might not have a clue what you want and give you the old brush off. As far as connectors and coring the cable Bill is correct a six pack or a few dollars goes a long way to getting that done, lol

Hey I was the only ham who worked at my company, which was a-ok by me, when we switched from microwave links to fiber optics guess who got all the transmitters and Andrews microwave dishes, lol

73
Matt

1265. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 04:07:13 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39FA506D.AF983F32@att.net>
Source record: 177616

I use a W2DU bead balun to make the transition from RG-213 (about 13 ft) out of the tuner to 450-ohm ladder line. Works great on 80 - 10 with a 20-meter EDZ (88 ft long at 33 ft high). I also use an identical setup to the ladderline that feeds a 40-meter horizontal full-wave loop.

There is no compelling reason to prefer the 4:1 balun over a 1:1 since the impedances involved will never be either 450 ohms or 50 ohms on any band, other than by sheer accident. I believe that the current-balun configuration is much to be preferred over the voltage-balun format in this application, hence the W2DU baluns here.

All you are trying to accomplish is to ensure that a minimum of current flows on the outer braid of the coax. A choking action is what is needed, not any sort of impedance match. Thus, a current balun is called for.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Bill Ogden wrote:
>
> I would like to connect a tuner (with only coax output) to 450ohm open wire
> which goes to a 45' dipole that I would like to try to use on several bands.
> I thought I would use something like a 4:1 voltage balun --- not a close
> match, but probably good enough. However, in reading about voltage baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?
>
> Bill Ogden
> W2WO

1266. Re: Lifespan of Hardline Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 04:11:28 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39FA51F0.9553CE7D@haertig.com>
Source record: 177613

With hard line having a solid outer conductor, I wouldn't think jacket impurities could contaminate the dielectric.

There are plenty of installations using Heliax foam line that are 40 years old and still working.

One other failure mode I can conceive of (but have no evidence that it actually happens) is deterioration of the foam dielectric. The material used is generally foamed polyethylene which is remarkably stable. If you have access to any kind of an impedance bridge, you might want to determine the characteristic impedance of the line using the open and short method. Probably not necessary, but if you've never done it, it can be a fun learning experience. (You can also determine the loss per wavelength and the electrical length of the line this way. Once you know the electrical length and the physical length, you can determine the velocity of propagation.)

Gray

Richard Clark wrote:
>
> On Fri, 27 Oct 2000 19:39:05 -0400, "Peter Bertini"
> <commquart@erols.com> wrote:
>
> >I have several spools of old Alumafoam (Times Wire) that have been in
> >storage for about 25 years, both 7/8" and 1/2" sizes. I have heard these
> >products have a finite lifespan, and I was wondering what the failure modes
> >for these cables normal are--increasing losses, etc.? And, I am was
> >wondering what causes these cables to deteriorate with age. I am planning
> >to use the cables next year on a new tower installation, and I am wondering
> >if I should worry about the cable because of its age; or is it worth the
> >bother of going through the motions to measure the losses using a signal
> >generator and my Boonton microwattmeter? What experiences have others on
> >the group had with aging hardline?
> >
> >Pete
> >
> >
>
> Hi Pete,
>
> On first pass, the principle mode of deterioration is the migration of
> jacket impurities into the center conductor insulator. This is
> usually performed through water as the vector of transport (rain or
> ground water when in the environment). The jacket and center

> insulator both being plastic based means that this migration takes
> some time to occur - unless it is in an extremely distressed
> environment.
>
> This of course is a theoretical explanation. There may be other
> considerations (like the center conductor uses air insulation). It
> would be far simpler to connector up both ends, connect a good dummy
> load and measure the power into the cable and the power out of the
> cable (use the same power meter at both ends). Compare the dB loss to
> the published figures and you should have a pretty good picture of the
> condition regardless of service or age.
>
> 73's
> Richard Clark, KB7QHC

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1267. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 04:30:32 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FA5668.B508BEA9@bigfoot.com>
Source record: 177519

Bill Ogden wrote:
> What is a reasonable way to connect the tuner to the line in this
> circumstance?

Ten to twenty turns of coax on a 2L pop bottle works pretty well.
Some lengths of ladder-line are better than others. EZNEC, and other
programs, allow one to choose an optimum length of ladder-line.
--
http://www.mindspring.com/~w6rca

1268. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 04:37:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tdl6f$o16$0@208.207.71.161>
Source record: 177618

Bill Ogden wrote:
>
> I would like to connect a tuner (with only coax output) to 450ohm open wire
> which goes to a 45' dipole that I would like to try to use on several bands.
> I thought I would use something like a 4:1 voltage balun --- not a close
> match, but probably good enough. However, in reading about voltage baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?
>

There was a thread on this subject some time ago. As I remember the
experts advised that rather than use a 4:1 voltage balun one should just
use coax that would withstand the voltages involved, just long enough to
get outside to where you can easily transition to open wire or ladder
line, and connect the coax directly to it, decoupling by using a proper
current (choke) balun just before the transition.
This eliminates the problem of a voltage balun seeing widely varying
impedances which it almost certainly can't handle and provides a
balanced input to the ladder line. The short run of coax will offer
little reflection loss, and if it is properly rated will handle the high
voltages that will sometimes be involved without any problem.
The SWR on the coax can become quite high with the inevitable mismatch
sure to occur with wide frequency changes as the antenna moves out of
resonance, but as long as the coax -and the tuner- is rated for the high
voltages involved it will cause no problem. (You didn't say what power
level you will run. Coax and tuner ratings for high power usage must be
scaled upward for the much higher voltages involved.)

Dick W0EX

1269. Re: Scanner antenna connection problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 04:45:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tdlkg$o16$1@208.207.71.161>
Source record: 177520

The PL259 you just installed is almost certainly shorted. It takes very little to short it-one single fine strand of wire from the braid touching the center pin/conductor will do it. The radio plays when you touch just the center pin to its contact but when you screw on the barrell of the PL259 the short inside it kills all the signal. I've seen it many times.
There is an art to installing PL259's and it takes some practice to get them right. I'd bet that is your problem.

Dick

MEL wrote:
>
> I have a problem with an external antenna connection for my new desk top
> VHF/Air/UHF Scanner and am looking for the most appropriate News Group to
> post a message with the problem. Can anyone tell me what NG I should try?
> This NG is the closest I could come up with.
>
> Here is the problem: I am running RG-8 coax cable antenna from the scanner
> to the antenna. Today I bought a PL-259 UHF - Solder Type Connector at
> Radio Shack to replace and existing connector. I put the new connector on
> the cable per the instructions that came with it but found that when I first
> put the connector center prod) in the center hole of antenna receptacle on
> the scanner, the scanner works OK. But as soon as I attempt to secure the
> scanner and the cable by threading the connector to the scanner the
> transmissions stop. They stop as soon as I touch the two metal parts
> together. If I pull the threaded coupling back and just leave the center
> prod sticking in the scanner, the transmissions start again.
>
> If you can help I would appreciate it. If there a more appropriate NG to
> post this please advise. Thanks

1270. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 05:08:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tdn0i$o16$2@208.207.71.161>
Source record: 177521

Butch Magee wrote:
>
> This was a rather ugly and pretentiously "low" peice of advice for a man with a
> problem Louis. I live in a fairly exclusive area on the Mississippi Gufl coast,
> with all the restrictions one could ask for and my 80/40 attic dipoles do a
> pretty good job for me on all bands (less 160). I'm a County Hunter Louis, I
> listen to weak signals all day and the mobiles are hearing me just as well as
> most of the stations with outdoor antennas, dipoles, verticals and beams. I put
> my 3 element 2mtr beam on TV rotor up in the attic and a 2 mtr/440 mobile
> vertical (mag mount taped to AC duct work, it's alluminum, to get as much of a
> counterpoise as I could. It works very well with my 2 mtr/440 HT.
>
> I might note to all that I do not run an amplifier now, but will when I figure
> out how to keep the garage door from going up and down when I run my amp. Other
> than the door I don't interfere with anything that we are aware of, 'cept for
> that darned door. The feed point of the dipoles are just about in the center of
> the attic and I just stapled the wire in several places along the rafters,
> making what ever turns I needed to in order to have the configuration of the 80
> with as balanced a set of bends on either side of the center feed point as I
> could. The 40 was a no sweat inverted "V" just stapled to the roof joists.
>

Attic antennas are a crap shoot when it comes to interference. It may
depend somewhat on how the house is wired. Some houses route all the AC
wiring through the attic then down inside each wall to the individual
receptacle outlets. There is almost always overhead wiring for ceiling
lights and their switch legs. Other houses use the basement and come up
to outlets, thus less wiring close to the antenna in the attic and less
likely to induce RFI onto the AC system. Higher pitched roofs can mean
more distance from the antenna to housewiring. The idea is to keep as
much distance as possible.
One attic installation I helped with involved paralleled dipoles on
40, 20 and 10 meters fed with RG58, tacked to the roof rafters with the
40 meter wire Z'ed as necessary to fit the space available. The antennas
worked FB, and even loaded and worked FB on 75 meters through a tuner.
Making contacts was no problem. RFI problems were to a hardwired smoke
alarm high on the kitchen wall and to the cordless telephone. They were
not present on all bands indicating they might be the result of a
resonance in the AC wiring, but they were not cured.
Looks to me like one has to just evaluate what you have, and make the
best attic installation possible, then live with whatever RFI that you
wind up not being able to cure. Chances are better than even there will
be some. And you'll *always* have the TV horizontal frequency "birdies"
every 15.75 kc to keep you company on receive, at least until HDTV

replaces the present analog system. Who knows what we'll have then? I'd bet the digital sets will be worse.

Dick W0EX

1271. Re: Autotuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 05:11:05 UTC
From: Taka <sawat@anet.ne.jp>
Message-ID: <39FA5FDE.61FDDE1D@anet.ne.jp>
Source record: 177523

hi i am Taka JR3TVH from JA.
it actually fit until 1 to 600ohm around. generally in JA, ICOM AH4
though it works above 80m, it is stable and very popural in Japan now.
it is small,light.
i have SGC230 but it also limited 150watts PEParound as same as AH4,Alincos.
i recomend for OMs , JRC one. comparing from other AH2.AH3.SGC230,and
its 500watts type,
This automatictuner has more dia. coils for each band for high power
and especially for 160m use.but if you put and watch your power below
150watts around, it will not saturated or burn
if you put a carrier signal for long time. sat@arrl.com

CAM wrote:
>
> 'Doc wrote:
>
> > That's an expensive way to use ladder-line. If the distance
> > to the 'outside' is fairly short (<10-15 feet), I'd run coax
> > outside to a good balun, then ladder-line to the antenna...
>
> What range of impedances will the balun see?
> --
> http://www.mindspring.com/~w6rca

1272. Re: Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 05:17:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FA615C.2C96@wt.net>
Source record: 177522

Mark Keith wrote:
>
> Announcing the latest in frectal technology!!! The frectal probe. In a
> blur of shiny activity the latest in antenna design is nearly complete!

>

Was able to do some testing this evening with the Frectal probeï¿½.
Comparing the tin foil covered version against the scaffold version,
could tell very little difference. If anything the smooth version gave
the best performance on 160m tonight. We will continue to run more tests
on this breakthough technology this weekend.
The scaffold version loaded well in tests we ran before the tin foil
covering last night. But as in recent modeling tests, after comparing
the two versions I could tell little advantage to all the meandering
wires which the scaffolding added to the structure. We had quite a group
of people interested in this new antenna and many hung around the
monument to watch me get the runs on 160m after we got it all tuned up.
The performance on 160 and 80 m was awesome. I was able to talk on 1.890
kc and hear my echo every time I unkeyed as the signal blasted it's way
around the world and back to my receiver. I'll post a pix of the
scaffold version of this antenna for reference. It did play well, but no
better than the solid mass of foil. In the picture you can see the van
we were operating from. The antenna was base fed with 213 coax. As we
are a small fledgling company I couldn't splurge on hardline. Overall,
I'd have to say it's been a thrill to test this theory in such an
historic setting. I had never been to DC before. It ranks up there with
my operating a special events station on the Battleship Texas. And the
prez seemed to be fairly nice too. I never actually got to see him, but
his relayed comments about his own version of this antenna were greatly
appreciated. "I guess his a UHF version".

Hope this helps...

http://web.wt.net/~nm5k/pro1.jpg

--
http://web.wt.net/~nm5k

1273. how about the difference about screwdriver antennas DKs and HS1500

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 05:20:25 UTC
From: Taka <sawat@anet.ne.jp>
Message-ID: <39FA620E.348804CA@anet.ne.jp>
Source record: 177524

hi for all , i am Taka JR3TVH from Osaka.
i am donated SD antenna, DK3 of Don Johnsns. it is so unique and happy
to me.
but installtion to new vehicle of mine, SUV montero, i need one like
High sierra HS202.
i cannot drill any hole to new SUV,you know.
and HS1500 price up and HS1500MarkII i saw on the HS website.
i want it ,the later 1500 is okay but he changed his website and more
expensive one,called MKII.
so i can not handle my wallet now.hi .Other progresssed DK3 type
antenna and StealthII.III.i find
them on the internet. What is the difference of them.
if anyone donate /sell low priceone , i would compare them all. i am
very interested it.
in JA there is few SD antenna. and ATAS100 coil is not big dia.73
mail me anyone!

1274. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 05:30:43 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <39fa6143.38073490@news.azstarnet.com>
Source record: 177525

On Fri, 27 Oct 2000 16:05:58 -0400, "Peter Bertini" <commquart@erols.com> wrote:

>"Rudy Marcelletti" <rudym@net-link.net> wrote in message
>news:39f9ced1$0$35012$44a10c7e@news.net-link.net...
>> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get for
>> free is solid center and solid skin, covered by a rubber coating, and it
>is
>> direct burial stuff. Have had 3 runs of 230+ feet in the ground for 2
>years
>> now with no problems, and last fall I even had a lot of fill dirt brought
>in
>> via 5 ton dump truck that drove over the hardline that was only burried
>> about a foot below the driveway with no ill effects.
>> Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
>> >
>> >Some CATV cables have the braid impregnated with a compound that prevents
>> >water migration
>> >through the length of the coaxial cable. A small slit or cut that would
>> >normally allow water to wick
>> >into to the braid if the braid wasn't flooded with this compound during
>> >manufacture. You'll recognize
>> >this type of cable if you ever see it, the braid looks like it was
>dipped
>> >in ScotchKote or something similar.
>> >
>> >Regards
>> >
>> >Peter
>> >
>> >
>Alas Rudy, NOWHERE did I say or mention HARDLINE 75 coaxial cable; my
>experience has been with RG59 and RG6 that have had flooded braids. Some
>other posters have
>confirmed that hardlines may also have the flooding compound to protect the
>aluminum
>sheath from corrosive conditions--that is news to me but I certainly dispute
>their claims.

Well, since the topic of this thread is "HARDLINE" maybe Rudy made a logical
assumption that you were talking about hardline.

And because something "is news to you" you automatically "dispute it?"
>
> I have never seen "a rubber coating" used on any type of CATV
>cable, so you are indeed one up on me..

Apparently several of us are one up on you. I have seen CATV "hardline" that has a jacket, that while precisely speaking isn't "rubber" is certainly a "rubber-like" material, that is designed to protect the aluminum shield from the elements.

Wes Stewart
>
>73
>
>Peter K1ZJH
>
>
>
>

1275. WTD:1750 Meter Xmtr/Beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 06:03:52 UTC
From: Heath <radiovintage@hotmail.com>
Message-ID: <mVtK5.148$G5.69844@nntp1.onemain.com>
Source record: 177526
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I am interested in buying an inexpensive 1750 meter transmitter and or beacon.Homebrew is ok and may be tube or solid state.
I am disabled with a neuro-muscular disease so it can not be a kit because I am unable to solder small components any longer.Price is also a concern due to fixed income so if you have anything you think I might be able to use please e-mail me with details and price.

1276. Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 06:09:54 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <39fa3653_1@news1.prserv.net>
Source record: 177608

I would like to connect a tuner (with only coax output) to 450ohm open wire which goes to a 45' dipole that I would like to try to use on several bands. I thought I would use something like a 4:1 voltage balun --- not a close match, but probably good enough. However, in reading about voltage baluns the handbook (and several other books) imply that they are reasonable solutions only when each side is matched to its load. The dipole will probably present a wide range of real/complex loads on various bands.

What is a reasonable way to connect the tuner to the line in this circumstance?

Bill Ogden
W2WO

1277. Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 06:15:20 UTC
From: rhatt <rhatt@hotmail.com>
Message-ID: <8tdqlh$t2a$1@ruby.mint.net>
Source record: 177527

Ok, so copyright infringements aside...

Could someone be so kind as to help me out? I would like to try a Rhombic array for working 10 meters. I have a nice opening on my lot that would seem ideal to installing one, but Im not all that technically apt, as far as doing the math necessary.
Any help would be appreciated.

Rhatt

"After 12 years of therapy, my shrink said something that brought tears to my
eyes... He said "No hablo Ingles".

1278. Re: Ignore all fractenna postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 06:16:18 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8tdjvghvm1@slb2.atl.mindspring.net>
Source record: 177617

jimmy john <jj@sandwitch.org> wrote in message
news:4A8A59F2BDCDD311BFC800508BA36AC8052462A1@www.indianarep.com...
> I'll take that luggage in Samsonite, please....
> ----------
> A rat done bit my sister Nell
>
> With whitey on the moon
>
> Her face and arms began to swell
>
> And whitey's on the moon
>
> I can't pay no doctor bills
>
> And whitey's on the moon
>
> Ten years from now, I'll be payin' still
>
> While whitey's on the moon
>
> You know, the man just upped my rent last night
>
> 'Cos whitey's on the moon
>
> No hot water, no toilets, no lights
>
> But whitey's on the moon
>
> I wonder why he's uppin' me
>
> 'Cos whitey's on the moon?
>
> Well, I was already givin' him fifty a week
>
> And now whitey's on the moon
>
> Taxes takin' my whole damn check
>
> The junkies make me a nervous wreck
>
> The price of food is goin' up
>
> And as if all that crap wasn't enough
>

> A rat done bit my sister Nell
>
> With whitey on the moon ...
>
>
One night/early morning on my old radio show I played that RIGHT after a
recording of Neil Armstrong on the Moon. Ah, free-form college radio, makes
14.313 sound like a Sunday School lesson.

Your luggage is in the mail.

Trust me.

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

1279. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 09:21:28 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39FA9A98.ED01FD8B@mwci.net>
Source record: 177528

Bill Ogden wrote:

> I would like to connect a tuner (with only coax output) to 450ohm open wire
> which goes to a 45' dipole that I would like to try to use on several bands.
> I thought I would use something like a 4:1 voltage balun --- not a close
> match, but probably good enough. However, in reading about voltage baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?

Consider the approach used in the ARRL-designed tuner in Chapter 22 of the 2000 ARRL Handbook.

Bill W0IYH

1280. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 12:14:09 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39FAC311.B92FBD1F@dialpoint.net>
Source record: 177533

If you are really concerned about this, wind the balun as a 9 to 1
instead of the more common 4 to 1 ratio.

Bill Ogden wrote:
>
> I would like to connect a tuner (with only coax output) to 450ohm open wire
> which goes to a 45' dipole that I would like to try to use on several bands.
> I thought I would use something like a 4:1 voltage balun --- not a close
> match, but probably good enough. However, in reading about voltage baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?
>
> Bill Ogden
> W2WO

1281. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 12:16:42 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <KszK5.44884$x81.971377@news2.rdc1.on.home.com>
Source record: 177529

Butch Magee <lynyrd@netdoor.com> wrote in message
news:39FA2C05.75A3B402@netdoor.com...
> This was a rather ugly and pretentiously "low" peice of advice for a man
with a
> problem Louis. I live in a fairly exclusive area on the Mississippi Gufl
coast,
> with all the restrictions one could ask for and my 80/40 attic dipoles do
a
> pretty good job for me on all bands (less 160). I'm a County Hunter
Louis, I
> listen to weak signals all day and the mobiles are hearing me just as well
as
> most of the stations with outdoor antennas, dipoles, verticals and beams.
I put
> my 3 element 2mtr beam on TV rotor up in the attic and a 2 mtr/440 mobile
> vertical (mag mount taped to AC duct work, it's alluminum, to get as much
of a
> counterpoise as I could. It works very well with my 2 mtr/440 HT.
>

Might be an ugly piece of advise but it was realistic. Your in a house the guy asking the question is in a townhouse. His neighbors are going to scream bloody murder when he keys up on anything more than 25 watts. If he is happy running 25 watts or there about then he should do fine. The guy should be prepared for the worst and that is what Louis was doing.

Barry D.

1282. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 12:50:56 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tei3j$1as$1@bob.news.rcn.net>
Source record: 177530

"Wes Stewart, Transmission Line Technician, Radio N7WS"
<no_spam_n7ws@azstarnet.com> wrote in message
news:39fa6143.38073490@news.azstarnet.com...
> On Fri, 27 Oct 2000 16:05:58 -0400, "Peter Bertini" <commquart@erols.com>
wrote:
>
> >"Rudy Marcelletti" <rudym@net-link.net> wrote in message
> >news:39f9ced1$0$35012$44a10c7e@news.net-link.net...
> >> Did not know 75 ohm CATV hardline had a "braid" as all the stuff I get
for
> >> free is solid center and solid skin, covered by a rubber coating, and
it
> >is

Snip

> >> Peter Bertini wrote in message <8ta4b7$pd8$1@bob.news.rcn.net>...
> >> >
> >> >Some CATV cables have the braid impregnated with a compound that
prevents
> >> >water migration
> >> >through the length of the coaxial cable. A small slit or cut that
would
> >> >normally allow water to wick
> >> >into to the braid if the braid wasn't flooded with this compound
during
> >> >manufacture. You'll recognize
> >> >this type of cable if you ever see it, the braid looks like it was
> >dipped
> >> >in ScotchKote or something similar.
> >> >
> >> >Regards
> >> >
> >> >Peter
> >> >
> >> >
> >Alas Rudy, NOWHERE did I say or mention HARDLINE 75 coaxial cable; my
> >experience has been with RG59 and RG6 that have had flooded braids. Some
> >other posters have
> >confirmed that hardlines may also have the flooding compound to protect
the
> >aluminum
> >sheath from corrosive conditions--that is news to me but I certainly
dispute
> >their claims.

>
> Well, since the topic of this thread is "HARDLINE" maybe Rudy made a
logical
> assumption that you were talking about hardline.

Wes, follow the thread and you will notice I was responding to the gentleman
who
asked about flooding compounds in coaxial cables. I used the braided
variety
as a example.
>
> And because something "is news to you" you automatically "dispute it?"
> >

Having a bad hair day, Wesley? I will have to watch your posts closely for
typos and
pounce on you when they occur. Obviously, that should have read " , I
certainly don't
dispute their claims".

> > I have never seen "a rubber coating" used on any type of CATV
> >cable, so you are indeed one up on me..
>
> Apparently several of us are one up on you. I have seen CATV "hardline"
that
> has a jacket, that while precisely speaking isn't "rubber" is certainly a
> "rubber-like" material, that is designed to protect the aluminum shield
from the
> elements.
>
> Wes Stewart
> >
> >73
> >

Sorry Wesley, never seen rubber used on any modern cables as a jacket. If
it is, it
is rarity.

> >Peter K1ZJH
> >
73

Peter
> >
> >
> >
>

1283. Re: Scanner antenna connection problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 12:54:18 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39FACC22.DBB3717E@GTE.net>
Source record: 177531

MEL wrote:

> I have a problem with an external antenna connection for my new desk top
> VHF/Air/UHF Scanner and am looking for the most appropriate News Group to
> post a message with the problem. Can anyone tell me what NG I should try?
> This NG is the closest I could come up with.
>
> Here is the problem: I am running RG-8 coax cable antenna from the scanner
> to the antenna. Today I bought a PL-259 UHF - Solder Type Connector at
> Radio Shack to replace and existing connector. I put the new connector on
> the cable per the instructions that came with it but found that when I first
> put the connector center prod) in the center hole of antenna receptacle on
> the scanner, the scanner works OK. But as soon as I attempt to secure the
> scanner and the cable by threading the connector to the scanner the
> transmissions stop. They stop as soon as I touch the two metal parts
> together. If I pull the threaded coupling back and just leave the center
> prod sticking in the scanner, the transmissions start again.
>
> If you can help I would appreciate it. If there a more appropriate NG to
> post this please advise. Thanks

Sounds as though there is a short in the coax. If the only thing you changed was the connector- then you have a short in the connector. An ohm meter test will proves this out- you may want to disconnect the antenna as it may be designed with a DC short itself, which would mask the coax short.

Dale W4OP

1284. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 13:01:01 UTC
From: matjake@aol.com
Message-ID: <20001028090101.25017.00000166@ng-cs1.aol.com>
Source record: 177532

Sorry Wesley, never seen rubber used on any modern cables as a jacket. If
it is, it
is rarity.

> >Peter K1ZJH

I would say the outside jacket is made of a PVC material.

Regards

1285. h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 13:12:02 UTC
From: fractenna@aol.com
Message-ID: <20001028091202.01754.00000925@ng-cd1.aol.com>
Source record: 177534

Congratulations you turkeys. You've taken someone whose done something positive and through jeaolusy and hatred changed his life. You are to be pitied.

Nathan Cohen has his position terminated on 1 Nov.

Now there must be assumed massive legal problems for those who have defamed and injured this person. I don't think you have any idea what kind of villany you have done. But I bet you will find out.

Phil
de N1ZKT

1286. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 13:17:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FAD1CC.2F1ED453@bigfoot.com>
Source record: 177535

Ralph Mowery wrote:
> If you are really concerned about this, wind the balun as a 9 to 1
> instead of the more common 4 to 1 ratio.

Why? The balun will never see 450 ohms.

> Bill Ogden wrote:
> > I would like to connect a tuner (with only coax output) to 450ohm open wire
> > which goes to a 45' dipole that I would like to try to use on several bands.
--
http://www.mindspring.com/~w6rca

1287. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 13:27:59 UTC
From: k4ia@aol.com
Message-ID: <20001028092759.00121.00001827@ng-cq1.aol.com>
Source record: 177536

The auto tuner in my Icom 746 handles the G5RV just fine on all bands including 30 meters where it isn't "supposed" to work. Your results may vary.

According to the folks at Radio Works, a G5RV is not very good in an inverted V configuration when the angle of the legs is less than 140 degrees. Too much radiation straight up. Check out www.radioworks.com Of course, if that is all you can do, it is better than nothing. My G5RV is an inverted V and it works OK but is being replaced this weekend with a ladder line fed dipole.

If you haven't yet bought the G5RV you might consider a shorter antenna that you can flatten out - such as the Spi-Ro AS-2. It is only 70 feet long works 160-10, uses ladder line and requires a tuner. See www.spiromfg.com

W9INN makes a space saver dipole covering 160-10 in only 71 feet. 80-10 in 42 feet. Look for the tiny print ads in QST. They are rather expensive compared to the G5RV or the Spi-ro product and aren't advertised to cover the WARC bands but I don't know why they wouldn't as they are ladder line fed through a tuner.

For your, RFI make sure you run the matching section of the G5RV straight down and keep the coax away from the antenna. High pass filters may help, also torroids on the phonelines and AC filters on the TV. Radio shack sells all that stuff. I originally had a lot of trouble with RFI with another antenna but it was solved by relocating the feedline. I wasted a lot of money at Radio Shack buying filters to no avail.

Let us know how it turns out.
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

1288. Re: PCB based antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 14:25:30 UTC
From: k1bqt@aol.com
Message-ID: <20001028102530.05236.00000831@ng-cu1.aol.com>
Source record: 177537

Hi Paul--

You'll probably have to space your pc board above an aluminum groundplane of some kind--perhaps at least a few inches above the surface. This should give you some consistent isolation from whatever external surface you mount it on--and allow you to optimize it on the bench. Probably hit Walmart and get a nifty plastic "mirowave-proof" food container to put it in?

Rick K1BQT

1289. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 14:46:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8teorbqct0@208.207.71.137>
Source record: 177538

Wes Stewart, Transmission Line Technician, Radio N7WS wrote:
>
I have seen CATV "hardline" that
> has a jacket, that while precisely speaking isn't "rubber" is certainly a
> "rubber-like" material, that is designed to protect the aluminum shield from the
> elements.

If looks mean anything that stuff would perform quite well buried. It
appears that it would probablly last as long as you'd want it to.

1290. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 14:51:32 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39FAE7F4.83AC9616@wb6hqk.ampr.org>
Source record: 177539

"Wes Stewart, Transmission Line Technician, Radio N7WS" wrote:
>
> > I have never seen "a rubber coating" used on any type of CATV
> >cable, so you are indeed one up on me..
>
> Apparently several of us are one up on you. I have seen CATV "hardline" that
> has a jacket, that while precisely speaking isn't "rubber" is certainly a
> "rubber-like" material, that is designed to protect the aluminum shield from the
> elements.
>
The outer jacket is polyethylene on all of the CATV hardline used in my
neighborhood as well as the 50 ohm stuff used at the local county radio
facility.

bart
wb6hqk

1291. WTB: Stubby Duck <3"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 14:54:16 UTC
From: BHL <philoxeny@hotmail.com>
Message-ID: <sMBK5.698$_a2.100398@news7.onvoy.net>
Source record: 177540
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.swap

Anyone tired of their 2 meter/440 dual band stubby duck? SMA or BNC ok. Any brand, any length up to 3 inches is ok. Must be able to transmit on 2 and 440. Tell me what you have and how much. Tnx. BHL philoxeny@hotmail.com

1292. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 14:59:10 UTC
From: richardharrison@webtv.net
Message-ID: <9291-39FAE9BE-4@storefull-117.iap.bryant.webtv.net>
Source record: 177479

Rhatt wrote:
"I would like to try a Rhonbic array for working 10 meters."

The U.S. Army supplied rhombics for use with radio sets AN/TRC-1, -3. and -4. in WW-2. Using the 70-MHz version having 4 wave lengths per side, this would scale to 29 MHz as follows:
Leg length: 115 ft. (2 ea. 230 ft. wires)
Height: Use 4 ea. 60 ft. poles for support.
End poles: 290 ft apart
Side poles: 125 ft. apart
A 600 to 800 ohm resistor is used to terminate the target end of the rhombic.
A balun and match is used between the 600-800 ohm rhombic and 50 ohm coax used with the radio set.

Gain would be about 11 dbd in free space, but depends on ground conductivity under and around the rhombic and could be more or less than 11dbd. Gain is the same if the termination resistance is omitted, but the rhombic will be bidirectional. The resistor makes it unidirectional.

The advantage of a rhombic is is ability to operate over a wide frequency range while maintaining a relatively constant impedance.

For single-band operation, doesn`t a Yagi look very good as it needs only a single support, can be rotated, and takes up much less real estate?

Best regards, Richard Harrison, KB5WZI

1293. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 15:20:38 UTC
From: "Wayne N3TNS"
Message-ID: <39FAEEC6.43BD083@attglobal.net>
Source record: 177541

That's the real problem with this country... no... make it society in general... it's always someone else's fault. Everyone is to blame but me.... I'm so tired of hearing that kind of shit I could scream. Maybe too much time was devoted to the internet and newsgroups and creating negative publicity and not enough time doing what he was paid to be doing... like work! (assuming you're talking about someone losing their job or contract). Get a life!

Wayne

email wgvideo at attglobal dot net

1294. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 16:13:38 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39FAFBF4.DB74F7AC@bellatlantic.net>
Source record: 177542

Groan. I used to have the location for that Spanish board - but can't
find it. If you can find it, please post it here. Thanks!

Dick Carroll wrote:

> From postings by users, the Spanish made board is better and much
> cheaper than the Ameritech. It would be worth researching for anyone who
> needed to resolve a failure.
>
> ehsjr@bellatlantic.net wrote:
> >
> > There's at least 2 different sources for replacement boards without
> > batteries - both in the over $100 range. So - you go for the battery
> > in the $5 range (for 2 batteries). If you're careful, you just bought
> > another ten years of life for about 5 bucks, you have an extra 3V
> > coin cell on hand, and you save over 100 bucks.. If you aren't
> > careful, you buy the expensive board to correct your error.
> >
> > The replacement board approach is great when the original
> > board loses its brains. And it provides extra memories, if
> > that feature is of interest. Anyone contemplating replacing the
> > battery should look into the replacement board before opening
> > the radio. go to the following url:
> > http://www.ameritech.net/users/willco788/index.html
> >
> > Dick Carroll wrote:
> >
> > > There's an aftermarket RAM board made in Spain, I believe which uses no
> > > battery, has better features than the original, according to users, and
> > > costs much less, shipped. I don't have the details in front of me but
> > > they can be gotten from others on the Icom list and the Icom net.
> > >
> > > Dick
> > >
> > > Dick Hughes wrote:
> > > >
> > > > That's not a bad idea if there's enough room. When I replaced the
> > > > battery in my IC-271 (same battery) I used those tiny clip leads with
> > > > the wire hook at the end to attach to the battery circuit at the
> > > > easiest point. I used a second battery to power the circuit and
> > > > unsoldered and replaced the existing battery. Was fairly easy to do,
> > > > but wish I had thought of your idea. Of course I have solved the
> > > > problem in my IC-745 with the Willco board. BTW, the battery in the
> > > > IC-745 was still going at 15 years. Lucky I suppose.
> > > >

> > > > Dick - W6CCD
> > > >
> > > > On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
> > > >
> > > > >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> > > > >and then just leave them in place? You could then just add the battery to the
> > > > >holder, replace the old battery and then remove the battery from the holder until
> > > > >next time. If there is enough room for this it would reduce wear and tear on the
> > > > >pcb and make the change next time much easier as there is less to remember 5 years
> > > > >down the road..

1295. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 16:38:17 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <39FB00F9.3A45C812@tir.com>
Source record: 177543

Dear Mr. Liggett:
Antenna Spec. co has some products that may well help.
http://www.antenna.com/trunking_cat/trkpg20.html

The above URL shows one possible solution. The Company has other
bidirectional amplifiers/antennas. Look under "repeaters."
Hope that this helps. 73 Mac

--
J. Mc Laughlin n8tt@tir.com Michigan ~

1296. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 17:17:12 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tf1o8$hu0$1@iac5.navix.net>
Source record: 177544

While my first inclination was to say if your looking for sympathy, you can find it in the dictionary between shit and syphilis....

Upon reflection, I hope to give you a serious answer. No one on this group could get Nathan fired except Nathan. Universities are the most politically correct institutions in society. As such, the firing of anyone is done ONLY after exhausting all other avenues and the utmost concern for the rights of the person being terminated. While missives from this group could start the process in motion, they could hardly be responsible for the conclusions. Having been on the receiving end of his vindictive nature, I can only assume that the supercilious, vitriolic personality carried over to his job. The mental instability shown on this newsgroup had to manifest itself in the classroom. Dr. Cohen is solely responsible for the events that have befell him. He is to be pitied, as his friend you have the obligation to encourage him to get some professional help so he may get his life back on track. Perpetuating the myth that his problems are the fault of others dos him a disservice. I expect however, much to the detriment of his mental health, you will continue as a cheer leader on the "sue the bastards" team. Mores the pity!

"Fractenna" <fractenna@aol.com> wrote in message
news:20001028091202.01754.00000925@ng-cd1.aol.com...
> Congratulations you turkeys. You've taken someone whose done something
positive
> and through jeaolusy and hatred changed his life. You are to be pitied.
>
> Nathan Cohen has his position terminated on 1 Nov.
>
> Now there must be assumed massive legal problems for those who have
defamed
> and injured this person. I don't think you have any idea what kind of
villany
> you have done. But I bet you will find out.
>
> Phil
> de N1ZKT
>
>

1297. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 17:23:06 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <iVDK5.457$NJ1.5433@news.inreach.com>
Source record: 177545

> Ok, so copyright infringements aside...

You are free to build any antenna you want, copyrighted or not. I am afraid that all the contentious exchanges on this NG have clouded some legal issues.

> Could someone be so kind as to help me out? I would like to try a Rhombic
> array for working 10 meters. I have a nice opening on my lot that would seem
> ideal to installing one, but Im not all that technically apt, as far as
> doing the math necessary.
> Any help would be appreciated.

The ARRL antenna book has been publishing rhombic designs for decades. You can probably find a copy at your local library. There are many antenna designs on the web. Try a search on "rhombic antennas" or go to:

http://www.ac6v.com/pageant.html

Good luck...

Roger K6XQ

1298. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 17:24:06 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39FB0C77.C5A4637E@bellatlantic.net>
Source record: 177546

Found it! Pasting the contents of my file:
EPROM/RAMBOARD
by Roberto Nardo, IK2RND

For ICOM IC-751/A IC-751 IC-745
ICR71E/A and IC-271 IC-471 IC-1271

The EPROM/RAMBOARD card directly replaces the ICOM RAM
UNIT EX-314 and EX-314 # 01. No soldering is needed and the
frequency coverage is extended from 10 KHz to 30.9 MHz (for HF Rigs)
and for the IC-271 2 meter radio, the range is extended to
142.400-153.990 MHz.

<snip>

For info mailto:roberto.nardo@pv.infn.it on the Internet
or IK2RND@IK2ANE.ILOM.IT.EU on the Packet BBS

Dick Carroll wrote:

> From postings by users, the Spanish made board is better and much
> cheaper than the Ameritech. It would be worth researching for anyone who
> needed to resolve a failure.
>
> ehsjr@bellatlantic.net wrote:
> >
> > There's at least 2 different sources for replacement boards without
> > batteries - both in the over $100 range. So - you go for the battery
> > in the $5 range (for 2 batteries). If you're careful, you just bought
> > another ten years of life for about 5 bucks, you have an extra 3V
> > coin cell on hand, and you save over 100 bucks.. If you aren't
> > careful, you buy the expensive board to correct your error.
> >
> > The replacement board approach is great when the original
> > board loses its brains. And it provides extra memories, if
> > that feature is of interest. Anyone contemplating replacing the
> > battery should look into the replacement board before opening
> > the radio. go to the following url:
> > http://www.ameritech.net/users/willco788/index.html
> >
> > Dick Carroll wrote:
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> > > There's an aftermarket RAM board made in Spain, I believe which uses no
> > > battery, has better features than the original, according to users, and
> > > costs much less, shipped. I don't have the details in front of me but
> > > they can be gotten from others on the Icom list and the Icom net.

> > >
> > > Dick
> > >
> > > Dick Hughes wrote:
> > > >
> > > > That's not a bad idea if there's enough room. When I replaced the
> > > > battery in my IC-271 (same battery) I used those tiny clip leads with
> > > > the wire hook at the end to attach to the battery circuit at the
> > > > easiest point. I used a second battery to power the circuit and
> > > > unsoldered and replaced the existing battery. Was fairly easy to do,
> > > > but wish I had thought of your idea. Of course I have solved the
> > > > problem in my IC-745 with the Willco board. BTW, the battery in the
> > > > IC-745 was still going at 15 years. Lucky I suppose.
> > > >
> > > > Dick - W6CCD
> > > >
> > > > On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
> > > >
> > > > >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> > > > >and then just leave them in place? You could then just add the battery to the
> > > > >holder, replace the old battery and then remove the battery from the holder until
> > > > >next time. If there is enough room for this it would reduce wear and tear on the
> > > > >pcb and make the change next time much easier as there is less to remember 5 years
> > > > >down the road..

1299. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 17:29:33 UTC
From: k1bqt@aol.com
Message-ID: <20001028132933.29754.00000249@ng-cr1.aol.com>
Source record: 177547

Hi Wayne--

>...it's always someone else's fault.<

Phil never specified if this disconnect involved FAS, BU Metro, or Amway, so how do we even know what he's talking about?

Regardless, I agree with you. Those unwilling to assume responsibility for their own actions often seek revenge by lashing out at others. But, don't worry about getting a "subpoena". A "subpoena" is simply a court order compelling a third party to produce take-out consisting of a particular type of elongated sandwich. The legal term that compells someone to appear and testify at trial is spelled a bit differently.

Rick K1BQT

1300. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 18:16:10 UTC
From: DON <Hanna@ican.net>
Message-ID: <3JEK5.11670$nk2.24014@news1.tor.primus.ca>
Source record: 177548
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

My 97 chev 2500 van would amuse on lookers when I transmitted on 80, 40 or 20. Anything over 25 watts on 80 meters the windshield wipers would start. On 40 meters the interior lights and dash warning lights would turn on. 20 meters a warning buzzer would sound from under the dash. Transmitting at 100 watts would kill the engine.
Several emails to GM showed that they are completely useless (I already knew that after having transmission problems that they would not address).
Anyway, paying closer attention to grounding, PL connections and chokes have solved the problems, but have not tried more than 100 watts.
Equipment: FT707, Screwdriver (homebrew)
Don
VA3 ANY
73

Dr. Robert Suding <robert@qadas.com> wrote in message news:39FA18A3.1780B59E@qadas.com...
> W9NTP has been running a KW on SSTV in his trucks, recently a Suburban, for
> a number of years, mostly on 20. using a Heathkit SB220. Contact him for
> details on
> problems & solutions found.
>
> A number of years ago I could shut down the electronic ignition on a Renault
> Fuego by keying my 25 watt 2M FM rig if the ground contact on the antenna
> was not making a good contact with the metal car body.
>
> Ford used to hire people to keep track of what make of car had its ignition
> system killed by getting too close to the Voice of America antennas. They
> were also concerned that the ABS brakes could lock up or airbags might
> deploy!
>
> Nissans put out a spurious signal on 146.985 Mhz which opens the squelch on
> a 2M FM receiver.
>
> Robert W0LMD
>
>
> Scott wrote:
>
> > No, my new vehicle isn't possessed!

> >
> > I wanted to up the power in my HF Mobil setup in my truck. Is there any
> > danger of running 500 or more watts in a new (2001)Chevy 1500 Truck? I
> > have heard some bad things about running power in newer vehicles - does
> > anyone have any insight/advice? I would being using 40 meters on up. Any
> > bands cause more problems than others?
> >
> > Scott.
>
>
>

1301. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 18:41:59 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <39fb1dc0.11685185@news1.pei.sympatico.ca>
Source record: 177549
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Walt Davidson <junkmail@redhotant.net> wrote:

>On Fri, 27 Oct 2000 21:22:05 -0500, "Adam" <radar_radio@yahoo.com>
>wrote:
>
>>1. I have a G5RV Dipole up about 40' set up as an inverted "v", and use it
>>on 10-80 meters with an external tuner. I just got a new rig with a built-in
>>autotuner. My question is: will the autotuner handle the SWR of the G5RV as
>>well as my manual tuner does, or will I be better off to continue using the
>>manual tuner? II have heard that autotuners have a low tolerance to high
>>SWR, and in some spots, the SWR on the G5RV is very high (3.1+).
>
>An external tuner will generally be better than an autotuner. If you
>have an external one, use it.

Yes, I agree with what Walt here says...I have a G5RV and use it with an FT-990 which has an autotuner and it works fine, my ant has several spots with swr over 3:1 and the tuner handles it fine...just for your info...

1302. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 19:18:22 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FB267E.DA5AD45B@hiwaay.net>
Source record: 177550

Rick- I think we can assume he meant BU. That is the only position we know of where other people control his employment. I note that some people are responding to the "hatred" post as if it originated with the real Phil. That may be true, in this case, but dont bet much money on it- history would lead me to think otherwise.

I'm sure we will hear more about this, and get LOTS of blame heaped on the members of the NG, because, obviously, it CANT be Chips fault- he is always blameless, and as pure as the driven snow.

I wonder if Cohendog got kicked, this morning?

Bill

Rick Littlefield wrote:
>
> Hi Wayne--
>
> >...it's always someone else's fault.<
>
> Phil never specified if this disconnect involved FAS, BU Metro, or Amway, so
> how do we even know what he's talking about?
>
> Regardless, I agree with you. Those unwilling to assume responsibility for
> their own actions often seek revenge by lashing out at others. But, don't
> worry about getting a "subpoena". A "subpoena" is simply a court order
> compelling a third party to produce take-out consisting of a particular type of
> elongated sandwich. The legal term that compells someone to appear and testify
> at trial is spelled a bit differently.
>
> Rick K1BQT

1303. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 20:48:52 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FB3BB4.27B8@wt.net>
Source record: 177551

Bill Aycock wrote:
>
> Rick- I think we can assume he meant BU. That is the only position we
> know of where other people control his employment. I note that some
> people are responding to the "hatred" post as if it originated with the
> real Phil. That may be true, in this case, but dont bet much money on
> it- history would lead me to think otherwise.
>
> I'm sure we will hear more about this, and get LOTS of blame heaped on
> the members of the NG, because, obviously, it CANT be Chips fault- he is
> always blameless, and as pure as the driven snow.
>
> I wonder if Cohendog got kicked, this morning?
>
> Bill

Well, he wrote....

Congratulations you turkeys. You've taken someone whose done something
positive and through jeaolusy and hatred changed his life. You are to be
pitied.

Nathan Cohen has his position terminated on 1 Nov.

Now there must be assumed massive legal problems for those who have
defamed and injured this person. I don't think you have any idea what
kind of villany you have done. But I bet you will find out.

Phil
de N1ZKT

unquote...

But it's all horsehocky. The only person guilty of all this is Chip. If
he is indeed fired, it's his own fault. I'm sure the school did their
research before coming to a conclusion. They are not going to fire
someone just because someone off a Usenet group says it needs to be. I'm
sure they looked into it and came to their conclusion on the FACTS of
the case. Heck, I subtly tried to warn him months ago about braying like
a jackass on the internet, but nooooooooooooo, he wouldn't listen. I bet
he listens now. And I myself didn't have a thing to do with any of this.
I could care less, except that he clogs the NG up with clap trap. I sure
haven't been in any contact with his school in any way. I doubt I would
even want to waste my time talking to them. If he thinks the school is
wrong, he needs to hire a lawyer and take em to court. Trying to sue
anyone on this NG will be an effort in futility. But as previously

mentioned, he won't listen. He thinks he's Perry Masons lost step child.
But I don't think his ph.d covered law. MK
--
http://web.wt.net/~nm5k

1304. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:13:45 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FB4189.4B88@wt.net>
Source record: 177552

K4IA wrote:
>
> The auto tuner in my Icom 746 handles the G5RV just fine on all bands including
> 30 meters where it isn't "supposed" to work. Your results may vary.

You could be having cases where it could run awful hot though. And you
can't really tell if it is or not.
That would make me very nervous. The built in tuners pretty
lightweight. And if it went south it would cost half a mint to fix.
But... it's your radio..:/
>
> According to the folks at Radio Works, a G5RV is not very good in an inverted V
> configuration when the angle of the legs is less than 140 degrees. Too much
> radiation straight up. Check out www.radioworks.com Of course, if that is
> all you can do, it is better than nothing. My G5RV is an inverted V and it
> works OK but is being replaced this weekend with a ladder line fed
> dipole.

Hummm, I would think the height above ground would have more of an
effect on the radiation. Even a flat top dipole will shoot straight up
if low to the ground in WL. In a case like that the angle of the legs
has little difference. And even an inv Vee with a 90 angle will show
good low angle radiation if over 1/2 Wl high. MK
--
http://web.wt.net/~nm5k

1305. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:19:54 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tfftl$85u$1@nnrp1.deja.com>
Source record: 177553

Sounds like one of two things may have caused this.

1) Grant money ran out.

2) He was found to spending too much time on the internet at work!

Either way, they wouldn't have fired NC for what ANYONE on the
newsgroups said unless it turned-out to be true!

In article <20001028091202.01754.00000925@ng-cd1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> Congratulations you turkeys. You've taken someone whose done
something positive
> and through jeaolusy and hatred changed his life. You are to be
pitied.
>
> Nathan Cohen has his position terminated on 1 Nov.
>
> Now there must be assumed massive legal problems for those who have
defamed
> and injured this person. I don't think you have any idea what kind of
villany
> you have done. But I bet you will find out.
>
> Phil
> de N1ZKT
>
>

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1306. Re: EZNEC: Warning of Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:35:45 UTC
From: Zsylvan+noZs_0010@Zcyberhighway.Znet.invalid
Message-ID: <slrn8vmdk3.5h.Zsylvan+noZs_0010@p100.dbutler.org>
Source record: 177554

On 24 Oct 2000 11:08:22 GMT, Fractenna <fractenna@aol.com> wrote:
>If you could kindly point some of those out, they can be supoenaed in support
>of the case.

First you have to have a case.

sdb
--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

1307. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:35:49 UTC
From: Zsylvan+noZs_0010@Zcyberhighway.Znet.invalid
Message-ID: <slrn8vmd51.5h.Zsylvan+noZs_0010@p100.dbutler.org>
Source record: 177555

On 24 Oct 2000 17:01:21 GMT, Fractenna <fractenna@aol.com> wrote:
>The MI2 EZNEC file is copyright and held by me.

Prove it.

>W7EL d/b/a EZNEC are under copyright violation in the publication and
>distribution of the file.

Prove it.

The only way to prove copyright has nothing to do with posting claims
in a public forum. It has everything to do with court, judge, etc.

sdb
--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

1308. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:35:50 UTC
From: Zsylvan+noZs_0010@Zcyberhighway.Znet.invalid
Message-ID: <slrn8vmdcb.5h.Zsylvan+noZs_0010@p100.dbutler.org>
Source record: 177557

On 24 Oct 2000 18:51:17 GMT, Fractenna <fractenna@aol.com> wrote:
>>On Tue, 24 Oct 2000 17:11:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
>>adjudicated: data lists do not constitute copyrightable content. As
>>EZNEC is based on a list of parameters, EZNEC files in and of
>>themselves do not carry copyright protection. (They may contain trade
>>secrets - but that cat is out of the bag.)

>Does ANYONE understand this person??

Yes. If you don't, you are mentally deficient.

sdb
--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

1309. Re: Depictions of the MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:35:51 UTC
From: Zsylvan+noZs_0010@Zcyberhighway.Znet.invalid
Message-ID: <slrn8vmdhj.5h.Zsylvan+noZs_0010@p100.dbutler.org>
Source record: 177556

On Wed, 25 Oct 2000 07:12:30 +0100, KB9WFK@mindspring.com <KB9WFK@mindspring.com> wrote:
>And when he is found legally innocent of your charges what will you do? sorry, I

He will never be found legally innocent, because he is legally innocent.
If there had been some trespass, then he could be found guilty. But
since it will never go to court, that won't happen.

sdb

--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

1310. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:38:02 UTC
From: fractenna@aol.com
Message-ID: <20001028173802.29846.00000255@ng-cr1.aol.com>
Source record: 177558

To Whom it May Concern:

The upcoming change I will experience is a private matter. I will not address it on this NG in any way.

I am writing to state that I DO NOT--repeat--DO NOT wish to receive nor expect any form of e-mail on this topic.

DO NOT e-mail me on this topic.

Cordially,
NC

1311. Re: Announcing the Frectal Probe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:42:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FB482E.2D55@wt.net>
Source record: 177559

Bob Miller wrote:

>
> Well, damn, Mark, thanks to your unusual spelling of the "f" word,
> using an "e" rather than an "a" you managed to sneak by all my filters
> for Mister F-word. Sigh.
>
> Bob
> kqwg

Pretty sneaky huh. But don't worry, I'll quit. I just wanted to give him a taste of his own medicine. My antenna a joke of course, but if you didn't know any better you could mix mine with one of their creations and you wouldn't think anything amiss. It would fit right in. But since he seems to have been terminated from his school gig, I better slack off. I don't want to trigger any irrational behaviour. He might kick Cohendog again. I wouldn't want that to happen. MK
--
http://web.wt.net/~nm5k

1312. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:46:22 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <7HHK5.1184$OG1.3711@newsfeed.slurp.net>
Source record: 177561

BWAAHAAHAAHAAAHAAAHAAAA ...

NC HIMSELF SEZ:

SnIp
I am writing to state that I DO NOT--repeat--DO NOT wish to receive nor
expect
any form of e-mail on this topic.

DO NOT e-mail me on this topic.

Cordially,
NC
sNiP

translation: do not reply to f-word trolls

BWAAHAAHAAHAAAHAAAHAAAA ...

K3BHJ

1313. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:48:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39FB49B6.569F7834@oio.net>
Source record: 177562

Frac,
I'm afraid it's a bit late. Your 'bud' Chip has made
it a topic on this NG. All I can say is that I certainly
don't plan to email you about this or any subject.
'Doc

1314. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 21:49:44 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39FB49F8.1CACC8D5@mwci.net>
Source record: 177560

Fractenna wrote:

> To Whom it May Concern:
>
> The upcoming change I will experience is a private matter. I will not address
> it on this NG in any way.
>
> I am writing to state that I DO NOT--repeat--DO NOT wish to receive nor expect
> any form of e-mail on this topic.
>
> DO NOT e-mail me on this topic.
>
> Cordially,
> NC

I do regret this problem, Chip. I hope things work out OK for you.

Bill W0IYH

1315. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 22:42:45 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tfkp4bsm1@nnrp1.deja.com>
Source record: 177563

In article <20001028173802.29846.00000255@ng-cr1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> To Whom it May Concern:
>
> The upcoming change I will experience is a private matter. I will not
address
> it on this NG in any way.
>

You just did!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1316. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:04:48 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <iFv7OXZ7yl09b5Qsc2dmAAmFn6Ct@4ax.com>
Source record: 177564

jbhall1282@my-deja.com wrote:

>I have a long run of coax from the shack out to my antenna garden and
>it must run underground. Trying to minimize losses, I was thinking of
>running hardline. Is most hardline suitable for direct burial? Thanks.
>73
>Jerry
>W0PWE
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

You might try
http://www.radioworks.com
or
http://www/thewireman.com

I know Radio Works sells a buriable "Bury Flex" with a polyethylene
jacket. The Wireman most likely has something similar. These guys can
probably give you the real scoop on what's truly buriable or not...

Bob
k5qwg

1317. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:11:15 UTC
From: JerryL <jlockett@onemain.com>
Message-ID: <F%IK5.395$G5.154835@nntp1.onemain.com>
Source record: 177565

Looks like he is trolling for sympathy now!!

> fractenna@aol.com (Fractenna) wrote:
> > To Whom it May Concern:
> >
> > The upcoming change I will experience is a private matter. I will not
> address
> > it on this NG in any way.
> >

1318. Re: Amplifiers and High Sierra Screwdriver

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:19:14 UTC
From: Hal Stang <wd4mda@mediaone.net>
Message-ID: <S9JK5.807$3h3.11729@typhoon.jacksonville.mediaone.net>
Source record: 177566

Rudy,
I run a high Sierra Screwdriver. I ran a Ameritron ALS 500M for two (2) years. If you read the specs from High Sierra , you will note 500 watts is about maximum. Most (I said most) screwdrivers apparently do not take anymore power, due to the material the form is made from, on which the coil is wrapped.
No tweaking, just drop the SWR flat and key the amp.
Ground, ground ground. Braid, strap etc.
Haven't run a cap hat. They sell one.
Hope this helps.

--
73
Hal Stang
WD4MDA
wd4mda@mediaone.net
"Rudy Marcelletti" <rudym@net-link.net> wrote in message news:39f9c77f$0$35012$44a10c7e@news.net-link.net...
> Any one using amplifiers with High Sierra screwdriver antennas? If so, how
> many watts, what kind of amp and how do you have the antenna grounded
> (bonded) to the frame of the vehicle (more than one braid, solid copper
> strap, other)? Do you use any type of cap hat? If so, what kind? How big?
> Do you need to tweak the tuning from barefoot position when you engage the
> amplifier? Ever have any corona?
>
>

1319. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:25:14 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39FB6037.850FFEE4@dvol.com>
Source record: 177567

Fractenna wrote:

> To Whom it May Concern:
>
> The upcoming change I will experience is a private matter. I will not address
> it on this NG in any way.

>
What the hell do you call this post?!
>

>
>
> I am writing to state that I DO NOT--repeat--DO NOT wish to receive nor expect
> any form of e-mail on this topic.
>
> DO NOT e-mail me on this topic.
>
> Cordially,
> NC

>
(PS) The U of P is looking for EE instructors. (Not *that* U of P, the University
of Pyongyang . .)

1320. Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:32:28 UTC
From: Aaron Hanson <ha2@uswest.net>
Message-ID: <RIJK5.6166$YI5.319399@news.uswest.net>
Source record: 177568

Hi All-

I'm considering purchasing an antenna for the specific purpose of TV reception of CBUT (Vancouver Canada channel 2) from Seattle. I've determined the transmitter location and power, and with some basic path loss calculations I've decided that for the antenna and feed-line I'm considering, I'll end up with about -25dBm (3 microwatts) signal strength at the TV.

Now I realize I have no idea what range of signal strength is necessary for decent TV reception. Of course the TV specs say nothing about receiver sensitivity.

Does anyone know what range of signal strengths equate to decent TV reception in today's typical TV?

Thanks!

-Aaron
KB7OPL

1321. Re: Lifespan of Hardline Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:45:07 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <39FB6503.83964C28@qadas.com>
Source record: 177469

I use several long lengths of hardline for my 160M to 10M antennas. The cable was old when I got it and that was 15 years ago. The main problem has been kinking the aluminum when trying to unroll the stuff.

I run a multiple of a 1/2 wavelength to each antenna. This way the impedence is the same at each end, regardless of the impedence of the hardline. The trick is to find the magic 1/2 wavelength point. It is rather simple using the MFJ or AEA analyzers, and the hardlines are all about 200-300 feet in length, and the price was right (free)!

Robert W0LMD

Peter Bertini wrote:

> I have several spools of old Alumafoam (Times Wire) that have been in
> storage for about 25 years, both 7/8" and 1/2" sizes. I have heard these
> products have a finite lifespan, and I was wondering what the failure modes
> for these cables normal are--increasing losses, etc.? And, I am was
> wondering what causes these cables to deteriorate with age. I am planning
> to use the cables next year on a new tower installation, and I am wondering
> if I should worry about the cable because of its age; or is it worth the
> bother of going through the motions to measure the losses using a signal
> generator and my Boonton microwattmeter? What experiences have others on
> the group had with aging hardline?
>
> Pete

1322. Re: Lifespan of Hardline Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-28 23:50:33 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tfooephl1@bob.news.rcn.net>
Source record: 177470

Thanks to everyone for all of the replys.

It is appreciated.

Pete

"Dr. Robert Suding" <robert@qadas.com> wrote in message
news:39FB6503.83964C28@qadas.com...
> I use several long lengths of hardline for my 160M to 10M antennas. The
cable
> was old when I got it and that was 15 years ago. The main problem has
been
> kinking the aluminum when trying to unroll the stuff.
>
> I run a multiple of a 1/2 wavelength to each antenna. This way the
impedence is
> the same at each end, regardless of the impedence of the hardline. The
trick is
> to find the magic 1/2 wavelength point. It is rather simple using the MFJ
or
> AEA analyzers, and the hardlines are all about 200-300 feet in length, and
the
> price was right (free)!
>
> Robert W0LMD
>
>
> Peter Bertini wrote:
>
> > I have several spools of old Alumafoam (Times Wire) that have been in
> > storage for about 25 years, both 7/8" and 1/2" sizes. I have heard
these
> > products have a finite lifespan, and I was wondering what the failure
modes
> > for these cables normal are--increasing losses, etc.? And, I am was
> > wondering what causes these cables to deteriorate with age. I am
planning
> > to use the cables next year on a new tower installation, and I am
wondering
> > if I should worry about the cable because of its age; or is it worth
the
> > bother of going through the motions to measure the losses using a signal
> > generator and my Boonton microwattmeter? What experiences have others
on
> > the group had with aging hardline?

> >
> > Pete
>
>
>

1323. Design, Calibration, Operation of SWR Meters & Reflectometers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 00:03:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tfr7l$4t4$1@uranium.btinternet.com>
Source record: 177472

NOW AVAILABLE, Program "SWRMETER.exe"

This program models and assists with the design of the
common HF Standing Wave Meter. Enter its essential
characteristics and the program constructs it and calibrates
it against the users standards ready for use.

Input data includes source/Tx internal resistance if known.

Extensive notes:- Principles, circuit diagram and
description, key component values, points to look out for.

Enter any load impedance R + jX and meter readings of
forward power, reflected power, reflection coefficient
magnitude and SWR are computed. Indicated values are
compared with true calculated values.

Continuously vary all input data in small increments on a
what-if? basis while observing meter indications.

Operating circumstances, including input resistance of
source, under which measuring errors will occur are
demonstrated and discussed.

This program is contained in a single executable file of
64.5 Kilobytes.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp
****

1324. Wow!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 00:25:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8th8gg$529$1@nntp9.atl.mindspring.net>
Source record: 177500

NG:

I've been really busy for a while and haven't checked in to the NG lately.

And when I do... wham!! Wow!

I see that NC is now going to SUE Roy... What???

I thought NC loved Roy, at least he always seemed to defer to Roy more than anyone else on the NG.

What could Roy, the most professional person on the NG in my opionion, have done to offend Dr. Cohen?

I guess that's what happens when you don't tune in to the soap opera every day, you simply lose touch!

Apparently I missed a big part of the "Sue the World as it Turns" plot.

Regards to all, and "hang in there Roy",

-Peter K1PO

1325. A new satellite antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 00:29:18 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <39FB6F5E.F2F793B2@qadas.com>
Source record: 177471

I have been modeling an antenna for the forthcoming phase 3D satellite that should be of use to many amateur satellite entusiasts.

I am looking for a design that will have a narrow, high gain beam pattern in azimuth along with a arc pattern from 0 to 90 degrees in elevation. The front to back & side should be great to minimize terestrial QRM & QRN. The reason why I want this is so that I can track a satellite with a single standard rotator, such as mounting the satellite antennas above an existing HF triband beam.

A single yagi has a rather narrow pattern both in azimuth and elevation. So I tried modeling a pair of yagis, fed in phase, set at various elevation angles from 0 to 90 degrees.

I found a very nice 0 to 90 degree "lemon slice" pattern results when a pair of in phase 10 element VHF or UHF yagis are mounted with the lower yagi pointed upward at 20 degrees and the upper one is pointed upward at 70 degrees. The "software gain" on this antenna looked like around 10-13 db, about 25 degrees beamwidth in azimuth and 90 degrees in elevation. If true, this might be an ideal antenna for P3D.

Larger yagis had more gain at some elevations, but tended to have deeper null points. Shorter yagis had less gain, but the nulls were minimal. 10 elements looks like the magic number to me. For more gain, 2 X 2 arrays could be used if needed.

My initial modeling was with a conventional K1FO-like horizontal yagi, but I also tried crossed yagis in an X, not a T configuration, so that I could use circular polarization with phase reversal as I do with my present AZ-EL mounted satellite antennas.

The end result is a pair of 40 element antennas for the uplink & the downlink. The physical mounting could become interesting. The boom lengths for 2M are about 13 feet long and about 4 feet for 70 CM.

How about some help from you antenna modelers out there? Let's make this a really ham antenna project instead of all the stupid sniping on this newsgroup.

Robert W0LMD
Conifer, Colorado

1326. disabled person looking for ARRL technician video course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 00:42:31 UTC
From: Charles Hunter <"crhunter(nospam)"@idirect.com>
Message-ID: <39FB72FE.F74F7148@idirect.com>
Source record: 177473

Disabled person looking for ARRL video technician course to learn ham radio

please remove (nospam) to reply

1327. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 01:28:13 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <39fb7cea.1826086@news.azstarnet.com>
Source record: 177474

On Sat, 28 Oct 2000 02:15:20 -0400, "rhatt" <rhatt@hotmail.com> wrote:

Try:

http://users.neca.com/cummings/rhombic.html

Wes Stewart

> Ok, so copyright infringements aside...
>
> Could someone be so kind as to help me out? I would like to try a Rhombic
>array for working 10 meters. I have a nice opening on my lot that would seem
>ideal to installing one, but Im not all that technically apt, as far as
>doing the math necessary.
> Any help would be appreciated.
>
>
> Rhatt
>
>"After 12 years of therapy, my shrink said something that brought tears to
>my
>eyes... He said "No hablo Ingles".
>
>

1328. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 02:26:19 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <39fb8250.3207758@news.azstarnet.com>
Source record: 177475

On Sat, 28 Oct 2000 08:50:56 -0400, "Peter Bertini" <commquart@erols.com> wrote:

[snip]
>
>Having a bad hair day, Wesley?

No, not today. Thursday night wasn't so good though. I was driving home on I-10 after enjoying my birthday dinner with my wife and mother when a *%&*$)(* 18-wheeler in front of me lost a complete tire tread (made of rubber or a rubberlike substance) and threw it into and then under the front end of my Camaro SS. The Camaro has a broken nose and some missing eyes, but I am still here to pick on you.

>I will have to watch your posts closely for
>typos and
>pounce on you when they occur.

Pounce away. You are an editor aren't you?

>Obviously, that should have read " , I
>certainly don't
>dispute their claims".

Obvious to you maybe, but I read what you wrote. To me, your tone seemed offensive to the respondent and I'm simply pointing that out.
>
>> > I have never seen "a rubber coating" used on any type of CATV
>> >cable, so you are indeed one up on me..
>>
>> Apparently several of us are one up on you. I have seen CATV "hardline"
>that
>> has a jacket, that while precisely speaking isn't "rubber" is certainly a
>> "rubber-like" material, that is designed to protect the aluminum shield
>from the
>> elements.
>>
>> Wes Stewart
>> >
>> >73
>> >
>
>Sorry Wesley, never seen rubber used on any modern cables as a jacket. If
>it is, it
>is rarity.

I do respond to my given name, so if you are trying to use it in a pejorative sense, you're out of luck.

From Webster's New Collegiate Dictionary:

rub-ber ... (snip) 2 a : an elastic substance that is obtained by coagulating the milky juice of any of the various plants (as of the genera Heavea and Ficus), is essentially a polymer of isoprene, and is prepared as sheets then dried b : any of the various synthetic rubberlike substances c : natural or synthetic rubber modified by chemical treatment to increase its useful properties (as toughness and resistance to wear) and used esp. in tires, electrical insulation and waterproof materials 3 : something made of or resembling rubber....

Note that I said, "precisely speaking isn't "rubber" is certainly a "rubber-like" material" So if I or anyone else uses the term "rubber" or "rubber(-)like" to describe the outer jacket material of a coaxial cable, I suggest that Webster would agree.

Elastic, tough, resistant to wear, waterproof, good electrical insulator, resembles rubber.

If it looks like a duck, quacks like a duck, walks like a duck.... It must be a rubberducky. (Sorry Pete, sometimes I just can't help myself)

1329. Butternut HF6V on 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 02:37:25 UTC
From: Larry Bratcher <lbratche@ipa.net>
Message-ID: <y0MK5.799$Cp1.174355@nntp2.onemain.com>
Source record: 177476

Has anyone out there successfully added the 6 meter kit to their Butternut HF6V vertical? I cannot get mine to resonate anywhere I put it. According to Bencher, the top bracket with the wire attached goes about 3/4 wave length above the ground (~162") and the other about 1/4 wave length below that (~54"). The instructions state 151" and 58" I believe. However, nothing close to this seems to work. The SWR is 5:1 + regardless. If anyone is successfully using the 6 meter on their Butternut I greatly like to know how it is set up.

Thanks

Larry

1330. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 03:13:37 UTC
From: rhatt <rhatt@hotmail.com>
Message-ID: <8tg4cs$7dd$1@ruby.mint.net>
Source record: 177477

Umm..it was an attempt at humor....ya know...hee hee? But anyways...thanx
for the link...Ive read the compendum..thats why I came here...hoping that
someone could translate it into something resembling that a non-tech type
person could understand.
But I appreciate the help....:)

Rhatt

After 12 years of therapy, my shrink said something that brought tears to
my eyes... He said "No hablo Ingles".

"Roger Leone" <arleone@inreach.com> wrote in message
news:iVDK5.457$NJ1.5433@news.inreach.com...
>
>
> > Ok, so copyright infringements aside...
>
> You are free to build any antenna you want, copyrighted or not. I am
> afraid that all the contentious exchanges on this NG have clouded some
legal
> issues.
>
> > Could someone be so kind as to help me out? I would like to try a
Rhombic
> > array for working 10 meters. I have a nice opening on my lot that would
> seem
> > ideal to installing one, but Im not all that technically apt, as far as
> > doing the math necessary.
> > Any help would be appreciated.
>
> The ARRL antenna book has been publishing rhombic designs for decades.
You
> can probably find a copy at your local library. There are many antenna
> designs on the web. Try a search on "rhombic antennas" or go to:
>
> http://www.ac6v.com/pageant.html
>
> Good luck...
>
> Roger K6XQ
>
>

1331. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 03:15:23 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39fb9d80_3@news3.prserv.net>
Source record: 177478

-25 dBm will be viewable, but not noise free. I try to keep my signals above -10 dBm if I can. Modern TV sensitivity doesn't vary much. Figure a bandwidth of 6 MHz and a noise figure of 10-15 dB. Start from KTB = -174 dBm for 1 Hz.

--
Crazy George
Aaron Hanson <ha2@uswest.net> wrote in message news:RlJK5.6166$Yl5.319399@news.uswest.net...
> Hi All-
>
> I'm considering purchasing an antenna for the specific purpose of TV
> reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
> determined the transmitter location and power, and with some basic path loss
> calculations I've decided that for the antenna and feed-line I'm
> considering, I'll end up with about -25dBm (3 microwatts) signal strength at
> the TV.
>
> Now I realize I have no idea what range of signal strength is necessary
> for decent TV reception. Of course the TV specs say nothing about receiver
> sensitivity.
>
> Does anyone know what range of signal strengths equate to decent TV
> reception in today's typical TV?
>
> Thanks!
>
> -Aaron
> KB7OPL
>
>

1332. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 05:49:58 UTC
From: accrider3@aol.comnojunque
Message-ID: <20001029014958.27184.00000409@ng-fa1.aol.com>
Source record: 177480

only if it is dead

1333. Re: If the Washington Monument ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 06:35:48 UTC
From: cathexis@erols.com
Message-ID: <39fbc51e.618234964@news.erols.com>
Source record: 177481

On Thu, 26 Oct 2000 09:20:47 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>David J. Windisch wrote:
>"---is a phalic symbol. What is the Pentagon?"
>
>One point shy of a sextagon.

That depends on what side you're on.

73,

Andrew
KG4JBM
>
>Best regards, Richard Harrison, KB5WZI
>

1334. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 06:51:40 UTC
From: cathexis@erols.com
Message-ID: <39fbc619.618486538@news.erols.com>
Source record: 177482

On Fri, 27 Oct 2000 09:48:38 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>I wrote:
>"There is wide variation in foliage and density."
>
>Of course, there is seasonal variation. An afterthought is that generals
>refight the last war. The military schemers probably emphasized Europe
>in their tree thoughts. Forests in Europe tend to be swept clean of
>underbrush. The practice is to gather everything for fuel and other
>uses. Even the lower branches are plucked.
>
>A relatively clean wooded area was probably used for the War
>Department`s tests of foliage attenuation. Attenuation from trees
>outside Europe is probably worse. Just speculation.
>
>Best regards, Richard Harrison, KB5WZI

Might be kinda fun to hammer two
copper pipes, one each into adjacent trees,
then run some ladder line up to your rig and
see what kinda SWR you get. The ultimate
stealth verticle. Hi.Hi.

Better yet, if you could get a copper
paint that actually had copper in it you could
spray paint selected branches to form a sort
of a fixed monster size Yagi.

"Excuse me, Mr. Ham. But doesn't
spray-painting your trees constitute a violation
of the Homeowner's Association Covenents ? "

" Oh that ? That just insecticide treatment
for bag-worms !"

73,

Andrew
KG4JBM

>

1335. 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 08:29:16 UTC
From: Jake Schneider <j4k3@texas.net>
Message-ID: <wdRK5.40133$d57.3871094@news4.aus1.giganews.com>
Source record: 177483

Hello all, this is my first post to the group, and I have a question. I have built a DSW-40 and tuned it properly I think, it worked the first time I applied power to it. Got the sidetone right on the carrier, zero beat a station with a TS-440, then listened on the DSW-40 and it was all good. I was enthusiastic to find a wealth of information on limited space antennas. See I am one of the damned, an apartment dweller. (First floor, PVC pipe damned I might add) So naturally when I saw information on the Slinky dipole, I rushed straight to Wal-Mart to purchase some slinkys and get it on. I was astonished to see that the swr was 1:1.5 even before I began adjusting the lengths! Yes it is against a wall, but still 1:1.2-1:1.5 from 7025-7130!! I unplugged the TS-440, and hooked the DSW up. I began listening to 7040, and sweeping around. Apparently all the loud stations were 5s, hrm. Previously, I used a random length of wire strung along the corners of my ceiling. I had the feeling that I was working the ground plane, and that is what prompted me to switch to the dipole. Unfortunately I've only made 4 total contacts the past two nights. All of them from Dallas,Houston, the farthest GA. (My QTH is Houston BTW) I have no real grounding scheme to speak of, god for bid someone find any copper in this complex. I guess the question is, what can I expect from such a slipshod setup? What can I do to improve it? Besides winning the lottery and moving to a mountain? Is 2 watts out in an apartment with lame ground even a reality? Am I expecting way too much? Help!$$!@

Station:

DSW-40 (I love this radio)
13.5v 7.5AH Lead acid gel cell (I use a APC UPS, to recharge it. I figure the circuitry in there knows how to keep it charged)
Slinky Dipole 7'6" each side fed with 52ohm coax about 8' up, inside the apartment!

Thank you,

Jake Schneider KC5UIV

1336. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 08:45:42 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <K9rCSEA2O++5EwP6@g3ohx.demon.co.uk>
Source record: 177486

In article <NzXJ5.4818$n26.45832@news1.onlynews.com>, Harold Johnson
<w4zcb@ispchannel.com> writes
>
>> >I have a couple of these things, but both have trouble reliably locking
>into
>> >the signal, maybe once every 3-5 days at best. I am located near San
>> >Francisco, CA., a hundred feet above sea level.
>> >
>> >Can I get your thoughts about enhancing the antenna/signal level? I
>don't
>> >have bad noise here that I am aware of.
>
>I receive WWVB very reliably here in the mountains of western North
>Carolina, but found that selectivity is the key. I use a tuned 100 turn loop
>on a 24 inch bicycle wheel, a design I found here on the Internet. That
>feeds a balanced pair of 40 dB gain instrumentation amplifiers made up from
>LM833 op-amps and results in a very high level of signal strength from the
>loop. (WWVB is about -70 dBm out of the amplifiers) The tuned loop is hung
>from a nail in a basement workshop, not a very good location.
>
>
<snip>

>Good luck
>
>W4ZCB
>
>

I presume that the bicycle wheel is made of metal and that you have
wound the 100 turns around the (tyreless) rim? Surely this presents a
complete short circuited turn, and pretty well kills the inductance and
Q of your coil? Or is the wheel one of the 'avant garde' variety, made
out of plastic?

Ian.

1337. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 08:52:39 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <StjEWKAXV++5Ewtu@g3ohx.demon.co.uk>
Source record: 177485

In article <39fbc619.618486538@news.erols.com>, Set'em up Joe
<cathexis@erols.com> writes
>On Fri, 27 Oct 2000 09:48:38 -0500 (CDT), richardharrison@webtv.net (Richard
>Harrison) wrote:
>
>>I wrote:
>>"There is wide variation in foliage and density."
>>
>>Of course, there is seasonal variation. An afterthought is that generals
>>refight the last war. The military schemers probably emphasized Europe
>>in their tree thoughts. Forests in Europe tend to be swept clean of
>>underbrush. The practice is to gather everything for fuel and other
>>uses. Even the lower branches are plucked.
>>
>>A relatively clean wooded area was probably used for the War
>>Department`s tests of foliage attenuation. Attenuation from trees
>>outside Europe is probably worse. Just speculation.
>>
>>Best regards, Richard Harrison, KB5WZI
>
> Might be kinda fun to hammer two
>copper pipes, one each into adjacent trees,
>then run some ladder line up to your rig and
>see what kinda SWR you get. The ultimate
>stealth verticle. Hi.Hi.
>
> Better yet, if you could get a copper
>paint that actually had copper in it you could
>spray paint selected branches to form a sort
>of a fixed monster size Yagi.
>
> "Excuse me, Mr. Ham. But doesn't
>spray-painting your trees constitute a violation
>of the Homeowner's Association Covenents ? "
>
> " Oh that ? That just insecticide treatment
>for bag-worms !"
>
> 73,
>
> Andrew
> KG4JBM
>
>>

>
I believe that experiments HAVE been done to try and use trees as
radiators (such as tapping into a trunk about 1/3 of the way up and
gamma-matching it like you would a vertical mast). Probably best when
'the sap is rising', so efficiency would be seasonal!

Ian.

1338. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 09:34:51 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <8tIPmUA78++5EwJ+@g3ohx.demon.co.uk>
Source record: 177484

In article <RlJK5.6166$Yl5.319399@news.uswest.net>, Aaron Hanson
<ha2@uswest.net> writes
>Hi All-
>
> I'm considering purchasing an antenna for the specific purpose of TV
>reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
>determined the transmitter location and power, and with some basic path loss
>calculations I've decided that for the antenna and feed-line I'm
>considering, I'll end up with about -25dBm (3 microwatts) signal strength at
>the TV.
>
> Now I realize I have no idea what range of signal strength is necessary
>for decent TV reception. Of course the TV specs say nothing about receiver
>sensitivity.
>
> Does anyone know what range of signal strengths equate to decent TV
>reception in today's typical TV?
>
> Thanks!
>
>-Aaron
>KB7OPL
>
>

Coming from the cable TV world, I see it like this...

Most modern TV tuners have a noise figure of <5dB.

Using a NF of 5dB, a TV signal of 0dBmV (1mV) will give you a carrier-
to-noise ratio of 59dB (ie the rms noise in the NTSC 4MHz TV channel
video bandwidth) MINUS your 5dB, ie 54dB.

-10dBmV (300uV) should give you a S/N of 44dB (where you will JUST start
to see the picture noise beginning to increase because of lack of
signal). And pro rata....

If you are not too discerning, you will probably find S/N of ~34dB
acceptable (at -20dBmV, 100uV).

Now, convert your dBm into dBmV. 0dBmV is ~-58dBm. You have calculated
that you will get -25dBm - that's a staggering +33dBmV!! You could boil
a kettle on that! If you are correct, you will probably have to fit an
attenuator at the TV input! I wonder if your calculation is correct? Or
have I screwed up somewhere (it won't be the first time!)?

Ian.

P.S. I note that there is another posting from 'Crazy George'. I feel that his name reflects the accuracy of his information (no offence, CG!). Are 'dBm' and 'dBmV' getting mixed up? There's a difference of ~58dB.

1339. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 09:42:52 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <HcxR6aAcE$+5Ewcd@g3ohx.demon.co.uk>
Source record: 177487

You are well adrift in your figures, George.

American System M NTSC video bandwidth is only ~4MHz, and TV tuner noise figures are pretty low (<5 dB, I think).

Also, -25dBm translates into ~33dBmV - enough to 'boil a kettle on' in the world of TV reception! Getting dBm and dBmV confused?

Ian.

In article <39fb9d80_3@news3.prserv.net>, Crazy George <munschNO@attglobal.net.SPAM> writes
>-25 dBm will be viewable, but not noise free. I try to keep my signals
>above -10 dBm if I can. Modern TV sensitivity doesn't vary much. Figure a
>bandwidth of 6 MHz and a noise figure of 10-15 dB. Start from KTB = -174
>dBm for 1 Hz.
>
>--
>Crazy George
>Aaron Hanson <ha2@uswest.net> wrote in message
>news:RlJK5.6166$Yl5.319399@news.uswest.net...
>> Hi All-
>>
>> I'm considering purchasing an antenna for the specific purpose of TV
>> reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
>> determined the transmitter location and power, and with some basic path
>loss
>> calculations I've decided that for the antenna and feed-line I'm
>> considering, I'll end up with about -25dBm (3 microwatts) signal strength
>at
>> the TV.
>>
>> Now I realize I have no idea what range of signal strength is
>necessary
>> for decent TV reception. Of course the TV specs say nothing about
>receiver
>> sensitivity.
>>
>> Does anyone know what range of signal strengths equate to decent TV
>> reception in today's typical TV?
>>
>> Thanks!
>>
>> -Aaron
>> KB7OPL

>>
>>
>

1340. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 10:42:04 UTC
From: fractenna@aol.com
Message-ID: <20001029054204.21607.00000367@ng-mj1.aol.com>
Source record: 177488

>
>Hello all, this is my first post to the group, and I have a question. I have
>built a DSW-40 and tuned it properly I think, it worked the first time I
>applied power to it. Got the sidetone right on the carrier, zero beat a
>station with a TS-440, then listened on the DSW-40 and it was all good. I
>was enthusiastic to find a wealth of information on limited space antennas.
>See I am one of the damned, an apartment dweller. (First floor, PVC pipe
>damned I might add) So naturally when I saw information on the Slinky
>dipole, I rushed straight to Wal-Mart to purchase some slinkys and get it
>on. I was astonished to see that the swr was 1:1.5 even before I began
>adjusting the lengths! Yes it is against a wall, but still 1:1.2-1:1.5 from
>7025-7130!! I unplugged the TS-440, and hooked the DSW up. I began listening
>to 7040, and sweeping around. Apparently all the loud stations were 5s, hrm.
>Previously, I used a random length of wire strung along the corners of my
>ceiling. I had the feeling that I was working the ground plane, and that is
>what prompted me to switch to the dipole. Unfortunately I've only made 4
>total contacts the past two nights. All of them from Dallas,Houston, the
>farthest GA. (My QTH is Houston BTW) I have no real grounding scheme to
>speak of, god for bid someone find any copper in this complex. I guess the
>question is, what can I expect from such a slipshod setup? What can I do to
>improve it? Besides winning the lottery and moving to a mountain? Is 2 watts
>out in an apartment with lame ground even a reality? Am I expecting way too
>much? Help!$$!@
>
> Station:
>
> DSW-40 (I love this radio)
> 13.5v 7.5AH Lead acid gel cell (I use a APC UPS, to recharge it. I
>figure the circuitry in there knows how to keep it charged)
> Slinky Dipole 7'6" each side fed with 52ohm coax about 8' up, inside the
>apartment!
>
>
> Thank you,
>
> Jake Schneider KC5UIV

Hi Jake--

Unfortunately the antenna is a poor one for that frequency. If you are getting such a good, broadband SWR without doing anything to the slinky, then something else is resonating; probably your grounding systems and coax.

A very short antenna on 40M at a low height will be inefficient and radiate mostly straight up. This won't be useful for DX, if that's what you want.

remember: SWR only indocates a matching quantity and tells you nothing about how much RF comes out the antenna or which direction it goes.

I don't know f your radio, but if you have to option to choose other bands, especially 10M, I suspect that your limitations won't be as constraining, because the antenna will be a greater function of a wave higher, and not as electrically small.

73
Chip N1IR

1341. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 10:43:11 UTC
From: Kirby Cave <kirbycave@starpower.net>
Message-ID: <8tgv46rgh1@bob.news.rcn.net>
Source record: 177489

I would think most hams running 2 watts are not expecting to hear the other station report 599 very often. My impression is that they enjoy the challenge more than the result. Hence the bragging rights associated with miles per watt. With an antenna inside an apartment, figure the erp is low anyway. With a starting point of 2 watts, you're at a disadvantage from the start.

Understand that many hams without 260 feet of space load an 80 meter dipole at the ends to make the antenna "appear" longer than it is. The slinky takes this approach to the ultimate by simply having one big inductor on each leg of the dipole. The end loaded dipole at least has some wire that radiates. The slinky has none. I suspect most of your power is expended in heating that big coil. You've proven you can make a few QSO's. Houston to Georgia under your conditions is nothing to sneeze at. Just remember effectively you're running QRPp, not QRP.

My sugguestions:

1. Apply the same sound antenna principles inside your apartment as someone who has acres of space for antennass. That is, get as much real wire as possible up as high as possible. Since your elevation limit is 8 feet, don't string wire around the room, string it around the whole apartment. Feed it as you would a random wire.

2. Many apartment dwellers stretch the longest dipole their place will accomodate (usually 10, 15, or 20 meters) the length of the apartment and feed it with coax. Restrict yourself to that band. Many years ago I put a 20 meter dipole inside my apartment in NYC. First QSO was USVI.

3. You gotta have a ground. Either a heavy wire out the closest window to a stealthy ground rod (since you're on the first floor) or at least a lot of copper wire around the base boards as a ground plane.

4. Take down those slinkys and give them to the kids. That's their intended purpose. Many on this group will tell you (correctly) that you can get a short piece of coat hanger to exibhit low SWR. It will still act like my first girlfriend - won't put out...

Kirby, WB3BBC

Jake Schneider <j4k3@texas.net> wrote in message news:wdRK5.40133$d57.3871094@news4.aus1.giganews.com...
> Hello all, this is my first post to the group, and I have a question. I have
> built a DSW-40 and tuned it properly I think, it worked the first time I

> applied power to it. Got the sidetone right on the carrier, zero beat a
> station with a TS-440, then listened on the DSW-40 and it was all good. I
> was enthusiastic to find a wealth of information on limited space
antennas.
> See I am one of the damned, an apartment dweller. (First floor, PVC pipe
> damned I might add) So naturally when I saw information on the Slinky
> dipole, I rushed straight to Wal-Mart to purchase some slinkys and get it
> on. I was astonished to see that the swr was 1:1.5 even before I began
> adjusting the lengths! Yes it is against a wall, but still 1:1.2-1:1.5
from
> 7025-7130!! I unplugged the TS-440, and hooked the DSW up. I began
listening
> to 7040, and sweeping around. Apparently all the loud stations were 5s,
hrm.
> Previously, I used a random length of wire strung along the corners of my
> ceiling. I had the feeling that I was working the ground plane, and that
is
> what prompted me to switch to the dipole. Unfortunately I've only made 4
> total contacts the past two nights. All of them from Dallas,Houston, the
> farthest GA. (My QTH is Houston BTW) I have no real grounding scheme to
> speak of, god for bid someone find any copper in this complex. I guess the
> question is, what can I expect from such a slipshod setup? What can I do
to
> improve it? Besides winning the lottery and moving to a mountain? Is 2
watts
> out in an apartment with lame ground even a reality? Am I expecting way
too
> much? Help!$$!@
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> Station:
>
> DSW-40 (I love this radio)
> 13.5v 7.5AH Lead acid gel cell (I use a APC UPS, to recharge it. I
> figure the circuitry in there knows how to keep it charged)
> Slinky Dipole 7'6" each side fed with 52ohm coax about 8' up, inside
the
> apartment!
>
>
> Thank you,
>
> Jake Schneider KC5UIV
>
>

1342. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 11:32:49 UTC
From: John Peterson <jpeterson@optushome.com.au>
Message-ID: <39fc0b83@turakina.six.asn.au>
Source record: 177490

I am only going from what the manual says and my previous use with and development of other types of models.

Here is my thinking.

1. The EZNEC program splits the antenna up into stright line "segments" and in the professional and registered versions this can be done automagically.

2. You do not get to see the segments it chooses.

3. Antenna wires in the model can only be straight lines.

4. A fractal to me is a shape of the same form within a shape (often repeated).

5. Now I imagined a real "arbitary" shaped antenna. I think for example of an antenna where two straight wires come together at an acute angle with a smoothed curve [I will use a 90deg pair of wires for example, joined by an arc of r radius].

6. ELNEC may model this as two sides of a box coming together with little straight bits (i.e. "steps") making up the arc.

7. These steps are in fact smaller versions of the larger shape, and inside that shape - thus fullfilling my criteria for a simple fractal design.

You may of course want to dissagree with this.

8. With a more complex "arbitary" shape where there is lots of wire in a small space in arbitary form this effect is magnified (rather than reduced) because ELNEC / you will chose straight lines it can handle.

This is why I suggest to be careful.

VE9SRB wrote in message ...
>
>"John Peterson" <jpeterson@optushome.com.au> wrote in message
>news:39f903bb@turakina.six.asn.au...
>> I would suggest you be VERY careful modelling a fractal design in EZNEC
>and
>> comparing it with an arbitary shape design.
>>
>> As we know EZNEC splits the antenna up into segments. As soon as you do
>> this you are giving your random design structure and I would expect it to
>be
>> modeled more as if it were fractal shape (well, that is if you call the
>10m
>> antenna on frac's site a fractal shape - personally I would argue that is

>is
>> not truely fractal - or fractal to three levels only)
>>
>
>Hi John:
>
>I don't quite follow your statements regarding EZNEC modeling a "random"
>shape as a Fractal. Perhaps the word "random" is a bit ambiguous.
>"Arbitrary" is clearly a better choice of wording. The only point in the
>comparisons is that taking the same total length of wire as in the MI2 and
>rearranging it into a non-fractal shape within the same physical aperture,
>you will get similar or in some cases better performance. The only
>constraint that I maintain in the arbitrary arrangement is keeping the
shape
>symmetrical. Although Fractal loop antennas are always symmetrical, all
>symmetrical loop antennas are not Fractals. This distinction needs to be
>recognized in the discussion.
>
>Steve
>
>
>

1343. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 11:57:54 UTC
From: fractenna@aol.com
Message-ID: <20001029065754.02373.00000366@ng-fy1.aol.com>
Source record: 177491

>
>I am only going from what the manual says and my previous use with and
>development of other types of models.
>
>Here is my thinking.
>
>1. The EZNEC program splits the antenna up into stright line "segments" and
>in the professional and registered versions this can be done automagically.
>
>2. You do not get to see the segments it chooses.
>
>3. Antenna wires in the model can only be straight lines.
>
>4. A fractal to me is a shape of the same form within a shape (often
>repeated).
>
>5. Now I imagined a real "arbitary" shaped antenna. I think for example of
>an antenna where two straight wires come together at an acute angle with a
>smoothed curve [I will use a 90deg pair of wires for example, joined by an
>arc of r radius].
>
>6. ELNEC may model this as two sides of a box coming together with little
>straight bits (i.e. "steps") making up the arc.
>
>7. These steps are in fact smaller versions of the larger shape, and inside
>that shape - thus fullfilling my criteria for a simple fractal design.
>
>You may of course want to dissagree with this.
>
>8. With a more complex "arbitary" shape where there is lots of wire in a
>small space in arbitary form this effect is magnified (rather than reduced)
>because ELNEC / you will chose straight lines it can handle.
>
>This is why I suggest to be careful.
>
>
>
>VE9SRB wrote in message ...
>>
>>"John Peterson" <jpeterson@optushome.com.au> wrote in message
>>news:39f903bb@turakina.six.asn.au...
>>> I would suggest you be VERY careful modelling a fractal design in EZNEC
>>and
>>> comparing it with an arbitary shape design.

>>>
>>> As we know EZNEC splits the antenna up into segments. As soon as you do
>>> this you are giving your random design structure and I would expect it to
>>be
>>> modeled more as if it were fractal shape (well, that is if you call the
>>10m
>>> antenna on frac's site a fractal shape - personally I would argue that is
>>is
>>> not truely fractal - or fractal to three levels only)
>>>
>>
>>Hi John:
>>
>>I don't quite follow your statements regarding EZNEC modeling a "random"
>>shape as a Fractal. Perhaps the word "random" is a bit ambiguous.
>>"Arbitrary" is clearly a better choice of wording. The only point in the
>>comparisons is that taking the same total length of wire as in the MI2 and
>>rearranging it into a non-fractal shape within the same physical aperture,
>>you will get similar or in some cases better performance. The only
>>constraint that I maintain in the arbitrary arrangement is keeping the
>shape
>>symmetrical. Although Fractal loop antennas are always symmetrical, all
>>symmetrical loop antennas are not Fractals. This distinction needs to be
>>recognized in the discussion.
>>
>>Steve
>>

I would say about 90% of Mr. Best's minformation stems from the fact that he does not understand what a fractal is. As we now have a generation of very good texts and reference, widely available, on fractals, that is his concern.

In fact, every single shape that Mr Best presents in his 'random' lists--non BTW are "random"-- is either dominated by fractal shapes or (related and hard to model accurately)) meanders.

Thus, in a scientific forum, such as a peer reviewed publication, Mr. Best would be objectively disocuraged in presenting what amounts to false interpretation--that is, that the fractal shapes have no beneift. In fact, he seems to strongly support the opposite!

I, for one, hope Mr. Best actually writes up a paper, if for no other reason then he has demonstrated that the Cohen Hohlfeld paper of 1996 is correct:

1) the Small Loop Approximation (see, for example Karus's ANTENNAS) , which ascribes the rad resistance to the enclosed area of the loop, is INCORRECT; in fact, the area of the loop has nothing to do with the radiation resistance. Mr. Best has discovered for himself that the SLA will not only predict the rad resistance incorrectly, but similar values of rad resistance are obtained with radically different values of enclosed area;

2) A fractal loop has a much higher radiation resistance, in this case attribuatble to the two current maxima.

What Mr. Best is not yet seeing as the scientific kernel is the limiting radiation resistance of a resonant loop in such a small form factor. That fact that he has a sample of designs which all are over 30 ohms says a lot (or should to him). Now: what is the best way to approach--or acheive-- the asymptotic value of rad resistance? My ongoing work on this question suggests that the limit is approximately 36-38 ohms. However, I do have some fractal loops--including MI2's, which present extremely good SWR's (of order 1.2:1), suggesting that the NEC modeling has some inaccuracy in getting precise values.

As I have stated, this info will be published after submission in January.

Cordially,

NC

1344. New employment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:08:37 UTC
From: OPSEC@opsyhopsy.com
Message-ID: <jUsT.aNoTheR.mEsSaGe.iD.97282130732749@opsyhopsy.com>
Source record: 177492

http://www.efn.org/~dan_m/Chip.html

--
Posted from host4.websitesource.com [209.239.38.252]
via Mailgate.ORG Server - http://www.Mailgate.ORG

1345. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:22:10 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <SDUK5.3699$wg7.42818@news1.onlynews.com>
Source record: 177493

> I presume that the bicycle wheel is made of metal and that you have
> wound the 100 turns around the (tyreless) rim? Surely this presents a
> complete short circuited turn, and pretty well kills the inductance and
> Q of your coil? Or is the wheel one of the 'avant garde' variety, made
> out of plastic?

Neither, as the article here on the web shows, you remove all the spokes, (I had my choice of free rims from a bicycle repair shop that was happy to have one less to throw away). Saw the rim through at one point, and screw the two ends (Separated by abput an inch) to a small block of wood. This removes the short and provides for me at least, a mounting for the loop amplifier and the short loop of wire for the "hanger". There is also a "wrap" of thin packaging plastic between the rim and the winding, just to cut the capacity to the rim, and when completed, the plastic is wrapped over the winding as well. Aluminum (Aluminium?) foil is wrapped around the complete assembly (minus the 1 inch gap), crunched to a conformal shield and grounded to the rim.

Use Google or some such to search for WWVB or VLF and you'll come across the pretty ingenious approach.

There's a hundred ways to make the loop, almost any of which results in a much larger capture area for the signal than a ferrite loopstick, and still providing much needed directivity to kill the noise in other directions.

W4ZCB

1346. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:40:28 UTC
From: JerryL <jlockett@onemain.com>
Message-ID: <eSUK5.880$Cp1.221081@nntp2.onemain.com>
Source record: 177494

Not if he used insulated wire? Don't you think that would work then even using
the metal rim?
--
Rttyman

"Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message
news:K9rCSEA2O++5EwP6@g3ohx.demon.co.uk...
> In article <NzXJ5.4818$n26.45832@news1.onlynews.com>, Harold Johnson
> <w4zcb@ispchannel.com> writes
> >
> >> >I have a couple of these things, but both have trouble reliably locking
> >into
> >> >the signal, maybe once every 3-5 days at best. I am located near San
> >> >Francisco, CA., a hundred feet above sea level.
> >> >
> >> >Can I get your thoughts about enhancing the antenna/signal level? I
> >don't
> >> >have bad noise here that I am aware of.
> >
> >I receive WWVB very reliably here in the mountains of western North
> >Carolina, but found that selectivity is the key. I use a tuned 100 turn loop
> >on a 24 inch bicycle wheel, a design I found here on the Internet. That
> >feeds a balanced pair of 40 dB gain instrumentation amplifiers made up from
> >LM833 op-amps and results in a very high level of signal strength from the
> >loop. (WWVB is about -70 dBm out of the amplifiers) The tuned loop is hung
> >from a nail in a basement workshop, not a very good location.
> >
> >
> <snip>
>
> >Good luck
> >
> >W4ZCB
> >
> >
>
> I presume that the bicycle wheel is made of metal and that you have
> wound the 100 turns around the (tyreless) rim? Surely this presents a
> complete short circuited turn, and pretty well kills the inductance and
> Q of your coil? Or is the wheel one of the 'avant garde' variety, made
> out of plastic?
>
> Ian.
>

1347. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:45:44 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FC1BF8.9F7E487E@hiwaay.net>
Source record: 177495

Where will it be published? (a source easily available to Hams would be
nice.)
Who are the "Peers" to do the "peer review" (someone who had actually
made an antenna would be nice.)

Hope this helps.

Bill-W4BSG

Fractenna wrote:
S N I P
> As I have stated, this info will be published after submission in January.
>
> Cordially,
>
> NC

1348. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:52:15 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <39FC1D7F.DA561A64@netdoor.com>
Source record: 177496
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Adam, As you well know, opinions on antennas are a dime a dozen, everybody has his favorite. I tell you from first hand experience (been there, done that, got the T-shirt to prove it) throw that G5RV away and just put you up an inverted V or a flattop for 80 mtrs feed it with coax (rg8x is light and will handle up to 600 watts and is inexpensive) Your'e autotuner will love the Vor strait dipole, and I will bet you will hear better and receive better signal reports.

Butch Magee KF5DE

Adam wrote:

> Hello everyone. I'm fairly new to HF and have a few questions about my
> antenna setup.
>
> 1. I have a G5RV Dipole up about 40' set up as an inverted "v", and use it
> on 10-80 meters with an external tuner. I just got a new rig with a built-in
> autotuner. My question is: will the autotuner handle the SWR of the G5RV as
> well as my manual tuner does, or will I be better off to continue using the
> manual tuner? II have heard that autotuners have a low tolerance to high
> SWR, and in some spots, the SWR on the G5RV is very high (3.1+).
>
> 2. How far should the ladderline and coax be from the leg of my tower? Do
> the "arms" of the antenna have to be in a V shape, or can I string them to
> fit my lot (If I do a V config., one arm hangs about 10' above my telephone
> line, and I don't want to do that).
>
> 3. I notice that on 40 and especially 80 meters, I get RFI on our TV's and
> phones as well as radios, but only on occasion. Would installing a good
> low-pass filter help to resolve this situation, or should I look into
> installing line and high-pass filters on the effected equipment?
>
> Any information would be greatly appreciated!
>
> Thanks
> Adam

1349. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:54:13 UTC
From: fractenna@aol.com
Message-ID: <20001029075413.02446.00000271@ng-fy1.aol.com>
Source record: 177497

>
>Where will it be published? (a source easily available to Hams would be
>nice.)
>Who are the "Peers" to do the "peer review" (someone who had actually
>made an antenna would be nice.)
>
>Hope this helps.
>
>Bill-W4BSG
>
>Fractenna wrote:
>S N I P
>> As I have stated, this info will be published after submission in January.
>>
>> Cordially,
>>
>> NC

Hi Bill--

No;

I do not publish in ham magazines anymore. I have two scholarly journals in mind. Probably take a while after acceptance, as journals tend to run slow.

After that I can see placing a summary on the ham page, on its new web site.

Cordially,

NC

1350. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 12:57:45 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <39FC1EC9.9441F330@netdoor.com>
Source record: 177498

The RadioWorks has a 4:1 current balun that is great for you're application. I use the same configuration and love the thing .

Butch KF5DE

Bill Ogden wrote:

> I would like to connect a tuner (with only coax output) to 450ohm open wire
> which goes to a 45' dipole that I would like to try to use on several bands.
> I thought I would use something like a 4:1 voltage balun --- not a close
> match, but probably good enough. However, in reading about voltage baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?
>
> Bill Ogden
> W2WO

1351. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 13:01:55 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <sx78OU7JtzbPh1ejRVEFLr3CNTM1@4ax.com>
Source record: 177499

I'd say you're doing great for 2 watts, indoor antenna.

Why not put a screwdriver antenna on your car? Drive it to a high spot
(well, okay, Houston has no high spots -- maybe out to Memorial Park
or whatever) and work dx from your car :-)

Bob
k5qwg

1352. Re: Is Hardline suitable for direct burial?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 13:43:38 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8th9ie$8ou$1@bob.news.rcn.net>
Source record: 177502

```
">
> No, not today. Thursday night wasn't so good though. I was driving home
on
> I-10 after enjoying my birthday dinner with my wife and mother when a
*%&*$)(*
> 18-wheeler in front of me lost a complete tire tread (made of rubber or a
> rubberlike substance) and threw it into and then under the front end of my
> Camaro SS. The Camaro has a broken nose and some missing eyes, but I am
still
> here to pick on you.
>

Was this a Firestone tire?

> >
> >> > I have never seen "a rubber coating" used on any type of CATV
> >> >cable, so you are indeed one up on me..
> >>
> >> Apparently several of us are one up on you. I have seen CATV
"hardline"
> >that
> >> has a jacket, that while precisely speaking isn't "rubber" is certainly
a
> >> "rubber-like" material, that is designed to protect the aluminum shield
> >from the
> >> elements.
> >>
> >> Wes Stewart
> >> >
> >> >73
> >> >

Now Wes, attempting to backpeddle on the "rubber" issue is STRETCHING
things a bit.
I hereby proclaim this thread HOSED.

Peter
```

1353. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 13:44:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39FC29C2.D073FF62@dialpoint.net>
Source record: 177501

With 2 watts and a low antenna system your results are probably good.
The dipole does not need a ground to work with, but the ground does
provide a place for undesired harmonics and things like that to go.
While not really recommended you might try using the ground of the AC
outlet for a ground. Just cut off the flat prongs of a power cord and
use the round one.

You might look for the frequencies of the QRP nets. They are the ones
using low power and are looking for the weak signals.

> Previously, I used a random length of wire strung along the corners of my
> ceiling. I had the feeling that I was working the ground plane, and that is
> what prompted me to switch to the dipole. Unfortunately I've only made 4
> total contacts the past two nights. All of them from Dallas,Houston, the
> farthest GA. (My QTH is Houston BTW) I have no real grounding scheme to
> speak of, god for bid someone find any copper in this complex. I guess the
> question is, what can I expect from such a slipshod setup? What can I do to
> improve it? Besides winning the lottery and moving to a mountain? Is 2 watts
> out in an apartment with lame ground even a reality? Am I expecting way too
> much? Help!$$!@
>
>

1354. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 14:24:58 UTC
From: klocko@toad.net
Message-ID: <8thbvnhoo1@nnrp1.deja.com>
Source record: 177503

In article <39fa3653_1@news1.prserv.net>,
"Bill Ogden" <wogden@attglobal.net> wrote:
> I would like to connect a tuner (with only coax output) to 450ohm open
wire
> which goes to a 45' dipole that I would like to try to use on several
bands.
> I thought I would use something like a 4:1 voltage balun --- not a
close
> match, but probably good enough. However, in reading about voltage
baluns
> the handbook (and several other books) imply that they are reasonable
> solutions only when each side is matched to its load. The dipole will
> probably present a wide range of real/complex loads on various bands.
>
> What is a reasonable way to connect the tuner to the line in this
> circumstance?

Hi Bill,
I'd go with a W2DU choke balun made from ferrite sleeves. The choke balun reduces currents on the outside of the coax shield. It doesn't guarantee that the currents on the ladder line are equal, so there may be some feed line radiation. But that shouldn't be a concern.

I have a similar setup at my place and have never had a problem with shocks. The ladder line feeds a 200' dipole that can be used (with tuner) on all bands 160 to 10. I have about 8" of ferrite sleeves at the point where the coax transitions to the ladder line. The coax center is connected to one side of the ladder line and the shield is connected to the other side. I have the section with the sleeves in an old plastic jug to provide a little weather protection. Rain still gets in but the sleeves never are immersed. You can find the sleeves at most hamfests, usually for about a dollar apiece (one stand had them at 3 for a buck and I scarfed up as many as I could). 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

1355. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 14:28:49 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <39fc3440$1_2@news2.one.net>
Source record: 177420

George Bush conspired with Gov. Pataki to keep John McCain, Steve Forbes, and his other competitors off the ballot in the Republican primary in New York State. They nearly succeeded until a federal judge embarrassed them into giving up this crassly antidemocratic effort.

If Bush had his way, you would have no vote. His would be the only name on the ballot.

And you think he's for personal freedoms?

... Rich

<reklaw.m@juno.COM> wrote in message
news:20001027.034112.-4161501.1.reklaw.m@juno.com...
> Maxine,
> Thank you for the information.
> I don't like either Algor or Bush and was going to "throw my vote away"
> and vote for
> Pat Buchanon. Now that you have shown how Bush is not a Lawyer and he is
> for
> personal freedoms, right to life and pro-gun laws, I have changed my
> mind.
> I will not throw my vote away. I hope you show others the error of their
> ways.
>
> GO GEORGE BUSH !!
>
> Thanks again,
> Mike

1356. Re: Cable routing in a home

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 14:32:44 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39FC350B.557542EB@roadrunner.nf.net>
Source record: 177504
Cross-posted to: rec.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.misc

M5WJF <mickey@mouse.com> wrote:.....chimney stack, I led the coax down the stack, ...

Then: Jeffrey Herman wrote:

> On the outside, I hope!

Sounds like a real 'hot' installation! To impress, you could always claim on QSLs, that your feedline 'burnt up'!

1357. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:08:17 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FC3D61.FC9A9C7E@bigfoot.com>
Source record: 177506
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Butch Magee wrote:
> Adam, As you well know, opinions on antennas are a dime a dozen, everybody has
> his favorite. I tell you from first hand experience (been there, done that, got
> the T-shirt to prove it) throw that G5RV away and just put you up an inverted V
> or a flattop for 80 mtrs feed it with coax ...

Opinions are one thing - physics is another. Your above configuration (with coax all the way to the dipole) is much worse advice than the G5RV on the bands where the G5RV performs well, i.e. 80m, 40m, 20m, 15m, and 12m. According to EZNEC, the 300 ohm series section transformer (matching section) lowers the 50 ohm SWR from 69:1 to 3.4:1 on 80m, from 64:1 to 4.3:1 on 40m, from 74:1 to 7.8:1 on 15m, and from 15:1 to 2.2:1 on 12m. Take a few minutes to calculate the relative losses in the coax due to SWR and you will see that the G5RV beats your antidotal advice all to heck. A good rule of thumb is not to run more than 50 ft of coax with an SWR higher than 10:1.
--
http://www.mindspring.com/~w6rca

1358. 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:14:31 UTC
From: Kevin Fontes <fontesk@earthlink.net>
Message-ID: <r9XK5.5913$R4.516294@newsread1.prod.itd.earthlink.net>
Source record: 177505

Hello,
I am interested in purchasing the Radio Shack 10 meter mobile and mounting in my pickup. I have been using UHF & VHF in my vehicles for a long time but I have no experience with HF in the car. I have two questions:

1) Can you recommend a 10 meter antenna to me?

2) Do I have to do anything different when installing an HF system (25 watts) in my vehicle?

3) Any other suggestions/issues would be greatly appreciated!

Thanks in Advance
Kevin A. Fontes
KI0EB
73

1359. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:17:45 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FC3F99.C381408A@bigfoot.com>
Source record: 177507

klocko@toad.net wrote:
> I'd go with a W2DU choke balun made from ferrite sleeves.

The most choking action for the money, IMO, is ten turns of
RG-400 (teflon) wrapped on a $9 Amidon FT-240-61 ferrite core.
--
http://www.mindspring.com/~w6rca

1360. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:28:14 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FC420E.831AB70E@hiwaay.net>
Source record: 177508

So much for the availability- now - how about the "peers"?

English majors to check spelling, punctuation and syntax.
Math majors to check notation and derivation.
Librarians to check attribution?
Art majors to critique the figures?
MBA's to see if the bottom line is red or black?

Which will it be? will we ever know?

Hope this helps.

Bill-W4BSG

Fractenna wrote:
>
> >
> >Where will it be published? (a source easily available to Hams would be
> >nice.)
> >Who are the "Peers" to do the "peer review" (someone who had actually
> >made an antenna would be nice.)
> >
> >Hope this helps.
> >
> >Bill-W4BSG
> >
> >Fractenna wrote:
> >S N I P
> >> As I have stated, this info will be published after submission in January.
> >>
> >> Cordially,
> >>
> >> NC
>
> Hi Bill--
>
> No;
>
> I do not publish in ham magazines anymore. I have two scholarly journals in
> mind. Probably take a while after acceptance, as journals tend to run slow.
>
> After that I can see placing a summary on the ham page, on its new web site.
>
> Cordially,
>
> NC

1361. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:52:22 UTC
From: Aaron Hanson <ha2@uswest.net>
Message-ID: <6LXK5.325$2X5.100533@news.uswest.net>
Source record: 177509

Thanks everyone for your replies.

I thought I did everything right; here is how I arrived at -25dBm (power relative to one milliwatt).

First, I converted the published transmitter power to EIRP

As listed by the FCC, the transmitter power is 100kW ERP, which equals 80dBm. I added 2.14dB to get 82.14dBm for EIRP. I'm told this is a standard conversion value. This will be 'Pt' below.

For path loss (Lp), I used Lp = 32.4 + 20log(f) + 20log(d), with f in MHz and d in km. For my location and channel 2; Lp = 32.4 + 20log(55.25) + 20log(191.1815) = 112.876dB

Finally, I add this all up to get received power (Pr);

Pr = EIRP - Lp + Ga - Lf where Ga is antenna gain (in dBi) and Lf is feed line loss (in dB).

Pr = 82.14 - 112.876 + 10 - 4 = -24.736bBm, or about 3 microwatts.

Assuming the voltages are all referenced to a 75 ohm load, 3 microwatts = 15 millivolts, or -18dBmV. A long way from 33dBmV.

Based on Ian's and Georges reply, I think I need a better understanding of how the basic receiver characteristic, NF (noise figure), relates to received signal strength.

-Aaron
KB7OPL

"Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message news:8tIPmUA78++5EwJ+@g3ohx.demon.co.uk...
> In article <RlJK5.6166$Yl5.319399@news.uswest.net>, Aaron Hanson
> <ha2@uswest.net> writes
> >Hi All-
> >
> > I'm considering purchasing an antenna for the specific purpose of TV
> >reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
> >determined the transmitter location and power, and with some basic path loss
> >calculations I've decided that for the antenna and feed-line I'm
> >considering, I'll end up with about -25dBm (3 microwatts) signal strength at
> >the TV.
> >
> > Now I realize I have no idea what range of signal strength is

necessary
> >for decent TV reception. Of course the TV specs say nothing about
receiver
> >sensitivity.
> >
> > Does anyone know what range of signal strengths equate to decent TV
> >reception in today's typical TV?
> >
> > Thanks!
> >
> >-Aaron
> >KB7OPL
> >
> >
>
> Coming from the cable TV world, I see it like this...
>
> Most modern TV tuners have a noise figure of <5dB.
>
> Using a NF of 5dB, a TV signal of 0dBmV (1mV) will give you a carrier-
> to-noise ratio of 59dB (ie the rms noise in the NTSC 4MHz TV channel
> video bandwidth) MINUS your 5dB, ie 54dB.
>
> -10dBmV (300uV) should give you a S/N of 44dB (where you will JUST start
> to see the picture noise beginning to increase because of lack of
> signal). And pro rata....
>
> If you are not too discerning, you will probably find S/N of ~34dB
> acceptable (at -20dBmV, 100uV).
>
> Now, convert your dBm into dBmV. 0dBmV is ~-58dBm. You have calculated
> that you will get -25dBm - that's a staggering +33dBmV!! You could boil
> a kettle on that! If you are correct, you will probably have to fit an
> attenuator at the TV input! I wonder if your calculation is correct? Or
> have I screwed up somewhere (it won't be the first time!)?
>
> Ian.
>
> P.S. I note that there is another posting from 'Crazy George'. I feel
> that his name reflects the accuracy of his information (no offence,
> CG!). Are 'dBm' and 'dBmV' getting mixed up? There's a difference of
> ~58dB.
>

1362. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 15:55:03 UTC
From: fractenna@aol.com
Message-ID: <20001029105503.16199.00000429@ng-ch1.aol.com>
Source record: 177510

>
>So much for the availability- now - how about the "peers"?
>
>English majors to check spelling, punctuation and syntax.
>Math majors to check notation and derivation.
>Librarians to check attribution?
>Art majors to critique the figures?
>MBA's to see if the bottom line is red or black?
>
>Which will it be? will we ever know?
>
>Hope this helps.
>
>Bill-W4BSG
>
>Fractenna wrote:
>>
>> >
>> >Where will it be published? (a source easily available to Hams would be
>> >nice.)
>> >Who are the "Peers" to do the "peer review" (someone who had actually
>> >made an antenna would be nice.)
>> >
>> >Hope this helps.
>> >
>> >Bill-W4BSG
>> >
>> >Fractenna wrote:
>> >S N I P
>> >> As I have stated, this info will be published after submission in
>January.
>> >>
>> >> Cordially,
>> >>
>> >> NC
>>
>> Hi Bill--
>>
>> No;
>>
>> I do not publish in ham magazines anymore. I have two scholarly journals
>in
>> mind. Probably take a while after acceptance, as journals tend to run slow.
>>

>> After that I can see placing a summary on the ham page, on its new web
>site.
>>
>> Cordially,
>>
>> NC
>

I don't understand. The journals I am thinkling about are peer-reviewed.
I don't know what else I can add to clarify this.

73
Chip N1IR

1363. New employment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:07:44 UTC
From: OPSEC@opsyhopsy.com
Message-ID: <jUsT.aNoTheR.mEsSaGe.iD.97283566213870@opsyhopsy.com>
Source record: 177511

http://www.miaminewtimes.com/issues/1997-01-09/metro.html

--
Posted from host4.websitesource.com [209.239.38.252]
via Mailgate.ORG Server - http://www.Mailgate.ORG

1364. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:29:03 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <39FC5038.61B5DB64@home.com>
Source record: 177512

Jake Schneider wrote:

> Hello all, this is my first post to the group, and I have a question. I have
> built a DSW-40 and tuned it properly I think, it worked the first time I
> applied power to it. Got the sidetone right on the carrier, zero beat a
> station with a TS-440, then listened on the DSW-40 and it was all good. I
> was enthusiastic to find a wealth of information on limited space antennas.
> See I am one of the damned, an apartment dweller. (First floor, PVC pipe
> damned I might add) So naturally when I saw information on the Slinky
> dipole, I rushed straight to Wal-Mart to purchase some slinkys and get it
> on. I was astonished to see that the swr was 1:1.5 even before I began
> adjusting the lengths! Yes it is against a wall, but still 1:1.2-1:1.5 from
> 7025-7130!! I unplugged the TS-440, and hooked the DSW up. I began listening
> to 7040, and sweeping around. Apparently all the loud stations were 5s, hrm.
> Previously, I used a random length of wire strung along the corners of my
> ceiling. I had the feeling that I was working the ground plane, and that is
> what prompted me to switch to the dipole. Unfortunately I've only made 4
> total contacts the past two nights. All of them from Dallas,Houston, the
> farthest GA. (My QTH is Houston BTW) I have no real grounding scheme to
> speak of, god for bid someone find any copper in this complex. I guess the
> question is, what can I expect from such a slipshod setup? What can I do to
> improve it? Besides winning the lottery and moving to a mountain? Is 2 watts
> out in an apartment with lame ground even a reality? Am I expecting way too
> much? Help!$$!@
>
> Station:
>
> DSW-40 (I love this radio)
> 13.5v 7.5AH Lead acid gel cell (I use a APC UPS, to recharge it. I
> figure the circuitry in there knows how to keep it charged)
> Slinky Dipole 7'6" each side fed with 52ohm coax about 8' up, inside the
> apartment!
>
> Thank you,
>
> Jake Schneider KC5UIV

You can always put a mobile antenna on your car and then run coax from the shack to the car. I know a few people who have done that at various times and it worked well. At least it gets you outside. Also, once outside, you might find a place to set up a small vertical (quarter wave) of fine wire -- it would only be 11 ft high for 15m or 8 ft high for 10m. On those bands, the car mobile antenna would probably work just as well.

--

Please delete NOSPAM from e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1365. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:34:31 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <mckovskbqdt4lg6q7t1o78p33vlptrr9rn@4ax.com>
Source record: 177513

On Sun, 29 Oct 2000 09:17:45 -0600, CAM <cam2338@bigfoot.com> wrote:

>klocko@toad.net wrote:
>> I'd go with a W2DU choke balun made from ferrite sleeves.
>
>The most choking action for the money, IMO, is ten turns of
>RG-400 (teflon) wrapped on a $9 Amidon FT-240-61 ferrite core.
Let me ask this, what's wrong with running the ladder line right to the tuners balanced output? Is the coax used only to keep the ladder line outside so it won't have to come through a window? How far from the edge of the window does the ladder line have to be to be considered safe and have no interaction? (talking a 100 watt station and alum frame windows). Getting ready to put up (weather permitting) phased dipoles for 20 today.

And can someone tell me if a Kenwood AT-250 has balanced output for ladder line? A friend is thinking of buying a TS-440 with a AT-250.

1366. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:45:55 UTC
From: CJ Jeff <mp3z@metacrawler.comREMOVE_THIS>
Message-ID: <7vYK5.538533$8u4.7057297@news1.rdc1.bc.home.com>
Source record: 177514

Kevin

Here is my 2 cents worth . I have run similar setups in my 4x4 / truck . I use an 8 GA wire (2 conductor) right from the battery to power the rig .

On antenna`s . For under $ 20.00 , use a Francis 108" whip and add a little length to it .
For under $ 60.00 , buy a Wilson 1000 and get a
longer whip for it , this is what I have used and it works great ! Bandwidth is really good as well .

Glad to see someone else likes the simplicity of the 10 meter rigs for communication on the road , not all
of us Amatuers can WASTE 1000`s of dollars on our mobiles.

Jeff VE7GMX

1367. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:45:58 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39FC5446.50248303@wb6hqk.ampr.org>
Source record: 177515

Fractenna wrote:

[snip]

> I, for one, hope Mr. Best actually writes up a paper, if for no other reason
> then he has demonstrated that the Cohen Hohlfeld paper of 1996 is correct:
>
> 1) the Small Loop Approximation (see, for example Karus's ANTENNAS) , which
> ascribes the rad resistance to the enclosed area of the loop, is INCORRECT; in
> fact, the area of the loop has nothing to do with the radiation resistance.

What specific claim made by Kraus are you claiming to be incorrect? I've
been over the entire chapter on loop antennas in both Kraus and Balanis,
who both make essentially the same observations. While not completely
general (especially Kraus), the derivations appear ironclad (to me
anyway), given the constraints on current distribution discussed in the
text.

> Mr.
> Best has discovered for himself that the SLA will not only predict the rad
> resistance incorrectly, but similar values of rad resistance are obtained with
> radically different values of enclosed area;

Are you referring to the small loop approximation in Kraus? As far as
radiation resistance is concerned, I don't see that it applies to the
various antenna's you or Steve have been discussing in the context of
the 'challenge'. Kraus makes it clear from the text and illustrations
that his small loop approximation for radiation resistance applies only
to the case of uniform loop current.

The current is not uniform in either your M12, or Steve's arbitrary
arrangements. Therefore, Kraus's derivation of the radiation resistance
for a small loop simply does not apply.

Kraus also makes the more general statement that the radiation from any
small loop of arbitrary geometry (and current distribution) is
proportional to the magnetic moment developed by the current. This
relationship follows directly from the classical formulation of the far
field vector magnetic potential. The only approximation is that the
physical extent of the antenna must be small enough so that the
variation in phase retardation across the antenna is negligable.

bart
wb6hqk

1368. Frequency Counter Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:52:18 UTC
From: CJ Jeff <mp3z@metacrawler.comREMOVE_THIS>
Message-ID: <6BYK5.538576$8u4.7057988@news1.rdc1.bc.home.com>
Source record: 177516

I just picked up an older rig and need to get a frequency counter for it .
Any suggestions as to whats good for NEW ones or what are the older
favorites or reliable ones ? I am looking at a older Heathkit IM-2410 ,
whats it worth or should I just buy new ? I dont want to spend tons of money
on it either. Anyone have a good one forsale ? Thanks a bunch

Jeff VE7GMX

z71@stones.comREMOVE_THIS

1369. Re: Wow!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:57:12 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39FC64D5.23BFC4F9@dvol.com>
Source record: 177517

"Peter O. Brackett" wrote:

> NG:
>
> I've been really busy for a while and haven't checked in to the NG lately.
>
> And when I do... wham!! Wow!
>
> I see that NC is now going to SUE Roy... What???

>
For the real kicker tune the "Hatred DID THIS" thread.
>
w3rv

1370. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 16:59:41 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39FC577D.239361B8@wb6hqk.ampr.org>
Source record: 177518

Aaron Hanson wrote:
>
> Thanks everyone for your replies.
>
> I thought I did everything right; here is how I arrived at -25dBm (power
> relative to one milliwatt).
>
> First, I converted the published transmitter power to EIRP
>
> As listed by the FCC, the transmitter power is 100kW ERP, which equals
> 80dBm. I added 2.14dB to get 82.14dBm for EIRP. I'm told this is a
> standard conversion value. This will be 'Pt' below.
>
> For path loss (Lp), I used Lp = 32.4 + 20log(f) + 20log(d), with f in
> MHz and d in km. For my location and channel 2; Lp = 32.4 + 20log(55.25) +
> 20log(191.1815) = 112.876dB

You are using the formula for free space path loss where the received signal power decreases by 20 dB per decade in distance. The formula does not take into account the destructive interference from the component of the received wave which is reflected off the nearby ground and will usually overestimate the received signal strength. In the realistic case where the ground reflection is unattenuated, the received signal strength falls off at a rate of 40 dB per decade in distance and increases 20 dB per decade of antenna height.

Real world path losses are usually somewhere in between the two cases.

bart
wb6hqk

1371. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 17:13:50 UTC
From: fractenna@aol.com
Message-ID: <20001029121350.27380.00002605@ng-md1.aol.com>
Source record: 177419

>
>Fractenna wrote:
>
>[snip]
>
>> I, for one, hope Mr. Best actually writes up a paper, if for no other
>reason
>> then he has demonstrated that the Cohen Hohlfeld paper of 1996 is correct:
>>
>> 1) the Small Loop Approximation (see, for example Karus's ANTENNAS) , which
>> ascribes the rad resistance to the enclosed area of the loop, is INCORRECT;
>in
>> fact, the area of the loop has nothing to do with the radiation resistance.
>
>
>What specific claim made by Kraus are you claiming to be incorrect? I've
>been over the entire chapter on loop antennas in both Kraus and Balanis,
>who both make essentially the same observations. While not completely
>general (especially Kraus), the derivations appear ironclad (to me
>anyway), given the constraints on current distribution discussed in the
>text.
>

Agreed. The point is this does not apply to all small loops and characterizing the rad resistance by area is inaccurate.

>> Mr.
>> Best has discovered for himself that the SLA will not only predict the rad
>> resistance incorrectly, but similar values of rad resistance are obtained
>with
>> radically different values of enclosed area;
>
>Are you referring to the small loop approximation in Kraus? As far as
>radiation resistance is concerned, I don't see that it applies to the
>various antenna's you or Steve have been discussing in the context of
>the 'challenge'.

It most certainly does not apply because it is an incorrect generalization for small loops. THAT is the point.

Note that on the other extreme, Kraus also talks about the rad resistance of large loops, again taking a 'uniform current' appropximation, which in most cases is surely not viable. Yet the values obtain are reasonable approximations. They are not reasonable approximations for small loops--characterized by area.

< Kraus makes it clear from the text and illustrations
>that his small loop approximation for radiation resistance applies only
>to the case of uniform loop current.
>

No; he also discusses multi turn loops, for example, which are by no means
uniform.

>The current is not uniform in either your M12, or Steve's arbitrary
>arrangements.

Absolutely!

<Therefore, Kraus's derivation of the radiation resistance
>for a small loop simply does not apply.
>

EXACTLY!

>Kraus also makes the more general statement that the radiation from any
>small loop of arbitrary geometry (and current distribution) is
>proportional to the magnetic moment developed by the current. This
>relationship follows directly from the classical formulation of the far
>field vector magnetic potential. The only approximation is that the
>physical extent of the antenna must be small enough so that the
>variation in phase retardation across the antenna is negligable.
>

That comment does not help vis a vis understanding a small loop. The point is
that a multi current max resonant loop which is electrically small is a
previously unknown--or at least little studied --beast. Perhaps you can help us
with a ref Bart? Could be much obliged.

73
Chip N1IR

>bart
>wb6hqk
>
>
>
>
>
>

1372. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 17:16:37 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8thm1h$p4u$1@nnrp1.deja.com>
Source record: 177422

In article <7vYK5.538533$8u4.7057297@news1.rdc1.bc.home.com>,
"CJ Jeff" <mp3z@metacrawler.comREMOVE_THIS> wrote:
> Kevin
>
> Here is my 2 cents worth . I have run similar setups in my 4x4 /
truck . I
> use an 8 GA wire (2 conductor) right from the battery to power the
rig .
>
> On antenna`s . For under $ 20.00 , use a Francis 108" whip and add a
little
> length to it .
> For under $ 60.00 , buy a Wilson 1000 and
get a
> longer whip for it , this is what I have used and it works great !
Bandwidth
> is really good as well .
>
> Glad to see someone else likes the simplicity of the 10 meter rigs for
> communication on the road , not all
> of us Amatuers can WASTE 1000`s of dollars on our mobiles.
>
> Jeff VE7GMX
>
>
I am a little confused on why you are lengthening the antennas. It is
my experience that 10 meteres is a shorter wavelength than 11 and
requires a shorter whip.
--
BillN6VLR

Sent via Deja.com http://www.deja.com/
Before you buy.

1373. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 17:27:02 UTC
From: mike.luther@ziplog.com
Message-ID: <svonf68qbtff4e@corp.supernews.com>
Source record: 177421

In <StjEWKAXV++5Ewtu@g3ohx.demon.co.uk>, Ian Jackson <ianjackson@g3ohx.demon.co.uk>
writes:
>In article <39fbc619.618486538@news.erols.com>, Set'em up Joe
><cathexis@erols.com> writes

>I believe that experiments HAVE been done to try and use trees as
>radiators (such as tapping into a trunk about 1/3 of the way up and
>gamma-matching it like you would a vertical mast). Probably best when
>'the sap is rising', so efficiency would be seasonal!

>Ian.

My 40 meter 4 square is, more or less, an embedded in the tree problem.
It's an elevated creature, 9 feet up off ground.

There is a difference in the SWR overall ring-around-the-rosy seasonally
adjusted and F/B ratio I do see when these Post Oak trees go from dormant
to operational! Despite the fact, however, that ' d posies bloom in 'd
spring, au contrare to the Royal Court .. All don't stand up and All fall
down at all!

For practical purposes, nightly performance of this array at a
seven megahertz rate ..

seems unaffected ...

by the rise in sap

Huge grin...

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

1374. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 17:46:10 UTC
From: "John S. MacKay" <k35454@direct.ca>
Message-ID: <gnZK5.17668$Mg1.1038713@brie.direct.ca>
Source record: 177423

The answer is YES. During WW2 yours truly was called upon to repair a 19
set installation in a tank... it would receive but not send. It had been
assumed that it wasn't sending because nobody could receive it. My
examination showed "no fault found". The tank was under a tree and
camouflaged. Moving it a few feet away from the tree resolved the peoblem.
VE7AFN/M. news:39fbc619.618486538@news.erols.com...
> On Fri, 27 Oct 2000 09:48:38 -0500 (CDT), richardharrison@webtv.net
(Richard
> Harrison) wrote:
>
> >I wrote:
> >"There is wide variation in foliage and density."
> >
> >Of course, there is seasonal variation. An afterthought is that generals
> >refight the last war. The military schemers probably emphasized Europe
> >in their tree thoughts. Forests in Europe tend to be swept clean of
> >underbrush. The practice is to gather everything for fuel and other
> >uses. Even the lower branches are plucked.
> >
> >A relatively clean wooded area was probably used for the War
> >Department`s tests of foliage attenuation. Attenuation from trees
> >outside Europe is probably worse. Just speculation.
> >
> >Best regards, Richard Harrison, KB5WZI
>
> Might be kinda fun to hammer two
> copper pipes, one each into adjacent trees,
> then run some ladder line up to your rig and
> see what kinda SWR you get. The ultimate
> stealth verticle. Hi.Hi.
>
> Better yet, if you could get a copper
> paint that actually had copper in it you could
> spray paint selected branches to form a sort
> of a fixed monster size Yagi.
>
> "Excuse me, Mr. Ham. But doesn't
> spray-painting your trees constitute a violation
> of the Homeowner's Association Covenents ? "
>
> " Oh that ? That just insecticide treatment
> for bag-worms !"
>
> 73,

>
> Andrew
> KG4JBM
>
> >
>

1375. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 18:07:53 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001029130753.09570.00000026@ng-fu1.aol.com>
Source record: 177426

>Kevin
>
>Here is my 2 cents worth . I have run similar setups in my 4x4 / truck . I
>use an 8 GA wire (2 conductor) right from the battery to power the rig .
>
>On antenna`s . For under $ 20.00 , use a Francis 108" whip and add a little
>length to it .
> For under $ 60.00 , buy a Wilson 1000 and get a
>longer whip for it , this is what I have used and it works great ! Bandwidth
>is really good as well .
>

Just out of curiosity why would you add to it? 10- meters requires a shorter
antenna then 11 meters.

>Glad to see someone else likes the simplicity of the 10 meter rigs for
>communication on the road , not all
>of us Amatuers can WASTE 1000`s of dollars on our mobiles.
>
>
>
>Jeff VE7GMX
>
Jeff,
Why is it a waste even if you didn't spend 1000's as you put it. You get what
you pay for as far as a dedicated mobile rig. I run an FT 100 Base/Mobile and
don't think it was a waste, AND I run 10/2 meters only mobile.
73
Sandor KG4FET

1376. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 18:14:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001029131400.09570.00000028@ng-fu1.aol.com>
Source record: 177428

>Hello,
>I am interested in purchasing the Radio Shack 10 meter mobile and mounting
>in my pickup. I have been using UHF & VHF in my vehicles for a long time
>but I have no experience with HF in the car. I have two questions:
>
>1) Can you recommend a 10 meter antenna to me?
>
>2) Do I have to do anything different when installing an HF system (25
>watts) in my vehicle?
>
>3) Any other suggestions/issues would be greatly appreciated!
>
>Thanks in Advance
>Kevin A. Fontes
>KI0EB
>73
>
>
>
Kevin,
The Wilson line of antennas are very good for what you want. In fact even the LIL Will is a pretty good 10 meter antenna. The Wilson 1000 Has about a 3 meg band width with < 2:1 SWR. I use one Mag mount with an FT 100 and It does a very good job.
73 and I'll be happy to help in any way I can.
Sandor KG4FET

1377. Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 18:33:57 UTC
From: rob34 <rob34@infinet.com>
Message-ID: <39fc90f7$0$35388$53a6afc1@news.erinet.com>
Source record: 177433

I am in the Kettering,Ohio area and I would like to use my television on channel 59 or I have a converter to pick up ametuer television.I was wondering if someone would have some ideas on what type of antenna to use to pick this up?Thank`s for any info,Rob.

1378. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 19:03:13 UTC
From: "Wayne N3TNS"
Message-ID: <39FC7471.A44671AB@attglobal.net>
Source record: 177425

BillN6VLR wrote:

> >
> I am a little confused on why you are lengthening the antennas. It is
> my experience that 10 meteres is a shorter wavelength than 11 and
> requires a shorter whip.
> --
> BillN6VLR

I agree with Bill. I had a 11/10 meter antenna on my suburban... you've seen them, they have the big open coils that look really cool and don't work worth a hoot. I went to the ham fest and bought myself ham sticks for 10, 20, and 40 meters. The glorified CB antenna had an SWR of 2.5-1 tops and I worked several contacts (spent a lot of time listening to get used to the difference between HF and 2 meters).

When I hooked the ham stick up I didn't even need to have the preamp on in my IC706. I could not believe the difference. I worked France the other day and now I can hear both sides of the conversation most of the time... probably why I didn't talk much because I could never hear the other side of the QSO so I didn't know when to call the station I could hear. They make a great mount for pickups advertised in ARRL magazine. I use quick disconnects (push, twist& lock) incase I need to get into parking garages or don't want the antenna out there when parked in the city, etc... you get the picture.

My advise, buy a hamstick or something made for ham radio. You don't have to spend a fortune to have a good time. I'm sure I could do better with more elaborate antennas, but I've seen a lot of HF antennas on vehicles and don't want all of that hanging on my suburban which I use in my business.... nothing wrong with that... just a matter of preference.

Good luck, if you need the names of the quick disconnects or the pickup bed mount (goes in the rack channels of your bed) let me know. Ham sticks are around 20 bucks, low profile and cheap enough to determine if you want to spend more later to get real serious.

email wgvideo at attglobal dot net

1379. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 19:04:13 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39FC669D.75FA0F27@haertig.com>
Source record: 177424

The rim would still act as a shorted secondary.

Should work ok if the rim were cut in one place and a bit of insulation
inserted, as is customary with shielded loops with the turns inside some
sort of metal tubing.

Gray

JerryL wrote:
>
> Not if he used insulated wire? Don't you think that would work then even using
> the metal rim?
> --
> Rttyman
>
> "Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message
> news:K9rCSEA2O++5EwP6@g3ohx.demon.co.uk...
> > In article <NzXJ5.4818$n26.45832@news1.onlynews.com>, Harold Johnson
> > <w4zcb@ispchannel.com> writes
> > >
> > >> >I have a couple of these things, but both have trouble reliably locking
> > >into
> > >> >the signal, maybe once every 3-5 days at best. I am located near San
> > >> >Francisco, CA., a hundred feet above sea level.
> > >> >
> > >> >Can I get your thoughts about enhancing the antenna/signal level? I
> > >don't
> > >> >have bad noise here that I am aware of.
> > >
> > >I receive WWVB very reliably here in the mountains of western North
> > >Carolina, but found that selectivity is the key. I use a tuned 100 turn loop
> > >on a 24 inch bicycle wheel, a design I found here on the Internet. That
> > >feeds a balanced pair of 40 dB gain instrumentation amplifiers made up from
> > >LM833 op-amps and results in a very high level of signal strength from the
> > >loop. (WWVB is about -70 dBm out of the amplifiers) The tuned loop is hung
> > >from a nail in a basement workshop, not a very good location.
> > >
> > >
> > <snip>
> >
> > >Good luck
> > >
> > >W4ZCB
> > >
> > >

> >
> > I presume that the bicycle wheel is made of metal and that you have
> > wound the 100 turns around the (tyreless) rim? Surely this presents a
> > complete short circuited turn, and pretty well kills the inductance and
> > Q of your coil? Or is the wheel one of the 'avant garde' variety, made
> > out of plastic?
> >
> > Ian.
> >

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1380. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 19:07:37 UTC
From: "Wayne N3TNS"
Message-ID: <39FC7579.FDD92AB7@attglobal.net>
Source record: 177427

Fractenna wrote:

> To Whom it May Concern:
>
>
>
> DO NOT e-mail me on this topic.
>
> Cordially,
> NC

Don't worry, we won't

email wgvideo at attglobal dot net

1381. Re: Fractal Geometry Insignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 19:48:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39FC7F1C.F6D8A4F0@eznec.com>
Source record: 177429

John Peterson wrote:
>
> I am only going from what the manual says and my previous use with and
> development of other types of models.

I'd like to talk about the manual with you. Apparently some portions are misleading, and I'd like to correct them. If you'd email me, mentioning which sections led you to these conclusions, I'd be very appreciative.

> Here is my thinking.
>
> 1. The EZNEC program splits the antenna up into stright line "segments" and
> in the professional and registered versions this can be done automagically.

The user makes the antenna from straight wires, and the length, position, and orientation are completely up to the user. The user then tells the program how many "segments" to divide these shorter wires into. Both the standard and professional versions allow the number of segments to be determined automatically, but I recommend using this feature with care. A number of factors is involved in determining the best number of segments, which the simple-minded automatic segmentation system doesn't take into account.

> 2. You do not get to see the segments it chooses.

This is not correct. The number of segments appears in the Wires Window. There, you can choose, and see, how many segments each wire is divided into. In the View Antenna display, the segment junctions are shown as dots of a color of your choice.

> 3. Antenna wires in the model can only be straight lines.

This is correct.

> 4. A fractal to me is a shape of the same form within a shape (often
> repeated).

I'm not an expert on this, but suspect that an expert would disagree.

> 5. Now I imagined a real "arbitary" shaped antenna. I think for example of
> an antenna where two straight wires come together at an acute angle with a
> smoothed curve [I will use a 90deg pair of wires for example, joined by an
> arc of r radius].
>
> 6. ELNEC may model this as two sides of a box coming together with little
> straight bits (i.e. "steps") making up the arc.

> 7. These steps are in fact smaller versions of the larger shape, and inside
> that shape - thus fullfilling my criteria for a simple fractal design.

It sounds like you have the impression that EZNEC (or ELNEC, which is
now obsolete) models some other shape than the one you've entered, and
substitutes straight wires or other wires from the ones you've
specified. It does not. It analyzes the shape you entered and no
other(*). You have full control over both the antenna shape and the
segmentation. The segments are not independent of the wires, but are
subdivisions of the wires which you specify.

> You may of course want to dissagree with this.
>
> 8. With a more complex "arbitary" shape where there is lots of wire in a
> small space in arbitary form this effect is magnified (rather than reduced)
> because ELNEC / you will chose straight lines it can handle.

Again, you choose the wires. The program doesn't.
>
> This is why I suggest to be careful.

One should always be careful when modeling, but I think your objections
are based mostly on misconceptions about how EZNEC works. Thanks very
much for taking the time to elaborate, so I could understand your
concerns.

I highly recommend that you, or anyone who has questions about how EZNEC
works, download the free demo and actually use it. And I'm always glad
to answer questions, with the only request being that you first make an
honest effort to find the answer in the manual.

Roy Lewallen, W7EL

(*) EZNEC will in some special cases analyze wires of different length
and diameter than the ones you've entered. NEC-2, which EZNEC uses for
calculations, is known to produce a small error when analyzing connected
wires of different diameter. This isn't large enough to be a problem in
most cases, but it is if the wires are part of a parasitic element, such
as in a Yagi element made from telescoping tubing. In special cases
where the element is straight, symmetrical, and close to half wave
resonance (or quarter wave resonance for a grounded element), EZNEC will
substitute an element of constant diameter and equivalent length which
will perform the same and be capable of accurate analysis. I call this
"stepped diameter correction". This process can be disabled if desired.
When it's active, the calculation window will show that the process is
being used, and you can see in the Wires Window exactly what
substitutions were made. Results from this substitution (using the
method developed by Dave Leeson, W6QHS in his book _Physical Design of
Yagi Antennas_) are very close to results using NEC-4 without the
substitution. NEC-4 is relatively free from the error.

> VE9SRB wrote in message ...
> >
> >"John Peterson" <jpeterson@optushome.com.au> wrote in message

> >news:39f903bb@turakina.six.asn.au...
> >> I would suggest you be VERY careful modelling a fractal design in EZNEC
> >and
> >> comparing it with an arbitary shape design.
> >>
> >> As we know EZNEC splits the antenna up into segments. As soon as you do
> >> this you are giving your random design structure and I would expect it to
> >be
> >> modeled more as if it were fractal shape (well, that is if you call the
> >10m
> >> antenna on frac's site a fractal shape - personally I would argue that is
> >is
> >> not truely fractal - or fractal to three levels only)
> >>
> >>
> >Hi John:
> >
> >I don't quite follow your statements regarding EZNEC modeling a "random"
> >shape as a Fractal. Perhaps the word "random" is a bit ambiguous.
> >"Arbitrary" is clearly a better choice of wording. The only point in the
> >comparisons is that taking the same total length of wire as in the MI2 and
> >rearranging it into a non-fractal shape within the same physical aperture,
> >you will get similar or in some cases better performance. The only
> >constraint that I maintain in the arbitrary arrangement is keeping the
> shape
> >symmetrical. Although Fractal loop antennas are always symmetrical, all
> >symmetrical loop antennas are not Fractals. This distinction needs to be
> >recognized in the discussion.
> >
> >Steve
> >
> >
> >

1382. Re: Frequency Counter Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 19:56:38 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <ff%K5.591$NJ1.7736@news.inreach.com>
Source record: 177430

Jeff:

If the "older rig" is running AM, then almost any freq counter will work...just hook the counter into one of the low level driver stages with a small coupling capacitor. Of course, use caution around high voltages.

If the "older rig" is an SSB transceiver, you should be aware than an ordinary freq counter will only display the frequency of the stage it is coupled to, which will not be the actual frequency of operation. To display the actual operating freq, you need a counter with the ability to add or subtract the IF freq. Such counters exist, but they are specially designed to do this job.

One such counter can be obtained from: http://www.aade.com/

Roger K6XQ

1383. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 20:13:58 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <39FC845E.8A7879AF@earthlink.net>
Source record: 177431

Actually, just about everyone has to meet the RF exposure requirements, your commercial radio provider, as well. However, mobile, "push-to-talk" installations are exempted from filing a survey because they're not on the air long enough, in one place, to likely exceed the SAR for public exposure. This includes your mobile 6 meter rig.

Cortland

Jake Brodsky wrote:

> Personally, I think this whole issue is just plain stupid. It's ok
> for me to use a 100 watt 48 MHz FM 2-Way radio with a trunk mounted
> antenna on a sedan at work, but I have to study the issue if I were to
> do the same at 52 MHz. What nonsense.
>
> And now the FDA is studying RF exposure. I can see where this is
> going. Well, I'm not going to care about this until the RF police
> come out with exposure meters. And I doubt that's going to happen any
> day in our lifetimes...
>
> Some day, our children will go combing through these ridiculous laws
> and regulations and they're going to find this turkey. I wonder what
> they'll think?
>
> 73,
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

1384. Re: Mobile HF Exposure Levels

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 20:16:50 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <39FC850F.EBC74537@earthlink.net>
Source record: 177432

A mobile such as you describe doesn't have to do anything, anyway.

Brian Kelly wrote:

> But we have the option of ignoring the lassos. Until I see any clinical evidence
> whatsoever that a bit of sporadic mobile 50w of 2m RF or 100w of HF RF has ever
> caused or hastened the demise of any homo sapiens type they can kiss my butt.

1385. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 21:37:16 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ti5ac$4ma$1@nnrp1.deja.com>
Source record: 177435

GW for personal freedoms? You are joking, arn't you? On my signature
below is a DIRECT quote from GW Bush. How's that for personal
freedoms!?

In article <20001027.034112.-4161501.1.reklaw.m@juno.com>,
reklaw.m@juno.COM wrote:
> for
> personal freedoms, right to life and pro-gun laws, I have changed my
> mind.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1386. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:01:12 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39FCABDA.625DE10B@home.com>
Source record: 177436

Fractenna wrote:
>
> Congratulations you turkeys. You've taken someone whose done something positive
> and through jeaolusy and hatred changed his life. You are to be pitied.
>
> Nathan Cohen has his position terminated on 1 Nov.

Looks like the neo-Luddites won this round. It doesn't come out of a
box ready to run, so kill it. So much for experimentation.

I subscribed to this NG in hopes of seeing information on advances
in antennas, because Hams are historically famous for thinking outside
the box.

Instead I find a bunch of people who give rednecks a bad name.

Bye.

Mark L. Fergerson

1387. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:06:13 UTC
From: richardharrison@webtv.net
Message-ID: <14167-39FC9F55-5@storefull-112.iap.bryant.webtv.net>
Source record: 177437

Arron Hanson wrote:
"I am considering purchasing an antenna for the specific purpose of TV reception of CBUT (Vancouver Canada Channel 2) from Seattle."

Can you use the Space Needle to mount your antenna?

There is slim to no chance of a 140-mile terrestrial line of sight path. You would need 2450 feet of antenna height on each end of a smooth earth path with zero Fresnel zone clearance and no allowance for abnormally poor atmospherics.

Your best hope is atmospheric refraction and forward scatter. It happens, but you need the best antenna you can get to make it happen regularly.

The path loss over a 140-mile Channel 2 line of sight path is tolerable. You lose 22 db in the first wavelength (about 18 feet), then you lose an additional 6 db every time the distance doubles after that. The total for 140 miles is about 118 db of loss.

If the transmitter ERP were 100KW in your direction, that would be plus 80 dbm.

The absolute difference between path loss and transmitter output is a small 38 db. With no reeiving antenna system gains or losses, that -38dbm is the receiver sensitivity required, because if the path were clear that would be the received carrier power. Any TV receiver should be much better than that.

The problem is that the propagation tends to be line of sight.

Best regards, Richard Harrison, KB5WZI

1388. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:20:35 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <PZ7DbAAzKK$5EwF4@g3ohx.demon.co.uk>
Source record: 177443

In article <SDUK5.3699$wg7.42818@news1.onlynews.com>, Harold Johnson
<w4zcb@ispchannel.com> writes
>
>> I presume that the bicycle wheel is made of metal and that you have
>> wound the 100 turns around the (tyreless) rim? Surely this presents a
>> complete short circuited turn, and pretty well kills the inductance and
>> Q of your coil? Or is the wheel one of the 'avant garde' variety, made
>> out of plastic?
>
>Neither, as the article here on the web shows, you remove all the spokes, (I
>had my choice of free rims from a bicycle repair shop that was happy to have
>one less to throw away). Saw the rim through at one point, and screw the two
>ends (Separated by abput an inch) to a small block of wood. This removes
>the short and provides for me at least, a mounting for the loop amplifier
>and the short loop of wire for the "hanger". There is also a "wrap" of thin
>packaging plastic between the rim and the winding, just to cut the capacity
>to the rim, and when completed, the plastic is wrapped over the winding as
>well. Aluminum (Aluminium?) foil is wrapped around the complete assembly
>(minus the 1 inch gap), crunched to a conformal shield and grounded to the
>rim.
>
>Use Google or some such to search for WWVB or VLF and you'll come across the
>pretty ingenious approach.
>
>There's a hundred ways to make the loop, almost any of which results in a
>much larger capture area for the signal than a ferrite loopstick, and still
>providing much needed directivity to kill the noise in other directions.
>
>W4ZCB
>
>
Ah Ha! Cunning eh! No spokes and a cut across the rim...
Sounds suspiciously like sabotage to me!
However, all is now clear. Thanks.

Ian.

1389. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:21:08 UTC
From: Adam <radar_radio@yahoo.com>
Message-ID: <svp8gcncf4rpa4@corp.supernews.com>
Source record: 177438
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hello again, and thanks for the advice so far. I wanted to make a few clarifications about my setup though. I intend to use my G5RV on ALL HF bands (10-80, including WARC). The antenna has 102' of "flat-top" to it, and about 30 feet or so of 400 ohm laddeline which is connected to a balun, after which there is about 70 feet or so of rg-8x. If precise measurements are needed, I can provide some. I am aware that certain lengths of coax can increase the SWR, but if memory serves, the length I have is one shown to be within an acceptable SWR range (although the SWR is still really high in spots).

My main concern was that my new rig's autotuner would fail if too great of an SWR is shown to it.

Thanks for your patience on this matter...I am slowly but surely learning the "HF ropes", as I am more experianced with VHF antenna systems.

Adam

1390. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:33:03 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <SZgErGAfWK$5EwGS@g3ohx.demon.co.uk>
Source record: 177442

Just one rule-of-thumb hint. At the receive end, a halfwave dipole for
appx 50 MHz (is it more like 47?) in a fieldstrength of 1V/m gives you
1V (60dBmV) into 75 ohms (ie the centre of the antenna when terminated
in 75 ohms). At appx 100MHz, for a halfwave dipole, you get half as
much, etc, etc...

Ian.

In article <6LXK5.325$2X5.100533@news.uswest.net>, Aaron Hanson
<ha2@uswest.net> writes
> Thanks everyone for your replies.
>
> I thought I did everything right; here is how I arrived at -25dBm (power
>relative to one milliwatt).
>
> First, I converted the published transmitter power to EIRP
>
> As listed by the FCC, the transmitter power is 100kW ERP, which equals
>80dBm. I added 2.14dB to get 82.14dBm for EIRP. I'm told this is a
>standard conversion value. This will be 'Pt' below.
>
> For path loss (Lp), I used Lp = 32.4 + 20log(f) + 20log(d), with f in
>MHz and d in km. For my location and channel 2; Lp = 32.4 + 20log(55.25) +
>20log(191.1815) = 112.876dB
>
> Finally, I add this all up to get received power (Pr);
>
> Pr = EIRP - Lp + Ga - Lf where Ga is antenna gain (in dBi) and Lf is
>feed line loss (in dB).
>
> Pr = 82.14 - 112.876 + 10 - 4 = -24.736bBm, or about 3 microwatts.
>
> Assuming the voltages are all referenced to a 75 ohm load, 3 microwatts
>= 15 millivolts, or -18dBmV. A long way from 33dBmV.
>
> Based on Ian's and Georges reply, I think I need a better understanding
>of how the basic receiver characteristic, NF (noise figure), relates to
>received signal strength.
>
>-Aaron
>KB7OPL
>
>"Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message
>news:8tIPmUA78++5EwJ+@g3ohx.demon.co.uk...
>> In article <RlJK5.6166$Yl5.319399@news.uswest.net>, Aaron Hanson

>> <ha2@uswest.net> writes
>> >Hi All-
>> >
>> > I'm considering purchasing an antenna for the specific purpose of TV
>> >reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
>> >determined the transmitter location and power, and with some basic path
>loss
>> >calculations I've decided that for the antenna and feed-line I'm
>> >considering, I'll end up with about -25dBm (3 microwatts) signal strength
>at
>> >the TV.
>> >
>> > Now I realize I have no idea what range of signal strength is
>necessary
>> >for decent TV reception. Of course the TV specs say nothing about
>receiver
>> >sensitivity.
>> >
>> > Does anyone know what range of signal strengths equate to decent TV
>> >reception in today's typical TV?
>> >
>> > Thanks!
>> >
>> >-Aaron
>> >KB7OPL
>> >
>> >
>>
>> Coming from the cable TV world, I see it like this...
>>
>> Most modern TV tuners have a noise figure of <5dB.
>>
>> Using a NF of 5dB, a TV signal of 0dBmV (1mV) will give you a carrier-
>> to-noise ratio of 59dB (ie the rms noise in the NTSC 4MHz TV channel
>> video bandwidth) MINUS your 5dB, ie 54dB.
>>
>> -10dBmV (300uV) should give you a S/N of 44dB (where you will JUST start
>> to see the picture noise beginning to increase because of lack of
>> signal). And pro rata....
>>
>> If you are not too discerning, you will probably find S/N of ~34dB
>> acceptable (at -20dBmV, 100uV).
>>
>> Now, convert your dBm into dBmV. 0dBmV is ~-58dBm. You have calculated
>> that you will get -25dBm - that's a staggering +33dBmV!! You could boil
>> a kettle on that! If you are correct, you will probably have to fit an
>> attenuator at the TV input! I wonder if your calculation is correct? Or
>> have I screwed up somewhere (it won't be the first time!)?
>>
>> Ian.

>>
>> P.S. I note that there is another posting from 'Crazy George'. I feel
>> that his name reflects the accuracy of his information (no offence,
>> CG!). Are 'dBm' and 'dBmV' getting mixed up? There's a difference of
>> ~58dB.
>>
>
>

1391. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:46:33 UTC
From: richardharrison@webtv.net
Message-ID: <23744-39FCA8C9-4@storefull-114.iap.bryant.webtv.net>
Source record: 177444

John S. McKay wrote:
"Moving it away from the tree resolved the problem."

The Type 19 tank set was a combo of two radios, one 2 to 8 MHz, or thereabouts depending on late or early production, and another, a UHF radio, operating 230 to 255 MHz.

Vertical trees next to vertical whips wouldn`t work well for either component radio set.

Best regards, Richard Harrison, KB5WZI

1392. 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:51:17 UTC
From: cathexis@erols.com
Message-ID: <39fca805.676331078@news.erols.com>
Source record: 177439

Greetings,

Some of you have recently helped me by suggesting
a good compromise would be 264 ft. dipole feed by 450ohm
ladderline. Having trouble finding ladderline and no nearby
Hamfests upcoming until Jan./Feb. How would things change
if I used the Radio Shack 300ohm twin TV feedline? Believe
they advertise it as "low-loss, foam core". Thoughts? Don't
care about cost issues as I already have 100ft. of this stuff
laying around un-used. Also already have an un-used spool
of 14AWG insulated stranded and 6 egg-type insulators. Am
I about good to go ?

TIA,

Andrew
KG4JBM

1393. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:52:55 UTC
From: rsmits@home.com
Message-ID: <39fcb856$1$efzvgf$mr2ice@news>
Source record: 177440

In <14167-39FC9F55-5@storefull-112.iap.bryant.webtv.net>, on 10/29/2000
at 05:06 PM, richardharrison@webtv.net (Richard Harrison) said:

>Arron Hanson wrote:
>"I am considering purchasing an antenna for the specific purpose of TV
>reception of CBUT (Vancouver Canada Channel 2) from Seattle."

>Can you use the Space Needle to mount your antenna?

>There is slim to no chance of a 140-mile terrestrial line of sight path.
>You would need 2450 feet of antenna height on each end of a smooth earth
>path with zero Fresnel zone clearance and no allowance for abnormally
>poor atmospherics.

You should know, Richard, that Channel 2 transmits from more than 3,000
feet up on Mount Seymour, near Vancouver.

That makes some difference.

Bob.

OS/2 VirusScan - "Windows found: Remove it? (Y/y)"

--
---
rsmits@home.com

1394. Re: Want to Buy: Non-Working Icom 745

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 22:53:37 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39FCAB2E.5E231EEC@bellatlantic.net>
Source record: 177441

And here's the url:
http://home1.gte.net/rhashiro/ik2rnd-icom-ramboard.html

Dick Carroll wrote:

> From postings by users, the Spanish made board is better and much
> cheaper than the Ameritech. It would be worth researching for anyone who
> needed to resolve a failure.
>
> ehsjr@bellatlantic.net wrote:
> >
> > There's at least 2 different sources for replacement boards without
> > batteries - both in the over $100 range. So - you go for the battery
> > in the $5 range (for 2 batteries). If you're careful, you just bought
> > another ten years of life for about 5 bucks, you have an extra 3V
> > coin cell on hand, and you save over 100 bucks.. If you aren't
> > careful, you buy the expensive board to correct your error.
> >
> > The replacement board approach is great when the original
> > board loses its brains. And it provides extra memories, if
> > that feature is of interest. Anyone contemplating replacing the
> > battery should look into the replacement board before opening
> > the radio. go to the following url:
> > http://www.ameritech.net/users/willco788/index.html
> >
> > Dick Carroll wrote:
> >
> > > There's an aftermarket RAM board made in Spain, I believe which uses no
> > > battery, has better features than the original, according to users, and
> > > costs much less, shipped. I don't have the details in front of me but
> > > they can be gotten from others on the Icom list and the Icom net.
> > >
> > > Dick
> > >
> > > Dick Hughes wrote:
> > > >
> > > > That's not a bad idea if there's enough room. When I replaced the
> > > > battery in my IC-271 (same battery) I used those tiny clip leads with
> > > > the wire hook at the end to attach to the battery circuit at the
> > > > easiest point. I used a second battery to power the circuit and
> > > > unsoldered and replaced the existing battery. Was fairly easy to do,
> > > > but wish I had thought of your idea. Of course I have solved the
> > > > problem in my IC-745 with the Willco board. BTW, the battery in the
> > > > IC-745 was still going at 15 years. Lucky I suppose.
> > > >

> > > > Dick - W6CCD
> > > >
> > > > On Wed, 25 Oct 2000 18:40:50 +0100, KB9WFK@mindspring.com wrote:
> > > >
> > > > >wouldn't it be better to solder on the wires, run them to a lithium battery holder
> > > > >and then just leave them in place? You could then just add the battery to the
> > > > >holder, replace the old battery and then remove the battery from the holder until
> > > > >next time. If there is enough room for this it would reduce wear and tear on the
> > > > >pcb and make the change next time much easier as there is less to remember 5 years
> > > > >down the road..

1395. Re: Antenna Choice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-29 23:53:51 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39FCB88C.A78730D9@att.net>
Source record: 177446

Roland, I can quickly make a recommendation for the in-motion antenna
for 75 - 10:

DON'T !

I have been driving a large motorhome like yours for over ten years now,
and I strongly urge you to give up any thoughts of working HF mobile
while in motion. You need every ounce of your attention on driving.
Operating CB or 2-meters is one thing, where all you have to do is
concentrate on the PTT button on the mic, but HF has too many little
knobs and switches to distract you. Pleased reconsider any notions of
this operation. I think that any other motorhoming ham would give you
the same advice.

For parked operation I have mounted a standard Hustler mount on the rear
luggage rail. I shinny up the ladder and attach the Hustler mast with
antenna attached with a bayonet mount. Takes only about a minute once I
am parked.

I have worked the world with that arrangement. The large motorhome top
(mine is all metal) makes a great groundplane for the higher bands and
the large chassis gives lots of capacitance to ground for the lower
bands.

Let us know what you do.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Roland S Geter Sr wrote:
>
> Hi Cecil,
>
> What kind of antenna would you recommend for use both stationary and in
> motion on a 40 foot motorhome for 75 - 10 meters?

1396. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:04:05 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8tidtl$58s$4@bashir.peak.org>
Source record: 177447

KG4FET <kg4fet@aol.combadspam> wrote:

: The Wilson line of antennas are very good for what you want. In fact even the
: LIL Will is a pretty good 10 meter antenna. The Wilson 1000 Has about a 3 meg
: band width with < 2:1 SWR. I use one Mag mount with an FT 100 and It does a
: very good job.

Wouldn't that much bandwidth mean a low Q - which generally (for a mobile
antenna) translates to high ground losses (e.g. - poor radiation efficiency)?

--
Bill Nelson (billn@peak.org)

1397. Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:11:21 UTC
From: rob34 <rob34@infinet.com>
Message-ID: <39fc928e$0$35382$53a6afc1@news.erinet.com>
Source record: 177434

I would like to pick up ametuer television with my communications concepts receiver.I am in the Kettering,Ohio area.The receiver is designed for 430 mhz reception.Any info on what type antenna to use would be appretiated.Rob

1398. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:15:20 UTC
From: n8blk@aol.com
Message-ID: <20001029191520.15489.00000080@nso-ma.aol.com>
Source record: 177449

In article <9RX4OXHStrrr5XOMTyoP=u+vWU6k@4ax.com>, Bob Miller
<bamiller@texas.net> writes:

>They broadcast on 5, 10, 15 and 20 Mhz. You should be able to pick up
>something. I have a cheapo Radio Shack wwv receiver that picks up wwv
>in Ft. Collins just fine with a pullup whip antenna. You should be
>getting either Ft. Collins or the Hawaii version of wwv unless you're
>listening on something really wretched, altho' I can't thing of
>anything more wretched than these little RShack gizmos, and they do
>just fine :-)
>

WWVB is on 60kHz, I'm sure of it. It isn't WWV or WWVH, but rather a different
service with no voice broadcasting. If you go to the NBS site, you can
hopefully get a detailed description of the broadcast services offered.
-art clemons-

1399. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:23:12 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FCBF70.A267A1FB@hiwaay.net>
Source record: 177450

Mark- your lack of analytical ability is remarkable- It is NOT
neo-Luddites that are against new antennas- it is rational humans who
are against a paranoid jerk.
You are also assuming it is some of the residents of this NG that caused
him grief- the real probability is that he did himself in, not any of
us. I have been surprised that Metro colloge kept him on this long.
HIs antennas may or may not be good- but we will never know from him,
because his main agenda is not technology, but Ego and the psychological
game called "uproar." If you look, you will find almost No technical
discourse from him- it is all blather. Almost all the technical content
of this NG is from others, not Cohen.
You should be more obsevant and look at the REAL reasons he is disliked,
and not attribute his position to rejection of new technology.

Bill-W4BSG

Mark Fergerson wrote:
>
> Fractenna wrote:
> >
> > Congratulations you turkeys. You've taken someone whose done something positive
> > and through jeaolusy and hatred changed his life. You are to be pitied.
> >
> > Nathan Cohen has his position terminated on 1 Nov.
>
> Looks like the neo-Luddites won this round. It doesn't come out of a
> box ready to run, so kill it. So much for experimentation.
>
> I subscribed to this NG in hopes of seeing information on advances
> in antennas, because Hams are historically famous for thinking outside
> the box.
>
> Instead I find a bunch of people who give rednecks a bad name.
>
> Bye.
>
> Mark L. Fergerson

1400. Antenna Choice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:32:15 UTC
From: Roland S Geter Sr <roland@geter.org>
Message-ID: <39FCC18E.EC828FE4@geter.org>
Source record: 177445

Hi Cecil,

What kind of antenna would you recommend for use both stationary and in motion on a 40 foot motorhome for 75 - 10 meters?

Roland S Geter Sr - WB6LNA
Scottsdale AZ 85253-4421
480-991-7300

1401. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 00:47:14 UTC
From: kk4bh@aol.comnospam
Message-ID: <20001029194714.29742.00000559@ng-cr1.aol.com>
Source record: 177451

>Greetings,
>
> Some of you have recently helped me by suggesting
>a good compromise would be 264 ft. dipole feed by 450ohm
>ladderline. Having trouble finding ladderline and no nearby
>Hamfests upcoming until Jan./Feb. How would things change
>if I used the Radio Shack 300ohm twin TV feedline? Believe
>they advertise it as "low-loss, foam core". Thoughts? Don't
>care about cost issues as I already have 100ft. of this stuff
>laying around un-used. Also already have an un-used spool
>of 14AWG insulated stranded and 6 egg-type insulators. Am
>I about good to go ?
>
> TIA,
>
> Andrew
> KG4JBM
>

Go for it Andrew! I've used the "el cheapo" flat ribbon line for many years on 40 meters with excellant results. Assuming you have a good tuner, you have nothing else to buy. I now use the 450 ohm ladderline since a local electronics store carries it at reasonable price. Good luck.

73
Ken Bjorklund
KK4BH
remove "nospam" when replying

1402. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 01:11:29 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <39fcbdbb_4@news1.prserv.net>
Source record: 177448

I have had many responses to my question and I thank all who took the time to respond. There is general agreement that a current choke is the way to go, and that is what I will do.

Thank you all,

Bill Ogden
W2WO

(BTW, my tuner does not have a balanced output option. This is what prompted the question.)

1403. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 01:26:48 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tiiqj$2q1$1@iac5.navix.net>
Source record: 177453

I am a bit confused, if you are using an 11 meter antenna, why would you lengthen it for 10 meters?

"CJ Jeff" <mp3z@metacrawler.comREMOVE_THIS> wrote in message news:7vYK5.538533$8u4.7057297@news1.rdc1.bc.home.com...
> Kevin
>
> Here is my 2 cents worth . I have run similar setups in my 4x4 / truck . I
> use an 8 GA wire (2 conductor) right from the battery to power the rig .
>
> On antenna`s . For under $ 20.00 , use a Francis 108" whip and add a little
> length to it .
> For under $ 60.00 , buy a Wilson 1000 and get a
> longer whip for it , this is what I have used and it works great ! Bandwidth
> is really good as well .
>
> Glad to see someone else likes the simplicity of the 10 meter rigs for
> communication on the road , not all
> of us Amatuers can WASTE 1000`s of dollars on our mobiles.
>
>
>
> Jeff VE7GMX
>
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1404. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 01:36:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tija0$7ph$0@208.206.142.100>
Source record: 177454
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

CAM wrote:
>
> Butch Magee wrote:
> > Adam, As you well know, opinions on antennas are a dime a dozen, everybody has
> > his favorite. I tell you from first hand experience (been there, done that, got
> > the T-shirt to prove it) throw that G5RV away and just put you up an inverted V
> > or a flattop for 80 mtrs feed it with coax ...
>
> Opinions are one thing - physics is another. Your above configuration (with
> coax all the way to the dipole) is much worse advice than the G5RV on the
> bands where the G5RV performs well, i.e. 80m, 40m, 20m, 15m, and 12m.
> According to EZNEC, the 300 ohm series section transformer (matching section)
> lowers the 50 ohm SWR from 69:1 to 3.4:1 on 80m, from 64:1 to 4.3:1 on 40m,
> from 74:1 to 7.8:1 on 15m, and from 15:1 to 2.2:1 on 12m. Take a few minutes
> to calculate the relative losses in the coax due to SWR and you will see that
> the G5RV beats your antidotal advice all to heck. A good rule of thumb is not
> to run more than 50 ft of coax with an SWR higher than 10:1.
>

So what you do about that is run PARALLEL dipoles, such that one of
them always presents a modest SWR on all bands of interest. 80,40, and
twenty meter dipoles paralleled on a single coax run do a quite good job
of covering the HF bands here.

1405. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 01:36:44 UTC
From: Jake Schneider <j4k3@texas.net>
Message-ID: <Mg4L5.777$bm2.75875@news3.aus1.giganews.com>
Source record: 177455

Thanks Kirby, I have been thinking a bit about how I can hang a long wire up in the apt. I just thought that if the long wire streached and twisted around the apartment that would be bad in some way. I know enough not to double the thing back on itself but as far as right angles and all that, I haven't a clue. I did tie my electrical ground to the rig and little good that did. I also noticed that I coulda smoked my power supply had I hooked that up. Finnally got the grasp of electrical and rf grounds. (somewhat) I appreciate you help and I'll try experimenting with longwires and good rf ground for now!

Thanks!

Jake KC5UIV

>
> 1. Apply the same sound antenna principles inside your apartment as someone
> who has acres of space for antennass. That is, get
> as much real wire as possible up as high as possible. Since your elevation
> limit is 8 feet, don't string wire around the room, string
> it around the whole apartment. Feed it as you would a random wire.
>
> 2. Many apartment dwellers stretch the longest dipole their place will
> accomodate (usually 10, 15, or 20 meters) the length of
> the apartment and feed it with coax. Restrict yourself to that band. Many
> years ago I put a 20 meter dipole inside my apartment
> in NYC. First QSO was USVI.
>
> 3. You gotta have a ground. Either a heavy wire out the closest window to a
> stealthy ground rod (since you're on the first floor) or
> at least a lot of copper wire around the base boards as a ground plane.
>
> 4. Take down those slinkys and give them to the kids. That's their intended
> purpose. Many on this group will tell you (correctly) that
> you can get a short piece of coat hanger to exibhit low SWR. It will still
> act like my first girlfriend - won't put out...
>
> Kirby, WB3BBC
>

1406. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:12:56 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tilf6gon1@nnrp1.deja.com>
Source record: 177456

In article <39FCDA95.A96C4A69@attglobal.net>,
Wayne N3TNS wrote:

> What the heck is a "neo-Luddites"
> Wayne
>

Lud&#65533;dite (ldt)
n.

1 Any of a group of British workers who between 1811 and 1816 rioted
and destroyed laborsaving textile machinery in the belief that such
machinery would diminish employment.
2 One who opposes technical or technological change.

Take your pick! :)

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1407. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:19:01 UTC
From: "Wayne N3TNS"
Message-ID: <39FCDA95.A96C4A69@attglobal.net>
Source record: 177452

Mark Fergerson wrote:

> Looks like the neo-Luddites won this round. It doesn't come out of a
> box ready to run, so kill it. So much for experimentation.

You should read the other posts in this thread... or any other thread on the Fractenna topic for that matter and you'd probably get a different picture. I too thought he was getting a lot of grief when I came on this newsgroup, but by observation came to my own conclusion the NC really has some problems. Of course, everyone certainly has the right to draw their own conclusions.

What the heck is a "neo-Luddites"
Wayne

email wgvideo at attglobal dot net

1408. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:22:23 UTC
From: hillbilly <hillbilly001@my-deja.com>
Message-ID: <8tim0r$h6i$1@nnrp1.deja.com>
Source record: 177460
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna

the tuner in my TS-450sat handles it just fine

--
Dave KG5XR

http://www.geocities.com/TheTropics/Island/4371/index.html
Ark/Mo State Line

Sent via Deja.com http://www.deja.com/
Before you buy.

1409. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:22:51 UTC
From: JAMES HAMPTON <j.r.hampton@worldnet.att.net>
Message-ID: <%X4L5.5817$5b4.322326@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177457

Aaron,

Before you do anything, you will have to go to the library and get out some topographical maps. You MUST draw a line from your site to the transmitting site. What you will have to do is see how high your antenna will have to be to 'see' the transmitting antenna. From a later post, it looks like you are trying to receive a television signal from well over 100 miles away. In order to do this, the antennas must 'see' (or be very close to seeing) each other. You will have to draw that line and make sure that nothing in the intervening terraine obstructs that line. You will then have to do other calculations (involving Freznel zones) to arrive at your final path loss. I used to do this about 30 years ago and that is a long path - and is likely to be obstructed unless either you or the transmitter is VERY high or both you and the transmitter are quite high in the air. You will also have the curvature of the earth to consider. The problem, if you run into one, will not likely be the transmitter power, nor the receiver noise factor - it is likely to be obstruction of the path between your receiver and the transmitter. Best of luck.

73s,
Jim AA2QA

"Aaron Hanson" <ha2@uswest.net> wrote in message
news:RlJK5.6166$Yl5.319399@news.uswest.net...
> Hi All-
>
> I'm considering purchasing an antenna for the specific purpose of TV
> reception of CBUT (Vancouver Canada channel 2) from Seattle. I've
> determined the transmitter location and power, and with some basic path
loss
> calculations I've decided that for the antenna and feed-line I'm
> considering, I'll end up with about -25dBm (3 microwatts) signal strength
at
> the TV.
>
> Now I realize I have no idea what range of signal strength is
necessary
> for decent TV reception. Of course the TV specs say nothing about
receiver
> sensitivity.
>
> Does anyone know what range of signal strengths equate to decent TV
> reception in today's typical TV?
>
> Thanks!

>
> -Aaron
> KB7OPL
>
>

1410. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:25:29 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <39FCDC02.A7E400DF@home.com>
Source record: 177458

Set'em up Joe wrote:

> Greetings,
>
> Some of you have recently helped me by suggesting
> a good compromise would be 264 ft. dipole feed by 450ohm
> ladderline. Having trouble finding ladderline and no nearby
> Hamfests upcoming until Jan./Feb. How would things change
> if I used the Radio Shack 300ohm twin TV feedline? Believe
> they advertise it as "low-loss, foam core". Thoughts? Don't
> care about cost issues as I already have 100ft. of this stuff
> laying around un-used. Also already have an un-used spool
> of 14AWG insulated stranded and 6 egg-type insulators. Am
> I about good to go ?
>
> TIA,
>
> Andrew
> KG4JBM

I used Radio Scrap twinlead. I bought the cheapest stuff they had because I just wanted to try feeding my dipole with "open wire" -- and it stayed up there for 13 years until I took it down. It was as good then as the day I put it up!

--

Please delete NOSPAM from e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1411. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:32:40 UTC
From: richardharrison@webtv.net
Message-ID: <25993-39FCDDC8-18@storefull-113.iap.bryant.webtv.net>
Source record: 177461

Ian Jackson, G3OHX wrote:
"At the receive end, a halfwave dipole for appx. 50 MHz (is it more like 47?) in a fieldstrength of 1 V/m gives you 1 V (60dBmV) into 75 ohms (i.e. the centre of the antenna when terminated in 75 ohms). At appx. 100 MHz, for a halfwave dipole, you get half as much, etc, etc..."

Good point. The power at a certain distance from the sender is in terms of physical area (per sq. mtr.) perpendicular to the direction of travel, not wavelength.

Also, the source of the power to the receiver has a resistance. It is the antenna`s radiation resistance. Maximum power transfer to the receiver requires a match between the receiver input resistance and the antenna`s radiation resistance. When there is a match, half the power is absorbed in the receiver`s input resistance, and half the power is re-radiated as the antenna`s radiation resistance. That`s the best it gets.

In Canada and the USA, TV Channel 2 occupies 54 to 60 MHz. Picture carrier is at 55.25 MHz. Sound carrier is at 59.75 MHz.

Best regards, Richard Harrison, KB5WZI

1412. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:48:12 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39FCE16A.36D64DA2@att.net>
Source record: 177462

A trick from "the old days"

When using regular TV twinlead it will last longer (as if that is a problem in this case!) and be less resistant to rain detuning if you will coat the line with a good paste wax. We used to use Johnson's paste wax and really slather it on! <:}

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Irv Finkleman wrote:
>
> Set'em up Joe wrote:
>
> > Greetings,
> >
> > Some of you have recently helped me by suggesting
> > a good compromise would be 264 ft. dipole feed by 450ohm
> > ladderline. Having trouble finding ladderline and no nearby
> > Hamfests upcoming until Jan./Feb. How would things change
> > if I used the Radio Shack 300ohm twin TV feedline? Believe
> > they advertise it as "low-loss, foam core". Thoughts? Don't
> > care about cost issues as I already have 100ft. of this stuff
> > laying around un-used. Also already have an un-used spool
> > of 14AWG insulated stranded and 6 egg-type insulators. Am
> > I about good to go ?
> >
> > TIA,
> >
> > Andrew
> > KG4JBM
>
> I used Radio Scrap twinlead. I bought the cheapest stuff they
> had because I just wanted to try feeding my dipole with "open
> wire" -- and it stayed up there for 13 years until I took it
> down. It was as good then as the day I put it up!

1413. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 02:53:26 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39FCE2A3.1CFC81F4@att.net>
Source record: 177463

For a better check, mount the antenna mast more or less horizontal with
the plane of the elements more or less vertical and the reflector next
to the ground. Just a few feet separation will be enough.

This will give you a better check of the tuning, SWR, etc.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Howard Kowall wrote:
>
> i just bought a used ta33jr
> put it together about 10ft above ground to test
> 20,15 mters seems to be ok out a little but should clear up when up 40 ft
> 10 mtrs way out to lunch (help)
> when i checked it before i bought it the 10mtrs was also still out
> the 20,15 mtr portion was ok set on cw
> i am going to call mosley on monday anyway
> any thoughts??
> thanx
> howard

1414. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 03:26:27 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FCEA63.699C8C1D@hiwaay.net>
Source record: 177464

What he means is--- "point it straight up"

Worked for me.

Bill-W4BSG

"George, W5YR" wrote:
>
> For a better check, mount the antenna mast more or less horizontal with
> the plane of the elements more or less vertical and the reflector next
> to the ground. Just a few feet separation will be enough.
>
> This will give you a better check of the tuning, SWR, etc.
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> Howard Kowall wrote:
> >
> > i just bought a used ta33jr
> > put it together about 10ft above ground to test
> > 20,15 mters seems to be ok out a little but should clear up when up 40 ft
> > 10 mtrs way out to lunch (help)
> > when i checked it before i bought it the 10mtrs was also still out
> > the 20,15 mtr portion was ok set on cw
> > i am going to call mosley on monday anyway
> > any thoughts??
> > thanx
> > howard

1415. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 04:25:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39FCF82B.A13AD6F4@oio.net>
Source record: 177465

Andrew,
You can use 300 ohm feed line with probably little
difference from the 450 ohm line. The maximum power
you can run with common TV twin-lead will probably be
less than with 450 ohm line.
'Doc

1416. ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 04:27:54 UTC
From: Howard Kowall <sysctrl@cyberspc.mb.ca>
Message-ID: <t05L5.1344$ae5.42892@news1.mts.net>
Source record: 177459

i just bought a used ta33jr
put it together about 10ft above ground to test
20,15 mters seems to be ok out a little but should clear up when up 40 ft
10 mtrs way out to lunch (help)
when i checked it before i bought it the 10mtrs was also still out
the 20,15 mtr portion was ok set on cw
i am going to call mosley on monday anyway
any thoughts??
thanx
howard

--
sysctrl@cyberspc.mb.ca or ve4isp@rac.ca

1417. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 04:39:48 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <39fcf96b.1777643@news1.pei.sympatico.ca>
Source record: 177466
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll <dixie@townsqr.com> wrote:

>CAM wrote:
>>
>> Butch Magee wrote:
>> > Adam, As you well know, opinions on antennas are a dime a dozen, everybody has
>> > his favorite. I tell you from first hand experience (been there, done that, got
>> > the T-shirt to prove it) throw that G5RV away and just put you up an inverted V
>> > or a flattop for 80 mtrs feed it with coax ...
>>
>> Opinions are one thing - physics is another. Your above configuration (with
>> coax all the way to the dipole) is much worse advice than the G5RV on the
>> bands where the G5RV performs well, i.e. 80m, 40m, 20m, 15m, and 12m.
>> According to EZNEC, the 300 ohm series section transformer (matching section)
>> lowers the 50 ohm SWR from 69:1 to 3.4:1 on 80m, from 64:1 to 4.3:1 on 40m,
>> from 74:1 to 7.8:1 on 15m, and from 15:1 to 2.2:1 on 12m. Take a few minutes
>> to calculate the relative losses in the coax due to SWR and you will see that
>> the G5RV beats your antidotal advice all to heck. A good rule of thumb is not
>> to run more than 50 ft of coax with an SWR higher than 10:1.
>>
>
> So what you do about that is run PARALLEL dipoles, such that one of
>them always presents a modest SWR on all bands of interest. 80,40, and
>twenty meter dipoles paralleled on a single coax run do a quite good job
>of covering the HF bands here.

But for crissake don't try to trim the individual flattops for low swr on their
own bands because they all interact and trimming one will make some other
dipole too long/short etc and you'll drive yourself nuts. BTW, don't try using
what cable companies and telcos use for 'lashing wire' to make antennas out of,
the manufacturers build a little resistance into the material in them and you
just cannot get the swr down. (drove myself nuts trying to once).

1418. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 05:01:28 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FD00A8.9DAB5F67@bigfoot.com>
Source record: 177467

BuzzKenwood wrote:
> Let me ask this, what's wrong with running the ladder line right to
> the tuners balanced output?

In most of the older tuners, the built-in balun is a 4:1 voltage balun designed to feed close to a 200 ohm load like a resonant loop or folded dipole. They are undersized for non-resonant dipole applications.
--
http://www.mindspring.com/~w6rca

1419. Re: Antenna Choice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 05:11:15 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FD02F3.A57F2CDA@bigfoot.com>
Source record: 177369

Roland S Geter Sr wrote:
> What kind of antenna would you recommend for use both stationary and in
> motion on a 40 foot motorhome for 75 - 10 meters?

I have the HighSierra HS-1600 on my pickup with the camper bottom
section option and a large top hat. It's hard to beat.
--
http://www.mindspring.com/~w6rca

1420. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 05:15:36 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FD03F8.C4DA8EB4@bigfoot.com>
Source record: 177370
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Adam wrote:
> Hello again, and thanks for the advice so far. I wanted to make a few
> clarifications about my setup though. I intend to use my G5RV on ALL HF
> bands (10-80, including WARC).

The standard G5RV does not work well on 30m, 17m, and 10m. However,
slight variations have a big effect on 10m. If you really want an
all HF band antenna, take a look at mine on my web page. Also follow
the G5RV web page selection to find out all about the G5RV.
--
http://www.mindspring.com/~w6rca

1421. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 05:22:05 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39FD057D.60495F62@oio.net>
Source record: 177468

BuzzKenwood,
No balanced output on an AT-250.
'Doc

1422. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 06:54:30 UTC
From: whites@ccp.com
Message-ID: <39ff1a62.308783395@news.ccp.com>
Source record: 177371

Why not use a heathkit balun coil set (model B1)
If you can find one.
Bob

1423. Dual band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 08:16:58 UTC
From: VK4LAJ <k4laj.SPAM.JAM@loaded-dog.com>
Message-ID: <39fd2ea5@grissom>
Source record: 177372

Hi all,

Does anybody have (or know where I can get) plans for a dual band VHF/ UHF vertical antenna? Gain is not important, as there are a lot of local repeaters around that are easily accessible.

I would prefer not using an antenna switch as I already have beams for both bands and only one position left on the switch

Thanks in advance

Don't forget to remove the SPAM.JAM

73
Adam VK4LAJ
E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
WWW: - http://www.loaded-dog.com
Brisbane Australia
CQ Zone 29/ 30
Point your beam at: -27.39S Lat. - 153.03E long
Maiden Head: - QG62mo
Height ASL: - 52m

My wife says I never listen to her...
at least that's what I thin she said?

1424. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 10:57:32 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <39fd5424_1@news.cybertours.com>
Source record: 177373

"Set'em up Joe" <cathexis@erols.com> wrote in message
news:39fca805.676331078@news.erols.com...
> Greetings,
>
> Some of you have recently helped me by suggesting
> a good compromise would be 264 ft. dipole feed by 450ohm
> ladderline. Having trouble finding ladderline and no nearby
> Hamfests upcoming until Jan./Feb. How would things change
> if I used the Radio Shack 300ohm twin TV feedline? Believe
> they advertise it as "low-loss, foam core". Thoughts? Don't
> care about cost issues as I already have 100ft. of this stuff
> laying around un-used. Also already have an un-used spool
> of 14AWG insulated stranded and 6 egg-type insulators. Am
> I about good to go ?
>
> TIA,
>
> Andrew
> KG4JBM

Though the R.S. 300 ohm stuff will work fine, I perfer the 450 stuff mostly because of it's bigger stronger conductors.. here are a couple of web sights that have the 450 ladder line in stock.

http://www.w7fg.com/ant.htm (source for true open wire 600ohm.)

http://www.surplussales.com/SSIndex.html

http://www.thewireman.com/

http://www.davisrf.com/

normal disclaimer- I don't represent no am I payed by any of the above firms.. there are others also

73 Dave KC1DI

1425. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 11:23:58 UTC
From: joseph.buch@dol.net
Message-ID: <39fd555e.2086399@news.dol.net>
Source record: 177374

Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote:

>>
>I believe that experiments HAVE been done to try and use trees as
>radiators (such as tapping into a trunk about 1/3 of the way up and
>gamma-matching it like you would a vertical mast). Probably best when
>'the sap is rising', so efficiency would be seasonal!
>
>Ian.
>
During the Vietnam War Bell Laboratories ran some tests of a device which transformed trees into vertical antennas. The problem was that in the dense jungles of Vietnam the absorption was so great even at HF frequencies that small vertical whips were worse radiators than normal.

The Bell Labs engineer called his device a "HEMAC". That was an acronym for something but I can't remember what. The HEMAC was a loosly wound air-core toroid. The tree trunk went through the center of the doughnut formed by the torroid. The torroid coil was resonated with a variable tuning capacitor.

Comparative test results in a densely wooded area showed the HEMAC/tree had significant gain over an electrically short whip. I do not remember the numbers. A photo of this device being used on a tree on the Bell Labs campus appeared in a trade magazine but I never saw or heard of the device again. The accompanying short article said the same technique could be used to excite metal light poles. I would be interested in anything anyone in this group could add on this subject, especially references that might be accessible via the Internet. An Altavista search on HEMAC got 26 hits but none related to the device I remember seeing in that magazine.

Joe Buch
joseph.buch@dol.net

1426. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 11:42:21 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <9dnqvs82rg7dnb61kscd1s84agqpuioqr9@4ax.com>
Source record: 177375

On Sun, 29 Oct 2000 23:01:28 -0600, CAM <cam2338@bigfoot.com> wrote:

>BuzzKenwood wrote:
>> Let me ask this, what's wrong with running the ladder line right to
>> the tuners balanced output?
>
>In most of the older tuners, the built-in balun is a 4:1 voltage balun
>designed to feed close to a 200 ohm load like a resonant loop or folded
>dipole. They are undersized for non-resonant dipole applications.

Ah, see I didn't realize that, thanks that helped

1427. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 11:42:57 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <9lnqvskoofqrvvnbg968t9kli0uof38roo@4ax.com>
Source record: 177376

On Sun, 29 Oct 2000 23:22:05 -0600, 'Doc <w5lz@oio.net> wrote:

>
>
>BuzzKenwood,
> No balanced output on an AT-250.
> 'Doc
OK, thanks I'll tell him

1428. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 12:13:56 UTC
From: richardharrison@webtv.net
Message-ID: <2764-39FD6604-12@storefull-111.iap.bryant.webtv.net>
Source record: 177377

Wayne, N3TNS wrote:
"It`s always someone else`s fault."

Ihat`s what lawyers try to sell. We make much of our own luck, and we usually like things to go well. I`m sorry Chip has a temporary reversal.

Sometimes others are out to "get you". There is a "bucket of crabs" environment. One crab tries to climb out of the bucket, the others clamp on and pull him down.

Best regards, Richard Harrison, KB5WZI

1429. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 13:31:18 UTC
From: richardharrison@webtv.net
Message-ID: <13874-39FD7826-7@storefull-118.iap.bryant.webtv.net>
Source record: 177378

Joe Buch wrote:
"The accompanying short article said the same technique could be used to excite metal light poles."

A math treatment of toroidal coupling to grounded towers is given by B. Whitfield Griffith, Jr. in "Radio Electronic Transmission Fundamentals", Library of Congress Catalog Card Number: 61-13756, pages 379-383.

Griffith says: "The toroidal coupling system which we have just described has thus far not found application in standard broadcast stations. The large toroidal inductor (mean diameter 6m and mean circumference, 18.86m, 1,06 turns per meter, or 20 turns in the example), would be expensive and difficult to construct and insulate."

Griffith says that shunt feed is a simple and effective alternative to toroidal excitation.

Best regards, Richard Harrison, KB5WZI

1430. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 13:42:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FD7AA8.8868ED3C@bigfoot.com>
Source record: 177379

whites@ccp.com wrote:
> Why not use a heathkit balun coil set (model B1)
> If you can find one.

The Heathkit balun coil shares a problem with a ferrite balun -
not enough inductance to handle all the impedances encountered
in a non-resonant, ladder-line fed doublet. I know of no multi-
band balun that will handle 2000+j2000 on 80m and 10m.
--
http://www.mindspring.com/~w6rca

1431. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 13:59:40 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <g9fL5.4603$K%5.76707@news1.rdc1.on.wave.home.com>
Source record: 177380

> Wayne, N3TNS wrote:
> "It`s always someone else`s fault."
>
> Ihat`s what lawyers try to sell. We make much of our own luck, and we
> usually like things to go well. I`m sorry Chip has a temporary reversal.
>
> Sometimes others are out to "get you". There is a "bucket of crabs"
> environment. One crab tries to climb out of the bucket, the others clamp
> on and pull him down.
>
> Best regards, Richard Harrison, KB5WZI
>

I always like to think "What goes around comes around." Chip has been a complete asshole to many folks. He has disrupted this news group and has caused many people grief. Now it is his turn!! Maybe he will change his tune, but probably not. I guess he can bend coat hangers full time now.

Barry D.

1432. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 15:31:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tk48n$9h4$0@208.207.71.175>
Source record: 177382

RanHefner wrote:
>
> In article <39FCDA95.A96C4A69@attglobal.net>,
> Wayne N3TNS wrote:
>
> > What the heck is a "neo-Luddites"
> > Wayne
> >
>
> Ludï¿½dite (ldt)
> n.
>
> 1 Any of a group of British workers who between 1811 and 1816 rioted
> and destroyed laborsaving textile machinery in the belief that such
> machinery would diminish employment.
> 2 One who opposes technical or technological change.
>
> Take your pick! :)
>

Someone here has missed the point completely. The problem with Chip et al is not that he has invented new technology which has been rejected by ANYONE on this NG, rather that he has consistantly and almost completely stonewalled against any and everyone here who has asked for real, hard information about his supposed invention. He repeatedly and very petulantly insists on directing all who ask to the most obscure of scientific writings which are mostly meaningless in deciphering any hard information on fractal shaped antennas as any improvement whatever over other shapes. He insists that the scientific literature supports his claims but so far has totally resisted any and all efforts to get him to tell us -right here- how and why.
It seems more than clear that when he can't or won't divulge, and almost all other respected and accepted antenna authorities fail to find any such attributes using the scientific references he quotes and their own scientific investigation, that his claims are vaporous at best, and a virtual scam attemp at worst.
If he was a serious scientist he would be more than pleased to make full disclosure, and we know that if his claims were valid it wouldn't be that hard to do.
Do I believe that fractal shaped antennas work? Of course- most any shape antenna will work.That's not the point of contention. Whether or not there is any advantage to those shapes-as is apparntly claimed by his writings and attempts to claim patents and copyrights- is the contentious area.

From here it looks like an attempt to force his claims onto the rest of the world, like it or not, by mostly bafflegab, bluster and threats of lawsuit.

1433. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 15:44:43 UTC
From: g0xay@aol.com
Message-ID: <20001030104443.20149.00000715@ng-bh1.aol.com>
Source record: 177383

Adam.
If you do end up using a G5RV, don't forget that Louis Varney designed it in the 40s for valve rigs (tune for max smoke etc). He updated the design several times, latterly using some co-ax as the original used only ladderline as feeder (and a special tuner). There are also several 'improved' versions with slightly different dimensions, redesigned using modelling programs. These allegedly work better and I think are ok on WARC bands. See various RSGB and ARRL antenna books. I am sure someone can confirm or deny the WARC bands bit.
Re possible damage to internal tuner. If a wire breaks and the swr departs skyward, my TS870 just shuts down and won't play.
Have fun

Dick G0XAY

1434. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 15:59:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tk5t6$e3l$0@208.207.71.175>
Source record: 177384

BuzzKenwood wrote:
>
> Let me ask this, what's wrong with running the ladder line right to
> the tuners balanced output? Is the coax used only to keep the ladder
> line outside so it won't have to come through a window?

Because you just move the problem from the coax/ladderline transition point to the inside of the tuner, which in the case of every commercially built C-L-C tuner I've encountered, has a 4:1 toroid balun inside its cabinet, used to provide a balanced output. The problem of that balun seeing many impedances that it can't handle remains, and just moves inside the tuner cabinet.
No such problem will exist when using a coax/ladderline transition with a current (choke) balun. The only requisite is that the short section of coax and the tuner output variable capacitor must handle the high voltages present on frequencies where the antenna causes high reflected ratios.

1435. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 16:15:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tk6ra$e3l$1@208.207.71.175>
Source record: 177385
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Gord Beaman wrote:

run PARALLEL dipoles, such that one of
> >them always presents a modest SWR on all bands of interest. 80,40, and
> >twenty meter dipoles paralleled on a single coax run do a quite good job
> >of covering the HF bands here.
>
> But for crissake don't try to trim the individual flattops for low swr on their
> own bands because they all interact and trimming one will make some other
> dipole too long/short etc and you'll drive yourself nuts. BTW, don't try using
> what cable companies and telcos use for 'lashing wire' to make antennas out of,
> the manufacturers build a little resistance into the material in them and you
> just cannot get the swr down. (drove myself nuts trying to once).

I cut them for center band, separate them as much as possible,
avoiding close parallel installations and tune them with a tuner. It
has always worked for me.

That "carrier wire" is stainlss steel of high strength, and I never
pass an opportunity to grab it when available. I don't use it for
antennas but there are many other excellent uses for it.

IMO Nothing beats Copperweld for antennas. A few years ago I boubht a
spool of some new stuff called "Silky Smooth" or somethbing like that
from The Wireman. It was many small strands of plated steel and looked
like a good thing, and I repaced all my old copperweld with it. Turns
out it was NOT a good thing at all. I climbed the tower last week and in
looking things over and I see that ALL the entire length of each wire
element on all my antennas are now RUSTING! The plating is coming off
the small strands and over the entire length of every wire element small
points of rust are appearing. I'll have to replace every element on
every wire antenna, 160, 80, 40 and 30 meter dipoles. So much for
another "technological" advance! It's copperweld exclusively for me from
here on.

1436. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 16:23:20 UTC
From: Howard Kowall <sysctrl@cyberspc.mb.ca>
Message-ID: <avfL5.1395$ae5.44785@news1.mts.net>
Source record: 177381

thanx for the advise will check it out
thanx
howard

"Howard Kowall" <sysctrl@cyberspc.mb.ca> wrote in message
news:t05L5.1344$ae5.42892@news1.mts.net...
> i just bought a used ta33jr
> put it together about 10ft above ground to test
> 20,15 mters seems to be ok out a little but should clear up when up 40 ft
> 10 mtrs way out to lunch (help)
> when i checked it before i bought it the 10mtrs was also still out
> the 20,15 mtr portion was ok set on cw
> i am going to call mosley on monday anyway
> any thoughts??
> thanx
> howard
>
>
> --
> sysctrl@cyberspc.mb.ca or ve4isp@rac.ca
>
>

1437. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 16:26:25 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FDA131.719E853A@bigfoot.com>
Source record: 177386

Dick Carroll wrote:
> The problem of
> that balun seeing many impedances that it can't handle remains, and just
> moves inside the tuner cabinet.
> No such problem will exist when using a coax/ladderline transition
> with a current (choke) balun.

However, a "current (choke)" balun is just a marginally better solution,
not a perfect solution. No balun or choke that I know of will handle
2000+j2000 ohms on both 80m and 10m. One needs to know what impedances
the balun/choke is seeing. Link coupling in the antenna tuner is a much
better solution.
--
http://www.mindspring.com/~w6rca

1438. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 16:43:45 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FDA541.27A47058@hiwaay.net>
Source record: 177387

Buzz- read the original post- he does not have a balanced output on his tuner.

Bill

BuzzKenwood wrote:
>
> On Sun, 29 Oct 2000 09:17:45 -0600, CAM <cam2338@bigfoot.com> wrote:
>
> >klocko@toad.net wrote:
> >> I'd go with a W2DU choke balun made from ferrite sleeves.
> >
> >The most choking action for the money, IMO, is ten turns of
> >RG-400 (teflon) wrapped on a $9 Amidon FT-240-61 ferrite core.
> Let me ask this, what's wrong with running the ladder line right to
> the tuners balanced output? Is the coax used only to keep the ladder
> line outside so it won't have to come through a window? How far from
> the edge of the window does the ladder line have to be to be
> considered safe and have no interaction? (talking a 100 watt station
> and alum frame windows). Getting ready to put up (weather
> permitting) phased dipoles for 20 today.
>
> And can someone tell me if a Kenwood AT-250 has balanced output for
> ladder line? A friend is thinking of buying a TS-440 with a AT-250.

1439. Re: Dual band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 16:48:17 UTC
From: arrow146@aol.com
Message-ID: <20001030114817.11915.00000372@ng-da1.aol.com>
Source record: 177388

>Subject: Dual band antenna
>From: "VK4LAJ" k4laj.SPAM.JAM@loaded-dog.com
>Date: Mon, Oct 30, 2000 2:16 AM
>Message-id: <39fd2ea5@grissom>
>
>Hi all,
>
>Does anybody have (or know where I can get) plans for a dual band VHF/ UHF
>vertical antenna? Gain is not important, as there are a lot of local
>repeaters around that are easily accessible.

<A HREF="http://members.aol.com/_ht_a/Arrow146/inst/ijpole.html">J-Pole
Instructions</A>

Construction Plans for the Model J146/440 Dual Band Solid Aluminum J-Pole

Parts Needed:

Radio Shack # 21-961   3/8”-24/SO239 Mount (Mobile CB Antenna) Radio
Shack # 15-826   TV Mast U-Bolt Clamp Assembly
About 90 inches of 3/8” diameter Solid Aluminum Rod.
5 1/2 inch piece of strut angle Aluminum 1 1/2” X 1 1/2” X 3/16” Thick.
4 Stainless Jam Nuts 3/8-24 thread

Tools needed:

Drill Press with drill Bits up to 1/2”.
Tap & Die for 3/8-24 thread.
Sander or file to de-burr the cut edges.
2 9/16 wrenches & a 3/4 wrench. Vice-grips

Make sure the piece of angle Aluminum is exactly 5 1/2 inches long. Drill 2
1/4” holes on one side, centered to fit the U-Bolt for mounting. On the other
surface of the angle From the left side measure in 1/2” and drill a 1/4”
pilot hole. From the left side measure in 1 15/16” and drill a 1/4” pilot
hole. From the left side measure in 5” and drill a 1/4” pilot hole. This
should give you 1 7/16” from center to center of the first 2 holes. This
should give you 4 1/2” from center to center of the two outside holes.
Redrill the left pilot hole to 1/2” Redrill the other 2 pilot holes to
11/32” Then tap the hole with a 3/8-24 Tap. Finish as required.

Cut a piece of the 3/8” Aluminum rod to about 21”. Attach a vice-grip to
one end. Using a 3/8-24 Die cut in about 8 threads in the other end. Screw on
the Coupling Nut that came with the SO239 Mount Tighten as much as you can.
Measure the rod & coupling nut & cut to exactly 19 1/4”

Cut a piece of the 3/8" Aluminum rod to about 59" Cut another piece about 8" Attach a vice-grip to one end. Using a 3/8-24 Die cut in about 15 threads in the other end. repeat for the 8" rod. (If you don't have jam nuts, cut enough threads for 2 nuts & the thickness of the angle bracket.) Screw on one of the Jam nuts & tighten as much as you can. Measure from the bottom of the nut and cut the rod to exactly 57 1/2" Measure from the bottom of the nut and cut the other rod to exactly 6 1/4" (Remember the nut must be included in the Measurement.) (Put a small amount of grease on the threads) Screw the elements into the threaded hole of the angle bracket and tighten. Screw on the other nut and tighten it.
Attach the 19 1/4" element in the 1/2" hole using the rest of the SO239 Mount. Mount & test your new antenna.

SWR should be 1.1:1 at 146 MHz and about 1.2:1 at 144 &148 MHz.

SWR should be 1.1:1 at 443 MHz. and about 1.2:1 at 437 & 450 MHz.

The J146/440 Dual Band with single SO239 feed is only $ 39.
Please add $ 6. Shipping & Handling per order (for US Funds).

73   Allen Lowe NØIMW
Arrow Antenna
1803 S. Greeley Hwy. # B
Cheyenne, WY 82007
(307) 638-2369 Fax (307) 638-3521
Arrow146@aol.com

1440. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 17:01:44 UTC
From: richardharrison@webtv.net
Message-ID: <24887-39FDA978-26@storefull-116.iap.bryant.webtv.net>
Source record: 177390

Jim, AA2QA wrote:
"The problem, if you run into one, will not likely be the transmitter power, nor the receiver noise factor- it is likely to be obstruction of the path between your receiver and the transmitter."

From a glance at the map Jim is likely right. The obstruction is likely to be from being over the horizon. The reflection point, or more aptly the grazing point is likely to be seawater which often produces deep fades.

I`ve worked with microwave receivers capable of TV relay. Sensitivity was between -80dbm and -90dbm. At UHF and VHF, better noise figures and sensitivities are produced in cheap TV sets. Quoted sensitivities seem rare probably because steady improvements tend to make such figures soon obsolete.

What Terman says about TV reception is more useful: "Television receiving antennas are usually mounted as high as practical above the earth, because the strength of the high-frequency signals from a distant transmitter will be directly proportional to height---. The minimum height necessary to obtain a usable signal will depend on the distance to the transmitter.

Directivity is required in the receiving antenna in order to inrease the capture area, and to provide the possibility of discrimination against undesired transmission paths. When the signal strength is not great the receiving antenna should not only be as high as possible, but should be of a type having a relatively large directive gain."

Best regards, Richard Harrison, KB5WZI

1441. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 17:10:57 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <39FDAB87.C48F11A0@home.com>
Source record: 177389

"George, W5YR" wrote:

> A trick from "the old days"
>
> When using regular TV twinlead it will last longer (as if that is a
> problem in this case!) and be less resistant to rain detuning if you
> will coat the line with a good paste wax. We used to use Johnson's paste
> wax and really slather it on! <:}
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> Irv Finkleman wrote:
> >
> > Set'em up Joe wrote:
> >
> > > Greetings,
> > >
> > > Some of you have recently helped me by suggesting
> > > a good compromise would be 264 ft. dipole feed by 450ohm
> > > ladderline. Having trouble finding ladderline and no nearby
> > > Hamfests upcoming until Jan./Feb. How would things change
> > > if I used the Radio Shack 300ohm twin TV feedline? Believe
> > > they advertise it as "low-loss, foam core". Thoughts? Don't
> > > care about cost issues as I already have 100ft. of this stuff
> > > laying around un-used. Also already have an un-used spool
> > > of 14AWG insulated stranded and 6 egg-type insulators. Am
> > > I about good to go ?
> > >
> > > TIA,
> > >
> > > Andrew
> > > KG4JBM
> >
> > I used Radio Scrap twinlead. I bought the cheapest stuff they
> > had because I just wanted to try feeding my dipole with "open
> > wire" -- and it stayed up there for 13 years until I took it
> > down. It was as good then as the day I put it up!

I never put anything on mine, mainly because when we put it up it was
December, there was six inches of snow on the ground, and it was below
zero. It sat through ice storms, rain, and whatever, and never showed any
signs of cracking or deterioration. If there was any change in it's

attentiation characteristics I did not notice it and had a reputation for hearing signals that others locally could not, and also for being heard when the others
weren't. Despite all the things that some "experts" might point out, it worked like crazy
for me. No extra expenses like wax were incurred. Some time after I took it down, I used the line for a "twin-lead" 75m marconi which I have since passed on to someone else -- it is still in use today -- that makes it about 17 years old now! The new owner consistently works world wide DX on 75m with it!
--

Please delete NOSPAM from e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1442. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 17:52:11 UTC
From: richardharrison@webtv.net
Message-ID: <3821-39FDB54B-9@storefull-112.iap.bryant.webtv.net>
Source record: 177391

Bill Nelson wrote:
"Wouldn`t that much bandwidth (3 MHz or about 10.4%) mean a low Q---?"

A full-length 1/4-wave whip doesn`t have any matching network to affect efficiency and bandwidth. 3 MHz bandwidth at 29 MHz doesn`t appear excessive to me.

Best regards, Richard Harrison, KB5WZI

1443. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 18:14:38 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <iWiL5.93$WN.660914@news.ntplx.net>
Source record: 177392

F6BOM <gilbert.mouget@waika9.com> wrote in message
news:sc5K5.69$SH7.296036@nnrp4.proxad.net...

> [Nothing but changed the subject]

Incorrect, sir; he also misspelled "significant."

73,
Ed, W1RFI

1444. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 18:32:41 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39FDBEC9.1B0E93E5@uci.edu>
Source record: 177393

Fractenna wrote:
> I don't understand. The journals I am thinkling about are peer-reviewed.
> I don't know what else I can add to clarify this.

The names of the journals?

1445. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 18:43:36 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tkfgm$v4f$1@nnrp1.deja.com>
Source record: 177394

In article <8tk48n$9h4$0@208.207.71.175>,
Dick Carroll <dixie@townsqr.com> wrote:
>
> Someone here has missed the point completely. The problem with Chip
et
> al is not that he has invented new technology which has been rejected
by
> ANYONE on this NG, rather that he has consistantly and almost

I think MOST everyone misses the point! It is my opinion (based on gutt-instinct and not hard facts) that NC and Fractal Antenna Systems are being evasive intentionally. The purpose, in my opinion, is to raise as much "talk" about the technology and company without showing their "weak" hand as to drum-up someone to make a purchase of company and rights.

It would seem that if NC and FRACTENNA was as good as he/they boast, they would be more forthcoming with information to sustain their assertions.

It is further my opinion that NC was given the "boot" because of one of two things. His grant money ran out or he was found to be spending way too much time on personal business as with the newsgroup and FRACTENNA while on the BU dole.

Of course, all of the above is my constitutionally protected opinion on the matters at hand and could be wrong. No one should draw conclusions from these statements, but rather should use their OWN minds to figure-out the FRACTAL jig-saw puzzle.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

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1446. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 19:25:37 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tkhv8$1c7$1@nnrp1.deja.com>
Source record: 177397

In article <20001029105503.16199.00000429@ng-ch1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
>
>
> I don't understand. The journals I am thinkling about are peer-
reviewed.
> I don't know what else I can add to clarify this.
>
> 73
> Chip N1IR
>

Chip, can't you see that your on-going unwillingness to provide more
complete information is what makes your statements suspect? Why don't
you simply NAME the journals?

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

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1447. Re: Dual band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 19:26:42 UTC
From: trader@NOSPAMcybermight.com
Message-ID: <39fdcac9.461799@209.189.89.230>
Source record: 177395

I believe that one of the recent issues of QST had plans for building
a dual-band J-pole antenna. (I think it was October).

On Mon, 30 Oct 2000 18:16:58 +1000, "VK4LAJ"
<k4laj.SPAM.JAM@loaded-dog.com> wrote:

>Hi all,
>
>Does anybody have (or know where I can get) plans for a dual band VHF/ UHF
>vertical antenna? Gain is not important, as there are a lot of local
>repeaters around that are easily accessible.
>
>I would prefer not using an antenna switch as I already have beams for both
>bands and only one position left on the switch
>
>Thanks in advance
>
>Don't forget to remove the SPAM.JAM
>
>73
>Adam VK4LAJ
>E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
>WWW: - http://www.loaded-dog.com
>Brisbane Australia
>CQ Zone 29/ 30
>Point your beam at: -27.39S Lat. - 153.03E long
>Maiden Head: - QG62mo
>Height ASL: - 52m
>
>My wife says I never listen to her...
>at least that's what I thin she said?
>
>

<<Get a WildThing2 Clone at http://www.cybermight.com/trader For a limited time only
$75.00
Alright!! The first one to complain leaves with a bloodstain!!!

Trader>>

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1448. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 19:35:32 UTC
From: trader@NOSPAMcybermight.com
Message-ID: <39fdcd55.1113940@209.189.89.230>
Source record: 177396

I love my MFJ 259B...I'm always playing around with an antenna..mine,
or a friends...It does a good job for it's price range.

On Wed, 25 Oct 2000 22:27:59 -0400, Kirby <kirby.no.spam@kpsnet.com>
wrote:

>I'm considering purchasing an antenna analyzer - the MFJ or something in
>that price range. Yeah, I know what MFJ stands for .... ;) . Have
>there been any comparison reviews done?
>
>Kirby
>

<<Get a WildThing2 Clone at http://www.cybermight.com/trader For a limited time only
$75.00
Alright!! The first one to complain leaves with a bloodstain!!!

Trader>>

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1449. Re: 160M dipole feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 19:43:43 UTC
From: lesw8wlq@webtv.net
Message-ID: <26925-39FDCF6F-33@storefull-611.iap.bryant.webtv.net>
Source record: 177398

I am using a 260 foot end fed zepp. I use 450 ohm ladder line over 200 foot long. I use a heathkit 2060-A tuner with it and it will load a 1:1 on all bands. I works very well on 17 with very little inductance in the the tuner, at 1:1 across the entire band with out retuning. The ideal feed line would be open wire with 6" feeder spreaders. I believe you would be better off going to the 450 ohm line. This is available from Cable X-Perts on a quick delivery basis. Get the 14 ga. if you can. The light stuff doesn't hold up that well. I am not sure but I don't think the 300 ohm radio shack will take a full KW. Ok for transceivers though. I am working on a Sterba Curtain which should be up next spring. This will use the 600 ohm open line with the six inch spreaders (low loss with this). After sixty years as a ham I firmly believe 600 ohm balanced line is the best. Cable X-Perts fone is 1-800-828-3340 orders only. In the 99 catalog the price was .99¢ a foot up to 499 feet.

Les W8WLQ

1450. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 20:34:04 UTC
From: "Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39FDDB3C.25AA@rpi.edu>
Source record: 177405

RanHefner wrote:
>
> GW for personal freedoms? You are joking, arn't you? On my signature
> below is a DIRECT quote from GW Bush. How's that for personal
> freedoms!?
>
> In article <20001027.034112.-4161501.1.reklaw.m@juno.com>,
> reklaw.m@juno.COM wrote:
> > for
> > personal freedoms, right to life and pro-gun laws, I have changed my
> > mind.
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

I think W was referring to self-control, as opposed to state control, in
that increased freedom requires increased responsibility and
accountability. For example, you can't legally yell "Fire" in a theater
without consequences if there is no fire. The exercise of Rights must
be tempered by Responsibility and good judgement.

Curt Breneman
RPI Chemistry
KC2EBP

1451. Re: HF attic antenna adivice, GOOD NEWS/BAD NEWS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 20:35:42 UTC
From: tegwilym@my-deja.com
Message-ID: <8tkm2t$5cu$1@nnrp1.deja.com>
Source record: 177401

> guy asking the question is in a townhouse. His neighbors are going to
> scream bloody murder when he keys up on anything more than 25 watts.
If he
> is happy running 25 watts or there about then he should do fine. The
guy
> should be prepared for the worst and that is what Louis was doing.

I am the guy that originally started this thread. Yes, I am in a
townhouse that is kind of a 'T' shaped place with 2 long units making
up the top of the 'T' and 3 smaller units making the bottom element of
the 'T'. I own one of the longer (3 bedroom) units and have maybe
about 50 to 60 feet of attic run (right over the neighbor's unit -
yikes!).
Another option I was thinking of was trying one of those B&K (B&W??)
whips antennas that are advertised to run on 2 through 40 meters that
clamp on an open window with the counterpoise wire you run around the
floor of the room. I was thinking I might even be able to clamp that
thing on my patio fence (about 6 feet tall) and just run outside to
change bands with the counterpoise clamp. That would at least get it
away from the tranciever and reduce some of the RF problems, and also
keep it away from the neighbors as best as possible too.

Of course I think the ideal antenna for my situation would be one of
those AEA Isoloops (or the MFJ clone). I see those on EBay every now
and then, but don't bid agressively enough to win! :-)

Tom KA7VIK - the condo dweller!

Sent via Deja.com http://www.deja.com/
Before you buy.

1452. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 20:43:02 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FDDD56.402F@wt.net>
Source record: 177399

rob34 wrote:
>
> I would like to pick up ametuer television with my communications concepts
> receiver.I am in the Kettering,Ohio area.The receiver is designed for 430
> mhz reception.Any info on what type antenna to use would be appretiated.Rob

I've done that here on ch#57. I used a radio shack UHF TV antenna that I
got half price for 12 bucks. It's about 25 el total. "about 10 reflector
elements in a corner reflector type setup and about 15 log type
elements. Worked ok. A good 70cm beam would be better. MK
--
http://web.wt.net/~nm5k

1453. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 20:53:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FDDFD7.5EDA@wt.net>
Source record: 177400

KG4FET wrote:

You sure don't need to spend 1000's on an all band mobile. I can set one up for 500 bucks. Including a radio.
Maybe less. My current ic-730 I bought about 10 years ago for 450$. All my antennas are pretty much free as I build them from junk. Being I am usually on 40/80 meter mobile, a ten meter rig would be useless for me. The skip zone on tem meters is so long, the only people you will talk to will be far away usually. And if the band is closed it will be useless."This will be all the time nearly in a non solar peak year".I use run more close in. If I break down and buy a new ic-706 like I've been thinking about recently, I'll have a about 900 $ in the new rig. Still not in the 1000's range, and thats for a brand new radio. MK

--
http://web.wt.net/~nm5k

1454. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 20:56:49 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FDE091.F94@wt.net>
Source record: 177402

Mark Fergerson wrote:
>
> Fractenna wrote:
> >
> > Congratulations you turkeys. You've taken someone whose done something positive
> > and through jeaolusy and hatred changed his life. You are to be pitied.
> >
> > Nathan Cohen has his position terminated on 1 Nov.
>
> Looks like the neo-Luddites won this round. It doesn't come out of a
> box ready to run, so kill it. So much for experimentation.
>
> I subscribed to this NG in hopes of seeing information on advances
> in antennas, because Hams are historically famous for thinking outside
> the box.
>
> Instead I find a bunch of people who give rednecks a bad name.
>
> Bye.
>
> Mark L. Fergerson

Boy, I can tell you haven't been around here much... MK
--
http://web.wt.net/~nm5k

1455. Re: A new satellite antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 21:20:17 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <svrpgl303aoqff@corp.supernews.com>
Source record: 177403

Why not dump mode "J" and move up to mode "L/S" instead? From my
understanding that is going to be the preferred mode for P3D anyway. The
mode "L/S" antennas are so small you could stick them on a cheap camera
tripod, and track the slowly moving satellite, at apogee, by hand. A small
helix antenna for each band would be shorter than your arm. I'm thinking
about doing this myself and see if I can work the bird out of my apartment,
that is IF it ends up in the planed orbit, AND the electronics work as
planed too. I'm waiting to see how things go before I start spending money,
and building stuff however.

--
Leland C. Scott
KC8LDO

"Dr. Robert Suding" <robert@qadas.com> wrote in message
news:39FB6F5E.F2F793B2@qadas.com...
> I have been modeling an antenna for the forthcoming phase 3D satellite
> that should be of use to many amateur satellite entusiasts.
>
> I am looking for a design that will have a narrow, high gain beam
> pattern in azimuth along with a arc pattern from 0 to 90 degrees in
> elevation. The front to back & side should be great to minimize
> terestrial QRM & QRN. The reason why I want this is so that I can track
> a satellite with a single standard rotator, such as mounting the
> satellite antennas above an existing HF triband beam.
>
> A single yagi has a rather narrow pattern both in azimuth and
> elevation. So I tried modeling a pair of yagis, fed in phase, set at
> various elevation angles from 0 to 90 degrees.
>
> I found a very nice 0 to 90 degree "lemon slice" pattern results when
> a pair of in phase 10 element VHF or UHF yagis are mounted with the
> lower yagi pointed upward at 20 degrees and the upper one is pointed
> upward at 70 degrees. The "software gain" on this antenna looked like
> around 10-13 db, about 25 degrees beamwidth in azimuth and 90 degrees
> in elevation. If true, this might be an ideal antenna for P3D.
>
> Larger yagis had more gain at some elevations, but tended to have deeper
> null points. Shorter yagis had less gain, but the nulls were minimal.
> 10 elements looks like the magic number to me. For more gain, 2 X 2
> arrays could be used if needed.
>
> My initial modeling was with a conventional K1FO-like horizontal yagi,
> but I also tried crossed yagis in an X, not a T configuration, so that
> I could use circular polarization with phase reversal as I do with my

> present AZ-EL mounted satellite antennas.
>
> The end result is a pair of 40 element antennas for the uplink & the
> downlink. The physical mounting could become interesting. The boom
> lengths for 2M are about 13 feet long and about 4 feet for 70 CM.
>
> How about some help from you antenna modelers out there? Let's make
> this a really ham antenna project instead of all the stupid sniping on
> this newsgroup.
>
> Robert W0LMD
> Conifer, Colorado
>

1456. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 21:53:13 UTC
From: David Wicks <david@g3yyd.freeserve.co.uk>
Message-ID: <8tkqrqjbn1@newsg4.svr.pol.co.uk>
Source record: 177406
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna

If you cause TVI on 40m and 80m excellent it means you are getting some RF out. I have always had problems with TVs and phones on 80m and 40m. The solution is the RSGB ferrite rings. I use one in each of the phone sockets here I wind a quad winding of about 14 turns on the ring and connect that between the incoming cable and the socket terminating point. I normally solder the windings to the incoming wires, you could use a connector if you wish.

On TVs I find most TVs and videos for that matter are cured with a RSGB ferrite ring in the antenna downlead close to the TV. I get small bore 75 Ohm coax (www.maplins.co.uk supply this by the metre) use a free Belling Lee plug and socket (also from Maplin) and use 14 turns. In stubborn cases I also do the same on the mains lead but house it is a small ABS box and use a 13 amp plug and socket along with strain relief grommets on the box.

73

David

1457. Re: Higher power in new vehicle?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 21:53:29 UTC
From: Scott <yetbbwa@grove.iup.edu>
Message-ID: <39FDEDD9.DAC40099@grove.iup.edu>
Source record: 177404
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

"Dr. Robert Suding" wrote:

> W9NTP has been running a KW on SSTV in his trucks, recently a Suburban, for
> a number of years, mostly on 20. using a Heathkit SB220. Contact him for
> details on
> problems & solutions found.

If I have troubles, I will take you up on this.

> ...or airbags might
> deploy!

I heard a story from a station in Denver - the guy told me when he ran 1KW (HF) in his Honda, the airbag deployed. Really, I am not sure if this is true or not...scary thought though!

Scott.

1458. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 22:19:06 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tks4h$b8k$1@nnrp1.deja.com>
Source record: 177407

In article <39FDDB3C.25AA@rpi.edu>,
brenec@rpi.edu wrote:
>
> I think W was referring to self-control, as opposed to state control,
in
> that increased freedom requires increased responsibility and
> accountability. For example, you can't legally yell "Fire" in a
theater
> without consequences if there is no fire. The exercise of Rights must
> be tempered by Responsibility and good judgement.
>
> Curt Breneman
> RPI Chemistry
> KC2EBP
>

Sorry Curt, but you are wrong. GW Bush got his panties in a wad when a parity web site http://www.gwbush.com started taking pop-shots at him. GW Bush wanted it FORCED to shut-down. When he was told that the little obsticle of the 1st ammendment stood in his way, he responded with the now famous quote shown below!

No, GW Bush wants to limit your 1st ammendment rights IF YOU ONLY MAKE FUN OF HIM! GW Bush is for the rights of GW only!
--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1459. Tuning a multiband dipole for meteor detection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 22:55:25 UTC
From: Luke Seubert <lseubert@radix.net>
Message-ID: <39FDFBC0.CEDFBCCF@radix.net>
Source record: 177408

Good day,

I am building a multiband dipole antenna designed to detect meteors which I plan to donate to my local astronomy club for educational use.

In brief, this dipole antenna will be designed to tune in the VHF TV video frequencies of Channels 3 and 6, 61.25 and 83.25 MHz respectively. In order to hear the "pings" and "warbles" of passing meteors, one then tunes the receiver to these frequencies using AM or SSB without AGC. (For a more detailed description, please refer to: http://mnbsun.stmarys.ca/~lonc/meteors.html)

My question involves the proper use of an MFJ-259B Antenna Analyzer. I roughly understand how to use one to properly trim and tune a regular dipole. When trimming several dipoles connected to the same feedline, does trimming one dipole effect the tuning of the other dipole in any way? Or can I simply tune each dipole in turn without regard for any effects on the other?

Many thanks for your assistance.

--

Luke Seubert

"If you have an apple and I have an apple and we exchange apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas."

- George Bernard Shaw

1460. Yaesu Rotor ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 23:50:05 UTC
From: Rotor <boy@yahoo.com>
Message-ID: <NOnL5.1829$ZL5.224929@juliett.dax.net>
Source record: 177409

Hi

what is the difference between Rotor : G-1000 C G-1000 SDX
& G-1000 DXC ???

I checkedt in Scandinavia for a biggest and newest G-1000 modell, and i
get G-1000 C modell on my the answer. but i thing this is a old modell,
with NO Memory.... Som tips, and help ?

How is the newst of this modell ??

Thanks.

Boy.

--
73 de Bj&#65533;rn

Radioamateur L C 2 N B T &#65533;

Trondheim Norway
AMSAT VHF & UHF DX
Stj&#65533;rdalsgruppa av NRRL - LA4M
Mail: lc2nbt@qsl.net
Icq: 64392835

1461. Re: Tuning a multiband dipole for meteor detection

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 23:52:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39FE09C0.FFC87013@eznec.com>
Source record: 177410

If the antennas are separated a fair amount (by say, 30 degrees or so), the interaction will be minimal. Whatever interaction there is will be primarily the longer dipole affecting the shorter one, so you should tune the longer one first. If the dipoles are parallel or nearly parallel, the interaction will be strong. Again, though, the majority of the interaction will be the longer one affecting the shorter one, so again you should adjust the longer one first. But with parallel or near parallel dipoles you might have to go back and readjust the longer one also, and make more than one iteration of the process. You'll also find that tuning will be quite critical, and will result in unexpected wire lengths. Parallel or near parallel dipoles are also quite narrowbanded, but that probably won't be an important consideration in your application.

Roy Lewallen, W7EL

Luke Seubert wrote:
>
> Good day,
>
> I am building a multiband dipole antenna designed to detect meteors
> which I plan to donate to my local astronomy club for educational use.
>
> In brief, this dipole antenna will be designed to tune in the VHF TV
> video frequencies of Channels 3 and 6, 61.25 and 83.25 MHz respectively.
> In order to hear the "pings" and "warbles" of passing meteors, one then
> tunes the receiver to these frequencies using AM or SSB without AGC.
> (For a more detailed description, please refer to:
> http://mnbsun.stmarys.ca/~lonc/meteors.html)
>
> My question involves the proper use of an MFJ-259B Antenna Analyzer. I
> roughly understand how to use one to properly trim and tune a regular
> dipole. When trimming several dipoles connected to the same feedline,
> does trimming one dipole effect the tuning of the other dipole in any
> way? Or can I simply tune each dipole in turn without regard for any
> effects on the other?
>
> Many thanks for your assistance.
>
> --
>
> Luke Seubert
>
> "If you have an apple and I have an apple and we exchange apples then
> you and I will still each have one apple. But if you have an idea and I

> have an idea and we exchange these ideas, then each of us will have two
> ideas."
>
> - George Bernard Shaw

1462. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-30 23:59:57 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39FE1960.E785A8F0@dvol.com>
Source record: 177411

RanHefner wrote:

> In article <39FCDA95.A96C4A69@attglobal.net>,
> Wayne N3TNS wrote:
>
> > What the heck is a "neo-Luddites"
> > Wayne
> >
>
> Ludï¿½dite (ldt)
> n.
>
> 1 Any of a group of British workers who between 1811 and 1816 rioted
> and destroyed laborsaving textile machinery in the belief that such
> machinery would diminish employment.

>
. . . . and got their butts strung up en masse for their efforts. They
didn't just destroy the nuts and bolts, they burned mills down and
killed people. Their agenda also included a belief that
indudtrialization would destroy society.
>

>
> 2 One who opposes technical or technological change.
>
> Take your pick! :)
>
> --
>

w3rv

1463. Re: Scanner antenna connection problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 00:11:39 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Yg3+Of=aDLlW8obRohApjHuhJwUh@4ax.com>
Source record: 177412

"MEL" <melnadja@sisqtel.net> wrote:

>I have a problem with an external antenna connection for my new desk top
>VHF/Air/UHF Scanner and am looking for the most appropriate News Group to
>post a message with the problem. Can anyone tell me what NG I should try?
>This NG is the closest I could come up with.
>
>Here is the problem: I am running RG-8 coax cable antenna from the scanner
>to the antenna. Today I bought a PL-259 UHF - Solder Type Connector at
>Radio Shack to replace and existing connector. I put the new connector on
>the cable per the instructions that came with it but found that when I first
>put the connector center prod) in the center hole of antenna receptacle on
>the scanner, the scanner works OK. But as soon as I attempt to secure the
>scanner and the cable by threading the connector to the scanner the
>transmissions stop. They stop as soon as I touch the two metal parts
>together. If I pull the threaded coupling back and just leave the center
>prod sticking in the scanner, the transmissions start again.
>
>If you can help I would appreciate it. If there a more appropriate NG to
>post this please advise. Thanks
>

Snip off the end of the cable with the plug.

Heat up your soldering iron and removed the old cabling from the plug.

Re-install, re-solder the plug to the remaining cable, and make sure
there is no short between the center connector and the outer braid.
(If you get things too hot, the outer braid can pass right through the
plastic filler and contact the center conductor.)

Bob
k5qwg

1464. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 00:21:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tl354qvv1@plutonium.btinternet.com>
Source record: 177413

Cecil, to what circuit impedance is this 2000+j2000 ohms
impedance referred ?

Is it the impedance looking into the 2-wire line ?

Or is it the impedance looking into the two wires strapped
together and treated as one line ?

--
++++++++++++++++++++++++++++++++
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp
++++++++++++++++++++++++++++++++
CAM <cam2338@bigfoot.com> wrote in message
news:39FD7AA8.8868ED3C@bigfoot.com...
> whites@ccp.com wrote:
> > Why not use a heathkit balun coil set (model B1)
> > If you can find one.
>
> The Heathkit balun coil shares a problem with a ferrite
balun -
> not enough inductance to handle all the impedances
encountered
> in a non-resonant, ladder-line fed doublet. I know of no
multi-
> band balun that will handle 2000+j2000 on 80m and 10m.
> --
> http://www.mindspring.com/~w6rca

1465. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 00:37:38 UTC
From: k1bqt@aol.com
Message-ID: <20001030193738.28319.00001737@ng-mg1.aol.com>
Source record: 177414

Hi Barry--

My bet is Chip is still happily employed by BU-Metro and will remain so (easy enough to confirm). He'd have to commit social mayhem to be "terminated" or de-funded mid-semester. It just doesn't happen in academia. Makes no sense.

IMHO, it's more plausible he was "conveniently terminated" from FAS by his own family or board to protect assets from legal exposure caused by escapades on here. First, they return the copywrites, then pull his "official status" to protect the family jewels. This feigned act of "rejection" works for Chip. Besides protecting family assets, it also lends pathos to his bogus complaints against Roy and others. Kinda like dressing up the plaintiff in a cast and a crutch before tiral (an old lawyers trick). Phil's done nothing to disconfirm this scenario by his huffing and posturing, has he?

Of course, this is only an idle opinion and I freely admit I could be very wrong. But, vicious threats accompanied by no specifics always invite speculation over darker motives.

Rick K1BQT

1466. FA: Guy Wire Terminal Forks for 5/16 inch cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:10:21 UTC
From: Douglas Snowden <snowden@peoplepc.com>
Message-ID: <39fe1a20@flexnet239.uunt.net>
Source record: 177415

I don't know how many of you may use these on guy installations:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=479972457

Doug N4IJ

1467. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:18:24 UTC
From: 2w8ji@contesting.com
Message-ID: <39fe1ccf.53062048@news.akorn.net>
Source record: 177417

On 31 Oct 2000 00:37:38 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>IMHO, it's more plausible he was "conveniently terminated" from FAS by his own
>family or board to protect assets from legal exposure caused by escapades on
>here. First, they return the copywrites, then pull his "official status" to
>protect the family jewels. This feigned act of "rejection" works for Chip.
>Besides protecting family assets, it also lends pathos to his bogus complaints
>against Roy and others. Kinda like dressing up the plaintiff in a cast and a
>crutch before tiral (an old lawyers trick). Phil's done nothing to disconfirm
>this scenario by his huffing and posturing, has he?
>
>Of course, this is only an idle opinion and I freely admit I could be very
>wrong. But, vicious threats accompanied by no specifics always invite
>speculation over darker motives.
>
>Rick K1BQT

I agree with Rick.

After seeing all the false claims and sympathy gathering ploys over
the past few years, I certainly wouldn't trust any statement made by
anyone at that source.

This is probably another attention gathering scheme, to keep the lime
light shining. You guys are probably just getting trolled.

It amazes me that 80% of the traffic here surrounds Cohen and his
nonsense.

73 Tom

1468. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:18:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tl6fs$e0$1@uranium.btinternet.com>
Source record: 177416

Who on this Earth cares about who the next US president
might be ?

The result won't have slightest effect on who on this Earth
suffers from economic sanctions and who is on the receiving
end of Cruise Missiles and anti-personel mines. The
Multinationals, the Pentagon, the CIA and the USA branch of
the Maffia between them control those aspects of the World's
economy. Bush or no Bush !

Which observant, un-brainwashed World citizens would wish to
disagree ?

Reg

Rich Griffiths <richg@one.net> wrote in message
news:39fc3440$1_2@news2.one.net...
> George Bush conspired with Gov. Pataki to keep John
McCain, Steve Forbes,
> and his other competitors off the ballot in the Republican
primary in New
> York State. They nearly succeeded until a federal judge
embarrassed them
> into giving up this crassly antidemocratic effort.
>
> If Bush had his way, you would have no vote. His would be
the only name on
> the ballot.
>
> And you think he's for personal freedoms?
>
> ... Rich
>
>
> <reklaw.m@juno.COM> wrote in message
> news:20001027.034112.-4161501.1.reklaw.m@juno.com...
> > Maxine,
> > Thank you for the information.
> > I don't like either Algor or Bush and was going to
"throw my vote away"
> > and vote for
> > Pat Buchanon. Now that you have shown how Bush is not a
Lawyer and he is
> > for
> > personal freedoms, right to life and pro-gun laws, I

have changed my
> > mind.
> > I will not throw my vote away. I hope you show others
the error of their
> > ways.
> >
> > GO GEORGE BUSH !!
> >
> > Thanks again,
> > Mike
>
>

1469. Re: Phil needs his own email account!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:22:35 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39FE2CB2.DD79D8F4@dvol.com>
Source record: 177319

OPSEC@opsyhopsy.com wrote:

>
> Does Phil withdraw his threats?

>
Which of those did he ever actually pursue in court?
>
w3rv

1470. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:24:41 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <tbpL5.4875$K%5.85227@news1.rdc1.on.wave.home.com>
Source record: 177418

Rick Littlefield <k1bqt@aol.com> wrote in message
news:20001030193738.28319.00001737@ng-mg1.aol.com...
> Hi Barry--
>
> My bet is Chip is still happily employed by BU-Metro and will remain so
(easy
> enough to confirm). He'd have to commit social mayhem to be "terminated"
or
> de-funded mid-semester. It just doesn't happen in academia. Makes no
sense.
>
> IMHO, it's more plausible he was "conveniently terminated" from FAS by his
own
> family or board to protect assets from legal exposure caused by escapades
on
> here. First, they return the copywrites, then pull his "official status"
to
> protect the family jewels. This feigned act of "rejection" works for
Chip.
> Besides protecting family assets, it also lends pathos to his bogus
complaints
> against Roy and others. Kinda like dressing up the plaintiff in a cast
and a
> crutch before tiral (an old lawyers trick). Phil's done nothing to
disconfirm
> this scenario by his huffing and posturing, has he?
>
> Of course, this is only an idle opinion and I freely admit I could be very
> wrong. But, vicious threats accompanied by no specifics always invite
> speculation over darker motives.
>

You might be right.

Barry D.

1471. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 01:26:59 UTC
From: richardharrison@webtv.net
Message-ID: <24888-39FE1FE3-26@storefull-116.iap.bryant.webtv.net>
Source record: 177320

Ed Hare, W1RFI wrote:
"Incorrect, sir, he also misspelled "significant."

I`ve twice tried to communicate privately that it is poor form on the internet to criticize spelling.
Twice my attempts bounced. Ed`s address appears bogus. Just like the ARRL he turns out to be all mouth and no ears.

Best regards, Richard Harrison, KB5WZI

1472. telescoping mechanism question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:22:56 UTC
From: JD <jds_14@hotmail.com>
Message-ID: <svsb0bd5oce3c9@corp.supernews.com>
Source record: 177321

Hi all. I want to put up a 3 piece telescoping mast. Does anybody have a drawing of the cable setup to raise and lower the thing?? Or a webpage that may have one??. Been drawing pictures and can't seem to come up with a workable idea. Duh.
tnx es 73 Judd

1473. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:29:55 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <3ralt8.7q2.ln@mail.specsol.com>
Source record: 177322

Rick Littlefield <k1bqt@aol.com> wrote:
> Hi Barry--

> My bet is Chip is still happily employed by BU-Metro and will remain so (easy
> enough to confirm). He'd have to commit social mayhem to be "terminated" or
> de-funded mid-semester. It just doesn't happen in academia. Makes no sense.

> IMHO, it's more plausible he was "conveniently terminated" from FAS by his own
> family or board to protect assets from legal exposure caused by escapades on
> here. First, they return the copywrites, then pull his "official status" to
> protect the family jewels. This feigned act of "rejection" works for Chip.
> Besides protecting family assets, it also lends pathos to his bogus complaints
> against Roy and others. Kinda like dressing up the plaintiff in a cast and a
> crutch before tiral (an old lawyers trick). Phil's done nothing to disconfirm
> this scenario by his huffing and posturing, has he?

> Of course, this is only an idle opinion and I freely admit I could be very
> wrong. But, vicious threats accompanied by no specifics always invite
> speculation over darker motives.

> Rick K1BQT

Easy enough to find out; if Chip is no longer 2 out of 3 officers of the
company, a change will have to be filed with the state of Florida and that
info is publicly available on the web....

Jim Pennino

1474. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:38:53 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FE30BC.E096B2CF@hiwaay.net>
Source record: 177323

Richard- Have you found out what you misspelled in Ed's address to have
it bounce? It has worked for me.

Bill

Richard Harrison wrote:
>
> Ed Hare, W1RFI wrote:
> "Incorrect, sir, he also misspelled "significant."
>
> I`ve twice tried to communicate privately that it is poor form on the
> internet to criticize spelling.
> Twice my attempts bounced. Ed`s address appears bogus. Just like the
> ARRL he turns out to be all mouth and no ears.
>
> Best regards, Richard Harrison, KB5WZI

1475. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:39:19 UTC
From: k9sqg@aol.com
Message-ID: <20001030213919.01970.00000306@ng-fo1.aol.com>
Source record: 177324

I had three MFJ swr analyzers. Sold all three and bought an Autek research model. Smaller, does everything in one box, etc.

73s,

Evan

1476. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:40:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tlbe4beb0@208.206.142.90>
Source record: 177325

RanHefner wrote:
>
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com

But AlGORE is still an (empty) woodenhead!

1477. Re: telescoping mechanism question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:54:39 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39FE346F.58A3D464@oio.net>
Source record: 177326

JD wrote:
>
> Hi all. I want to put up a 3 piece telescoping mast. Does anybody have a
> drawing of the cable setup to raise and lower the thing?? Or a webpage that
> may have one??. Been drawing pictures and can't seem to come up with a
> workable idea. Duh.
> tnx es 73 Judd

Judd,
There's no 'easy' way to do this, it requires quite a bit
of engineering, or modification to make it work. The winch
operated telescoping masts, and some of the telescoping towers
use the same system, a series of pullys and one continuous
cable. Your drawings are probably the same as those I've seen,
but if you'd like I could probably make a very simple diagram
for you.
'Doc

1478. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 02:55:12 UTC
From: raiar@slacc.com.nospam
Message-ID: <39fe3423.218591248@news.galilei.com>
Source record: 177327

Hi Jake

I used to be an apartment dweller!

Pick up a few rolls of self adhesive copper foil, aluminum if you can't afford the copper. Run it around the perimeter of your apartment on the wall just under the ceiling, you can paint over it to hide it if need be.

You will be surprised at the results!

TTUL
Gary

1479. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 03:02:30 UTC
From: dinod@deltanet.com
Message-ID: <aDqL5.140328$g6.65750483@news2.rdc2.tx.home.com>
Source record: 177328

Rich, you're a fool. And toanswer your question....YES! W is for
personal freedom.

Dino

>George Bush conspired with Gov. Pataki to keep John McCain, Steve Forbes,
>and his other competitors off the ballot in the Republican primary in New
>York State. They nearly succeeded until a federal judge embarrassed them
>into giving up this crassly antidemocratic effort.
>
>If Bush had his way, you would have no vote. His would be the only name on
>the ballot.
>
>And you think he's for personal freedoms?
>
>... Rich

1480. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 03:04:48 UTC
From: dinod@deltanet.com
Message-ID: <kFqL5.140359$g6.65755555@news2.rdc2.tx.home.com>
Source record: 177329

Good Job Curt!

>I think W was referring to self-control, as opposed to state control, in
>that increased freedom requires increased responsibility and
>accountability. For example, you can't legally yell "Fire" in a theater
>without consequences if there is no fire. The exercise of Rights must
>be tempered by Responsibility and good judgement.
>
>Curt Breneman
>RPI Chemistry
>KC2EBP

1481. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 03:06:05 UTC
From: dinod@deltanet.com
Message-ID: <xGqL5.140376$g6.65758256@news2.rdc2.tx.home.com>
Source record: 177330

Another fool!

>Sorry Curt, but you are wrong. GW Bush got his panties in a wad when a
>parity web site http://www.gwbush.com started taking pop-shots at him.
>GW Bush wanted it FORCED to shut-down. When he was told that the
>little obsticle of the 1st ammendment stood in his way, he responded
>with the now famous quote shown below!
>
>No, GW Bush wants to limit your 1st ammendment rights IF YOU ONLY MAKE
>FUN OF HIM! GW Bush is for the rights of GW only!
>--
>"There ought to be limits on freedom." G.W. Bush,Jr. 1999
>G.W. Bush...Not a crackhead anymore!
>http://www.gwbush.com
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

1482. Re: telescoping mechanism question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 03:30:59 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <39FE3CF3.40BC081D@nettally.com>
Source record: 177332

Picture the mast as follows:

Section one, largest diameter, is fixed to foundation and forms the lowest section
Section two, telescopes within section one, and forms middle section
Section three, telescopes within section two, and forms upper most section.

Two pulleys and two cables are required at a minimum.

Sections one and two each have a pulley affixed near their tops.

A winch fastened to side of section one lifts bottom of section two via a cable through the pulley atop of section one.

A second cable is attached to top of section one, passes through pulley on top of section two and is attached to bottom of section three.

The action of raising section two, is transferred through the second cable and lifts section three.

Sufficient clearance is required between the telescoping tubes to accomodate the cables and pulley sheaves.

Cable working strength, loads and stresses are another matter for which I offer no liability. Keep fingers and other limbs out of the works at all times.

JD wrote:

> Hi all. I want to put up a 3 piece telescoping mast. Does anybody have a
> drawing of the cable setup to raise and lower the thing?? Or a webpage that
> may have one??. Been drawing pictures and can't seem to come up with a
> workable idea. Duh.
> tnx es 73 Judd

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
"Any and all non-solicited commercial E-mail (SPAM) sent to

this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

1483. Re: Fractal Geometry ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 03:42:17 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <tcrL5.15380$xJ4.673664@bgtnsc06-news.ops.worldnet.att.net>
Source record: 177331

"Fractenna" <fractenna@aol.com> wrote in message
news:20001029065754.02373.00000366@ng-fy1.aol.com...
>
> 1) the Small Loop Approximation (see, for example Karus's ANTENNAS) ,
which
> ascribes the rad resistance to the enclosed area of the loop, is
INCORRECT; in
> fact, the area of the loop has nothing to do with the radiation
resistance. Mr.
> Best has discovered for himself that the SLA will not only predict the rad
> resistance incorrectly, but similar values of rad resistance are obtained
with
> radically different values of enclosed area;

The statement above ..

"Best has discovered for himself that the SLA will not
only predict the rad resistance incorrectly, but similar values of rad
resistance are obtained with radically different values of enclosed area"

.. does not apply to any aspect of my analysis as in all cases, the loops I
modeled had virtually identical physical aperture (enclosed area) and very
close, if not identical, total wire length. My analysis of the MI2 and
non-fractal loops did not consider variations in loop aperture size with a
comparison of radiation resistance.

Additionally, the Small Loop Approximation (SLA) in the context under which
it was written is not incorrect. It simply should not be taken out of
context. The SLA is used to describe the behavior of small circular loops
where the current distribution is assumed to be constant (uniform) over the
loop structure. In the SLA model, it is assumed that the circular loop
radius is less than approximately 0.05 wavelengths. Since the loop must
remain circular as its diameter decreases, the total wire length in the loop
is also decreasing as diameter decreases. As a result, the smaller the loop
becomes, the shorter the overall wire length and the radiation resistance
decreases to a point where eventually, the loop is small enough such that
the loss resistance is greater than the radiation resistance and the loop
has lower efficiency. In the SLA model discussion, it is clearly stated
that if the loop geometry changes to a point where the current distribution
is no longer uniform, a more complex analysis method is needed (like
numerical modeling) to describe the loop properties. From Balanis (1982):
"The most attractive polygonal loop antennas are the square, rectangular,
triangular and rhombic. .. because of their more complex structure,
theoretical analyses seems to be unsuccessful [RWP King - 1956]." Kraus and
others recognized long ago that the SLA model would not be a valid tool to

accurately "model" complex loop structures, which would include fractal loops.

Another way to look at the SLA is the following: keep the loop aperture and total wire length constant and continually reduce the operating frequency and examine the radiation resistance. A circular loop and a fractal loop will exhibit similar behavior. As the frequency decreases (aperture area and wire length decrease wrt wavelength) the radiation resistance will decrease and eventually, the wavelength will be sufficiently large, such that the loop is small, and the loop will have lower efficiency.

Clearly, with a complex loop geometry, the SLA formulas cannot be used to directly
determine the actual radiation resistance but the concepts of the SLA remain valid. To state that the radiation resistance has nothing to do with the area of a loop (fractal or otherwise) is simply incorrect. A fractal loop 1/2 the size of another fractal loop of the same geometry would not have the
same radiation resistance at the same frequency. The radiation resistance of any loop is a function of numerous factors, which include the area of the loop, the total length of wire in the loop, the feedpoint location and to a lesser extent, the loop geometry.

>
> 2) A fractal loop has a much higher radiation resistance, in this case
> attribuatble to the two current maxima.
>

A square, non-fractal resonant loop has two current maxima as well, so this is
not a unique characteristic of fractal antennas.

Steve

1484. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 04:01:18 UTC
From: webspuds <webspuds@hotmail.com>
Message-ID: <8tlg6brss1@nnrp1.deja.com>
Source record: 177333

Hey Trader,

What antenna(s) have you used this on so far, and what is the SWR
range ?

I'm also looking for another MFJ HF tuner for the ole Kenwood 430,
anyone have any suggestions on model. Roller inductor would be
nice, but not necessary.

Thanks!

In article <39fdcd55.1113940@209.189.89.230>,
trader@NOSPAMcybermight.com (Trader) wrote:
> I love my MFJ 259B...I'm always playing around with an antenna..mine,
> or a friends...It does a good job for it's price range.
>
> On Wed, 25 Oct 2000 22:27:59 -0400, Kirby <kirby.no.spam@kpsnet.com>
> wrote:
>
> >I'm considering purchasing an antenna analyzer - the MFJ or
something in
> >that price range. Yeah, I know what MFJ stands for .... ;) . Have
> >there been any comparison reviews done?
> >
> >Kirby
> >
>
> <<Get a WildThing2 Clone at http://www.cybermight.com/trader For a
limited time only $75.00
> Alright!! The first one to complain leaves with a bloodstain!!!
>
> Trader>>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>

--
We B. Spuds
AKA "webspuds"
webspuds@hotmail.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1485. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 04:23:12 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <bsdsvsga78qoh5rb5li69r9451sgnlg9o3@4ax.com>
Source record: 177334

On Mon, 30 Oct 2000 10:43:45 -0600, Bill Aycock <baycock@hiwaay.net>
wrote:

>Buzz- read the original post- he does not have a balanced output on his
>tuner.
>
>Bill
Hi Bill,
I understand that now, and I see what he was trying to do.

1486. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 04:40:44 UTC
From: richardharrison@webtv.net
Message-ID: <2764-39FE4D4C-105@storefull-111.iap.bryant.webtv.net>
Source record: 177337

Bill Aycock wrote:
"Have you found out what you misspelled in Ed`s address?"

No, I typed nothing in his address. I just clicked om "reply" to the address Ed provided. I looked for the usual "No Spam Garbage", etc.

Best regards, Richard Harrison, KB5WZI

1487. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 04:56:26 UTC
From: n7ws@azstarnet.com
Message-ID: <39fe4f63.51395326@news.azstarnet.com>
Source record: 177336

On Sun, 29 Oct 2000 22:51:17 GMT, cathexis@erols.com (Set'em up Joe) wrote:

>Greetings,
>
> Some of you have recently helped me by suggesting
>a good compromise would be 264 ft. dipole feed by 450ohm
>ladderline. Having trouble finding ladderline and no nearby
>Hamfests upcoming until Jan./Feb. How would things change
>if I used the Radio Shack 300ohm twin TV feedline? Believe
>they advertise it as "low-loss, foam core". Thoughts? Don't
>care about cost issues as I already have 100ft. of this stuff
>laying around un-used. Also already have an un-used spool
>of 14AWG insulated stranded and 6 egg-type insulators. Am
>I about good to go ?
>
> TIA,
>
> Andrew
> KG4JBM
>

I must have missed the earlier suggestions so if I'm missing the point forgive me. But, have you considered using coax and not having all of the fuss required to properly use balanced line?

I gather that your line will be less than 100' long and unless you have your dipole up 100' or so, the feedpoint Z will be reasonable for direct coax feed.

73,

Wes Stewart

1488. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 05:20:11 UTC
From: Barry Ornitz <ornitz@dpnet.net>
Message-ID: <VEsL5.2281$qP1.1405435@news-west.usenetserver.com>
Source record: 177338

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:8tidtl$58s$4@bashir.peak.org...

> KG4FET <kg4fet@aol.combadspam> wrote:
>
> : The Wilson line of antennas are very good for what you
> : want. In fact even the LIL Will is a pretty good 10
> : meter antenna. The Wilson 1000 Has about a 3 meg
> : band width with < 2:1 SWR. I use one Mag mount with an
> : FT 100 and It does a very good job.
>
> Wouldn't that much bandwidth mean a low Q - which
> generally (for a mobile antenna) translates to high ground
> losses (e.g. - poor radiation efficiency)?

Exactly!

To demonstrate this to a CB friend, I built him a base-
loaded three foot whip. The radiator was 3/16 brass rod,
silver plated, and the large base coil was 14 gauge silver-plated.
An L-network was combined with the loading coil for
impedance matching by adding an air variable from the coil
input to ground.

Bandwidth, as predicted for this length antenna, was a
slightly over 20 kHz for a 2:1 or less VSWR. Tuning was a
real pain as standing within a few feet of the antenna
detuned it drastically, but after many hours of iterative
tuning (trial and error) we finally got it adjusted for
27.185 - CB Channel 19.

To test the antenna, we did A-B-C testing against a bumper-
mount quarter-wave whip and a commercial 45" center-loaded
CB antenna. About 30 tests were run with other stations
comparing the signal strengths of the three antennas.

The results were pretty much as expected. The quarter-wave
bumper mount antenna gave the highest signal strengths. The
homebrew antenna, on Channel 19, performed almost as well
with most contacts reporting negligible differences between
it and the full sized whip. The commercial antenna always
produced one to two S-units lower signal strengths. On one
channel on either side of 19, the homebrew antenna did a
little worse than on 19, but it still outperformed the
commercial antenna by far. However, the VSWR two channels
away made it unusuable on these channels. On the road

testing confirmed its good performance - until a truck passed in an adjacent lane and detuned the antenna again!

There is a reason commercial CB antennas use stainless steel whips - the added RF loss. Some CB antennas even have stainless loading coils or extremely fine wire to increase the RF losses further still. The reason - to trade efficciency for bandwidth.

And before anyone suggests the matching network limited the homebrew antenna's bandwidth, it should be noted that an L-network provides impedance matching while providing the least bandwidth reduction.

73, Barry L. Ornitz WA4VZQ

1489. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 05:29:45 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FE58C9.BB0877F4@bigfoot.com>
Source record: 177339

Reg Edwards wrote:
> Who on this Earth cares about who the next US president
> might be ?

Most of the 4,000,000 members of the NRA.
--
http://www.mindspring.com/~w6rca

1490. Re: Antenna Choice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 05:36:31 UTC
From: Roland S Geter Sr <roland@geter.org>
Message-ID: <39FE5A5F.ABAA8635@geter.org>
Source record: 177335
Cross-posted to: rec.radio.amateur.antenna,alt.rv,rec.outdoor.rv-travel

Hi George,
I guess I should have reiterated more when I posted but I belong to a two-ham two-wide-body driver family namely xyl (of 41yrs) -KD6QCH. We also have a very serious dual computer/ham radio console that only one of us uses while underway. The driver can't even see the GPS/Street Atlas 8.0 (SA) laptop we use for navigation; only the co-pilot can. The driver can however hear the SA turning instructions that are broadcasted on the stereo system. I'll attach a jpg in a couple days after I reinstall some packet/tnc wiring.
I do have a couple Hustlers for stationary use that hinge down while underway. Also been thinking about the radial less R-7000/R-8000 mounted on the ground for stationary operation even in roadside parking areas.
The problem with the Hustlers I don't have the good luck you are having with matching. Very high SWR even barefoot then impossible with the linear causing arching, etc. I even have straps from Hustler base to bumper supports with no improvement. I've tried everything except trying to temporarily ground the motorhome with a earth rod. (hihi)
I guess I don't understand the capacitance to ground concept you speak of. I seem to be getting the best luck with the MFJ ground counterpoise unit but SWR isn't good.
I started this post because I happened to remember some of the older (preset) larger aircraft that simply had dipoles on the under bellies that I could maybe duplicate (at 40 feet each) and tune with SGC or ALINCO type units (?). What about that? And what would I gain if anything besides low wind resistance?
73's
Roland S Geter Sr - WB6LNA ex W2RPQ
Scottsdale AZ 85253-4421

"George, W5YR" wrote:

> Roland, I can quickly make a recommendation for the in-motion antenna
> for 75 - 10:
>
> DON'T !
>
> I have been driving a large motorhome like yours for over ten years now,
> and I strongly urge you to give up any thoughts of working HF mobile
> while in motion. You need every ounce of your attention on driving.
> Operating CB or 2-meters is one thing, where all you have to do is
> concentrate on the PTT button on the mic, but HF has too many little
> knobs and switches to distract you. Pleased reconsider any notions of
> this operation. I think that any other motorhoming ham would give you
> the same advice.
>

> For parked operation I have mounted a standard Hustler mount on the rear
> luggage rail. I shinny up the ladder and attach the Hustler mast with
> antenna attached with a bayonet mount. Takes only about a minute once I
> am parked.
>
> I have worked the world with that arrangement. The large motorhome top
> (mine is all metal) makes a great groundplane for the higher bands and
> the large chassis gives lots of capacitance to ground for the lower
> bands.
>
> Let us know what you do.
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> Roland S Geter Sr wrote:
> >
> > Hi Cecil,
> >
> > What kind of antenna would you recommend for use both stationary and in
> > motion on a 40 foot motorhome for 75 - 10 meters?

1491. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 05:40:39 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FE5B57.6F979117@bigfoot.com>
Source record: 177340

Reg Edwards wrote:
>
> Cecil, to what circuit impedance is this 2000+j2000 ohms
> impedance referred ?
>
> Is it the impedance looking into the 2-wire line ?

Yep, it is the impedance seen when feeding a 50 ohm dipole with
about 0.73 WL of 450 ohm ladder-line, a relatively common occurence.
This would happen when a 20m dipole is fed with 46ft of ladder-line.

Assuming typical ladder-line may have an SWR ranging up to 20:1, the
poor balun may be required to handle 9000 ohms, an almost impossible
task. That's why I make sure my balun/choke see a current maximum
point.
--
http://www.mindspring.com/~w6rca

1492. Six Challenge Winning Brooms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 06:38:39 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <sF=+OZgA9xTxQgS8+d6jZ146vgGl@4ax.com>
Source record: 177341

Hi All,

Don't hold your breaths waiting for the ink to dry on that
check, these are the winning designs of the
rec.radio.amateur.antenna Fractal Antenna Challenge
which can be found at
http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm

In a nutshell the results were:
VE9SRB Random2 First Place [Challenge FOM = 4.155]
VE9SRB Random3 Second Place [Challenge FOM = 4.122]
VE9SRB Random4 Third Place [Challenge FOM = 3.968]
VE9SRB Random5 Fourth Place [Challenge FOM = 3.682]
VE9SRB MI2 Fifth Place [Challenge FOM = 2.009]
VE9SRB Random1 Sixth Place [Challenge FOM = 1.005]
n1ir MI2 [Challenge FOM = 1.000]

All designs had to be adjusted in some manner to resonate at
the specified frequency of 14.15 MHz. All antennas were
judged to be "about" 1/8 wavelength dimension on each side
of the antenna. As NONE were at, or under, that spec. I
normalized FOM's to the n1ir MI2 design (all 6 other designs
took a scoring hit).

Other issues drove me to make subtle changes (like one wire
table with 550 segments - come on now!). Such twiddling may
shift the line-up at the bottom of the pack - but the
leaders are clear. In any event, having introduced some
error, no matter how slight, I make all designs available at
http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm
upon approval.

73's
Richard Clark, KB7QHC

1493. Re: Dual band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 07:19:55 UTC
From: VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com>
Message-ID: <39fe7424@grissom>
Source record: 177342

> I believe that one of the recent issues of QST had plans for building
> a dual-band J-pole antenna. (I think it was October).

Thanks, I will look out for it, We are a month or so behind here (what with international shipping and all) so it should hit the news-stand shelf at the end of November. September issue only got here this week.:-)

Don't forget to remove the SPAM.JAM

73
Adam VK4LAJ
E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
WWW: - http://www.loaded-dog.com
Brisbane Australia
CQ Zone 29/ 30
Point your beam at: -27.39S Lat. - 153.03E long
Maiden Head: - QG62mo
Height ASL: - 52m

My wife says I never listen to her...
at least that's what I thin she said?

1494. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 07:55:51 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <HOhO2JAHsn$5EwVI@ifwtech.demon.co.uk>
Source record: 177343

Brian Kelly wrote:

>> Ludï¿½dite (ldt)
>> n.
>>
>> 1 Any of a group of British workers who between 1811 and 1816 rioted
>> and destroyed laborsaving textile machinery in the belief that such
>> machinery would diminish employment.
>
>>
>. . . . and got their butts strung up en masse for their efforts.

True (though not quite literally ;-)

>They
>didn't just destroy the nuts and bolts, they burned mills down

That's also true.

>and
>killed people.

In the course of the riots, people were killed, but mostly soldiers - the only ones who had firearms. In case anyone gets a mistaken impression, the Luddite riots were nothing like the modern terrorist killing of other "civilians".

>Their agenda also included a belief that
>indudtrialization would destroy society.

That's a very 20th/21st-century educated way of putting it. The people involved at the time had much more immediate motivations like the disappearance of their own jobs... and events proved them right.

Also, the picture was very complex. The riots actually occurred in two waves, and in a number of places that were essentially isolated. There was not a single "Luddite" movement, and their leader "General Ned Ludd" did not even exist.

I'm not trying to pick an argument with Brian, but only to point out that the modern meaning of "Luddite" as "anti-technology" has very little to do with what actually happened in northern England in 1811-1816.

In the present discussion, it would be better not to use the word at all.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1495. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 10:50:15 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FEA3E7.D98C4C04@hiwaay.net>
Source record: 177344

Ian- Thanks for filling in those gaps in my general knowledge. THere
were several events of moment going on at about the same time, that got
more attention in the books.

re your last statement- I agree, and the use by Mark was (in my opinion)
a remarkable use of the concept and indicated either an ill-informed
individual, or ane with another agenda. Very curious.

Thanks- Bill- W4BSG
(It's hard to type with the cat named 'Merlin' between me and the
screen.)

"Ian White, G3SEK" wrote:
>
> Brian Kelly wrote:
>
> >> Ludï¿½dite (ldt)
> >> n.
> >>
> >> 1 Any of a group of British workers who between 1811 and 1816 rioted
> >> and destroyed laborsaving textile machinery in the belief that such
> >> machinery would diminish employment.
> >
> >>
> >. . . and got their butts strung up en masse for their efforts.
>
> True (though not quite literally ;-)
>
> >They
> >didn't just destroy the nuts and bolts, they burned mills down
>
> That's also true.
>
> >and
> >killed people.
>
> In the course of the riots, people were killed, but mostly soldiers -
> the only ones who had firearms. In case anyone gets a mistaken
> impression, the Luddite riots were nothing like the modern terrorist
> killing of other "civilians".
>
> >Their agenda also included a belief that
> >indudtrialization would destroy society.
>
> That's a very 20th/21st-century educated way of putting it. The people

> involved at the time had much more immediate motivations like the
> disappearance of their own jobs... and events proved them right.
>
> Also, the picture was very complex. The riots actually occurred in two
> waves, and in a number of places that were essentially isolated. There
> was not a single "Luddite" movement, and their leader "General Ned Ludd"
> did not even exist.
>
> I'm not trying to pick an argument with Brian, but only to point out
> that the modern meaning of "Luddite" as "anti-technology" has very
> little to do with what actually happened in northern England in
> 1811-1816.
>
> In the present discussion, it would be better not to use the word at
> all.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

1496. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 10:53:01 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FEA48D.E74C61B5@hiwaay.net>
Source record: 177345

Puzzling- I have done exactly that, and got through fine.
Bill

Richard Harrison wrote:
>
> Bill Aycock wrote:
> "Have you found out what you misspelled in Ed`s address?"
>
> No, I typed nothing in his address. I just clicked om "reply" to the
> address Ed provided. I looked for the usual "No Spam Garbage", etc.
>
> Best regards, Richard Harrison, KB5WZI

1497. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 11:19:08 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <6NxL5.509$pi7.827@newsfeed.slurp.net>
Source record: 177346

A 50-ft roll of munimula flashing is about 17 bux here in Zinzinnati.
Makes good loops and other things ...

K3BHJ

1498. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 12:12:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tmdub$2pb$1@plutonium.btinternet.com>
Source record: 177347

Cecil, I don't see what you have to worry about.

With a choke balun there's just a pair of short wires between one end and the other. It has the effect only of increasing the length of the main transmission line by the length of the line wound on the balun. Otherwise the balun has no effect on normal line operation.

The effectiveness of the choke, considered as a single conductor wound round a ferrite core, depends only on the input impedance of the transmission line also considered as single conductor (2 wires in parallel). Which is an entirely different impedance. If it has a very high impedance so that the choke has no effect then you don't need the choke anyway.

Reg
==========
CAM wrote -
> Reg Edwards wrote:
> >
> > Cecil, to what circuit impedance is this 2000+j2000 ohms
> > impedance referred ?
> >
> > Is it the impedance looking into the 2-wire line ?
>
> Yep, it is the impedance seen when feeding a 50 ohm dipole
with
> about 0.73 WL of 450 ohm ladder-line, a relatively common
occurence.
> This would happen when a 20m dipole is fed with 46ft of
ladder-line.
>
> Assuming typical ladder-line may have an SWR ranging up to
20:1, the
> poor balun may be required to handle 9000 ohms, an almost
impossible
> task. That's why I make sure my balun/choke see a current
maximum
> point.
> --
> http://www.mindspring.com/~w6rca

1499. PHOTO AND SWR PLOT OF MI2 FRACTAL LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 12:37:48 UTC
From: fractenna@aol.com
Message-ID: <20001031073748.02890.00000128@ng-cd1.aol.com>
Source record: 177348

I again repeat my offer to send gif files of a N3's MI2 installation and his SWR plot.
This is not a model but an actual installation.

The best SWR he gets is about 1.2:1 and I believe most, of not all, of the 10M band has less than a 2:1 SWR.

This is one of many MI2 designs which have excellent 50 ohm match.

Please query at chipn1ir@aol.com soon, because I send these out at one time and already have many requests.

73
Chip N1IR

1500. Re: telescoping mechanism question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 13:05:36 UTC
From: JD <jds_14@hotmail.com>
Message-ID: <svtglbfhc04m0d@corp.supernews.com>
Source record: 177349

'Doc wrote in message <39FE346F.58A3D464@oio.net>...
>
>
>JD wrote:
>> Thanks for the reply . I would very much appreciate a diagram Doc. I
cant seem to figure out how to get the top section up. I had a diagram
somewhere , but cant seem to find it anywhere. Thanks. 73 Judd
>
>Judd,
> There's no 'easy' way to do this, it requires quite a bit
>of engineering, or modification to make it work. The winch
>operated telescoping masts, and some of the telescoping towers
>use the same system, a series of pullys and one continuous
>cable. Your drawings are probably the same as those I've seen,
>but if you'd like I could probably make a very simple diagram
>for you.
> 'Doc

1501. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 13:28:36 UTC
From: fractenna@aol.com
Message-ID: <20001031082836.02920.00000152@ng-cd1.aol.com>
Source record: 177350

>
>
>
>Fractenna wrote:
>> I don't understand. The journals I am thinkling about are peer-reviewed.
>> I don't know what else I can add to clarify this.
>
>The names of the journals?

I will be happy to tell you the name after acceptance of the MS. Frankly, in 25 years of scientific publishing, no layman has asked me such a question. Just out of curiousity, why is it important for you to know this?

You can tell me offline at chipn1ir@aol.com if you like.

Cordially,

NC

1502. Re: Broadcast TV receiver sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 15:07:10 UTC
From: richardharrison@webtv.net
Message-ID: <1380-39FEE01E-10@storefull-117.iap.bryant.webtv.net>
Source record: 177351

Bob wrote:
"---Channel 2 transmits from more than 3,000 feet up on Mount Seymour, near Vancouver,"

That mountain is appropriately named. Its height is significant. The distance to the radio horizon in miles is approximately the square root of twice the antenna elevation in feet. From a height of 3000 feet the radio horizon is about 77.5 miles. If the total distance to the receiver is 140 miles, you need enough receiving antenna height to see the horizon 62.5 miles away as a minimum. That height calculates as 1953 feet. That`s lots of sections of TV mast.

We had figured 2450 feet on each end of the path with equal heights. Having 3000 feet on the transmitter end reduces the required height to 1953 feet for the receiving antenna.

Best regards, Richard Harrison, KB5WZI

1503. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 15:45:26 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <tQBL5.99$WN.718992@news.ntplx.net>
Source record: 177352

Richard Harrison <richardharrison@webtv.net> wrote:

> Ed Hare, W1RFI wrote:

> Twice my attempts bounced. Ed`s address appears bogus. Just like the
> ARRL he turns out to be all mouth and no ears.

Do you really know me well enough to insult me? Do you really believe that insults are in better taste than criticizing a spelling error? An interesting perspective on life, I would say...

73,
Ed Hare, W1RFI

1504. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:01:06 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <a3CL5.100$WN.720194@news.ntplx.net>
Source record: 177353

Bill Aycock <baycock@hiwaay.net> wrote in message
news:39FEA48D.E74C61B5@hiwaay.net...

> > Bill Aycock wrote:

> > "Have you found out what you misspelled in Ed`s address?"

> > No, I typed nothing in his address. I just clicked om "reply" to the
> > address Ed provided. I looked for the usual "No Spam Garbage", etc.

> Puzzling- I have done exactly that, and got through fine.

That is puzzling, indeed. My newsreader is configured to supply
w1rfi@arrl.net as my reply address. I just sent email to w1rfi@arrl.net and
got a failed mail message. For some reason that is not apparent when I look
on the ARRL members-only page, the system thinks it should send the email to
3Dw1rfi@arrl.org. That is NOT a valid address, so I would expect it would
fail. I have reported this to our IS folks.

I can be reached at:

w1rfi@arrl.org
w1rfi@aol.com

If Richard wants to send me his email that criticizing spelling errors is in
poor taste on newsgroups, he can use either of those two addresses.

73,
Ed Hare, W1RFI

1505. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:20:56 UTC
From: cathexis@erols.com
Message-ID: <39feeef8.125391038@news.erols.com>
Source record: 177354

On Tue, 31 Oct 2000 04:56:26 GMT, n7ws@azstarnet.com (Wes Stewart) wrote:

>On Sun, 29 Oct 2000 22:51:17 GMT, cathexis@erols.com (Set'em up Joe) wrote:
>
>>Greetings,
>>
>> Some of you have recently helped me by suggesting
>>a good compromise would be 264 ft. dipole feed by 450ohm
>>ladderline. Having trouble finding ladderline and no nearby
>>Hamfests upcoming until Jan./Feb. How would things change
>>if I used the Radio Shack 300ohm twin TV feedline? Believe
>>they advertise it as "low-loss, foam core". Thoughts? Don't
>>care about cost issues as I already have 100ft. of this stuff
>>laying around un-used. Also already have an un-used spool
>>of 14AWG insulated stranded and 6 egg-type insulators. Am
>>I about good to go ?
>>
>> TIA,
>>
>> Andrew
>> KG4JBM
>>
>
>I must have missed the earlier suggestions so if I'm missing the point forgive
>me. But, have you considered using coax and not having all of the fuss required
>to properly use balanced line?
>
>I gather that your line will be less than 100' long and unless you have your
>dipole up 100' or so, the feedpoint Z will be reasonable for direct coax feed.
>
>73,
>
>Wes Stewart

Others here have told me that coax or coax/balun will not broadband as
well as twinlead. My current antenna is approx. 240ft.+ random up about 40ft.
and I'm using a MFJ 941-E to tune. This does very well for 17 and 12 in
particular. Fine for 10 and 20. But the bottom drops out when I go to 40/80/160.
Especially 80/160. The antenna that's being proposed would be 264ft. Dipole
up about 50-60ft. and roughly bent to an open "C" shape. Feedline length would
be around, say, 40ft. vertical down and addt'l 30 or so feet to shack. If you're
interested, rig is FT-980 with 100W peak. No plans for linear at this time. If
you've any thoughts you'd like to contribute I'd welcome them.

Andrew
KG4JBM

1506. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:26:34 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FEF2BA.2DC433C@bigfoot.com>
Source record: 177356

Reg Edwards wrote:
> If it has a very high
> impedance so that the choke has no effect then you don't
> need the choke anyway.

The purpose of a choke is to reduce common-mode currents.
If the choke has no effect then it is not reducing common-
mode currents. The result is all the problems associated
with common-mode currents, e.g. RF-in-the-shack, feedline
radiation, TVI, etc.
--
http://www.mindspring.com/~w6rca

1507. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:36:04 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39FEF4F4.56EDB213@wb6hqk.ampr.org>
Source record: 177355

CAM wrote:
>
> Reg Edwards wrote:
> >
> > Cecil, to what circuit impedance is this 2000+j2000 ohms
> > impedance referred ?
> >
> > Is it the impedance looking into the 2-wire line ?
>
> Yep, it is the impedance seen when feeding a 50 ohm dipole with
> about 0.73 WL of 450 ohm ladder-line, a relatively common occurence.
> This would happen when a 20m dipole is fed with 46ft of ladder-line.

This particular case isn't so bad. The antenna is center fed with a balanced transmission line and may not even need a balun at the feedpoint.

Providing a longitudinal (common mode) impedance of a couple of hundred ohms will likely provide all the decoupling you need since in this particular case, the common mode impedance of the antenna feedpoint is probably less than 50 ohms. The differential mode impedance of the balun should be somewhere between 50 and 450 ohms which is very easily achieved with a bifilar winding made from twisted pair.

The situation on 75 meters would be terrible however. First of all, even ignoring the balun problem, the antenna is too short to work well on 75 meters unless it is very carefully designed for the specific situation and even then, will be touchy to tune. The feedpoint impedance might be in the neighborhood of 10 - j1500 ohms resulting in an SWR on the 450 ohm feeder of 545:1. Depending on the core used, a typical balun might have a differential mode capacitance of 100 pF. The differential mode inductive reactance of the balun is negligible on 75m. Adding the 100 pF capacitance in shunt with the antenna feedpoint transforms the feedpoint impedance from the original 10 - j1500 to the considerably worse value of 1.5 - j581 ohms (SWR = 800:1), and results in significantly increased transmission line losses due to the lower resistive component. In order to transfer 100 watts into the antenna feedpoint, a current of 12.2 amps is required and results in a feedpoint voltage of 7117 volts!

Not only will the balun likely arc over on 75m, it won't provide significant common mode decoupling.

bart
wb6hqk

1508. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:44:37 UTC
From: richardharrison@webtv.net
Message-ID: <20985-39FEF6F5-31@storefull-114.iap.bryant.webtv.net>
Source record: 177360

Barry, WA4VZQ wrote:
"There is a reason commercial CB antennas use stainless steel whips- the added RF loss."

I think the whips are stainless steel for mechanical reasons. Electrically shallow current penetration makes resistivity more significant as frequency rises. But, the r-f resistance of a CB 1/4-wave whip is still small. It varies with diameter and resistivity.

A 1-inch diameter copper surface has a resistance of 0.001 ohm per foot at 1 MHz. Rough scaling that for a 1/4-wave stainless steel whip adjusted for the resistivity of stainless steel at 30 MHz gives a resistance of about 0.3 ohms per foot. Current varies from maximum at the drive point to zero at the tip of the whip, etc. but I am only trying to find a ballpark value.

So, if our 9-foot whip has 2.7 ohms of r-f resistance, and it has more than 10 times that value of radiation resistance, the loss resistance is almost negligible.

If the above were not true, there would be a big market for plated antennas. There isn`t!

Best regards, Richard Harrison, KB5WZI

1509. trouble with a4s

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 16:52:46 UTC
From: ki8fb@my-deja.com
Message-ID: <8tmtcqvll1@nnrp1.deja.com>
Source record: 177357

the tem meter band on my cushcraft a4s just quit working(friday before
last weeks contest). how do i check the traps to see if they are bad?
can the trap be taken apart and fixed? any other ideas?
thanks for the help.
73
Kevin KI8FB

Sent via Deja.com http://www.deja.com/
Before you buy.

1510. New job for NC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 17:05:12 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tmu6o$5bb$1@iac5.navix.net>
Source record: 177358

Has our favorite antenna personality got a new gig?
http://www.act.co.il/nc/sirot.html

1511. rec.radio.amateur.antenna Fractal Antenna Challenge Winner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 17:11:43 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <g=v+OQ7YktHRLy6lWE0pBAA7l2fs@4ax.com>
Source record: 177359

Hi All,

With permissions granted, I have made those EZNEC files available (the originals) and added screen shots of the antennas themselves to my web page that follows. They are quite an assembly of twisted wire and it is instructive that the best antennas are not always those found in text books.

http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm

In a nutshell the results were:
VE9SRB Random2 First Place [Challenge FOM = 4.155]
VE9SRB Random3 Second Place [Challenge FOM = 4.122]
VE9SRB Random4 Third Place [Challenge FOM = 3.968]
VE9SRB Random5 Fourth Place [Challenge FOM = 3.682]
VE9SRB MI2 Fifth Place [Challenge FOM = 2.009]
VE9SRB Random1 Sixth Place [Challenge FOM = 1.005]
n1ir MI2 [Challenge FOM = 1.000]

All designs had to be adjusted in some manner to resonate at the specified frequency of 14.15 MHz. All antennas were judged to be "about" 1/8 wavelength dimension on each side of the antenna. As NONE were at, or under, that spec. I normalized FOM's to the n1ir MI2 design (all 6 other designs took a scoring hit).

Other issues drove me to make subtle changes (like one wire table with 550 segments - come on now!). Such twiddling may shift the line-up at the bottom of the pack - but the leaders are clear. In any event, having introduced some error, no matter how slight, I make all designs available at http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm with approval.

73's
Richard Clark, KB7QHC

1512. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 17:18:31 UTC
From: n7ws@azstarnet.com
Message-ID: <39fefbfe.95588808@news.azstarnet.com>
Source record: 177361

On Tue, 31 Oct 2000 16:20:56 GMT, cathexis@erols.com (Set'em up Joe) wrote:

[snip]
>
> Others here have told me that coax or coax/balun will not broadband as
>well as twinlead. My current antenna is approx. 240ft.+ random up about 40ft.
>and I'm using a MFJ 941-E to tune. This does very well for 17 and 12 in
>particular. Fine for 10 and 20. But the bottom drops out when I go to 40/80/160.
>Especially 80/160. The antenna that's being proposed would be 264ft. Dipole
>up about 50-60ft. and roughly bent to an open "C" shape. Feedline length would
>be around, say, 40ft. vertical down and addt'l 30 or so feet to shack. If you're
>interested, rig is FT-980 with 100W peak. No plans for linear at this time. If
>you've any thoughts you'd like to contribute I'd welcome them.
>
> Andrew
> KG4JBM

Andrew,

Here is my problem. The subject of the thread is "160m dipole....".

What I see above is discussion on 10, 12, 17, 20, 40, 80, etc.

If this is a 160 meter only dipole, then I recommend coax feed. If it is to be used on other bands as well, then a balanced line/balun/tuner is one option. Another is a parallel dipole, a trap dipole, or a combination of the two, option.

In any event, I would not recommend the 300 ohm line but something more substantial such as Wireman's so-called 450 ohm stuff.

Fortunately, you have enough length that operation on 160 is not compromised too much, although if you are going to use this on all bands, the pattern is going to be a mess.

73,

Wes
>
>

1513. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 17:25:37 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80535DFDA@www.indianarep.com>
Source record: 177362

Since openwire is pennies per foot, why not just order some? You won't find it all that much cheaper at a hamfest.

What is "bottom drops out?" Can't tune the SWR down or receive signals are weak? I've stayed away from unbalanced antennas, so I'm certainly without direct knowledge - but I read that for the lower bands the importance of grounding becomes all the more significant and is critical to effective 160M radiation. Just what I've read, mind you.
.

Set'em up Joe <cathexis@erols.com> wrote in message news:39feeef8.125391038@news.erols.com...
>
> Others here have told me that coax or coax/balun will not broadband as
> well as twinlead. My current antenna is approx. 240ft.+ random up about 40ft.
> and I'm using a MFJ 941-E to tune. This does very well for 17 and 12 in
> particular. Fine for 10 and 20. But the bottom drops out when I go to 40/80/160.
> Especially 80/160. The antenna that's being proposed would be 264ft. Dipole
> up about 50-60ft. and roughly bent to an open "C" shape. Feedline length would
> be around, say, 40ft. vertical down and addt'l 30 or so feet to shack. If you're
> interested, rig is FT-980 with 100W peak. No plans for linear at this time. If
> you've any thoughts you'd like to contribute I'd welcome them.
>
> Andrew
> KG4JBM
>

1514. Re: Fractal Geometry & Kraus's SLA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 18:02:21 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NODL5.15833$xJ4.721427@bgtnsc06-news.ops.worldnet.att.net>
Source record: 177363

"Fractenna" <fractenna@aol.com> wrote in message
news:20001029121350.27380.00002605@ng-md1.aol.com...
> >
> >Fractenna wrote:
> >
> >[snip]
> >
> >> I, for one, hope Mr. Best actually writes up a paper, if for no other
> >reason
> >> then he has demonstrated that the Cohen Hohlfeld paper of 1996 is
correct:
> >>
> >> 1) the Small Loop Approximation (see, for example Karus's ANTENNAS) ,
which
> >> ascribes the rad resistance to the enclosed area of the loop, is
INCORRECT;
> >in
> >> fact, the area of the loop has nothing to do with the radiation
resistance.
> >
> >
> >What specific claim made by Kraus are you claiming to be incorrect? I've
> >been over the entire chapter on loop antennas in both Kraus and Balanis,
> >who both make essentially the same observations. While not completely
> >general (especially Kraus), the derivations appear ironclad (to me
> >anyway), given the constraints on current distribution discussed in the
> >text.
> >
>
> Agreed. The point is this does not apply to all small loops and
characterizing
> the rad resistance by area is inaccurate.
>
> >> Mr.
> >> Best has discovered for himself that the SLA will not only predict the
rad
> >> resistance incorrectly, but similar values of rad resistance are
obtained
> >with
> >> radically different values of enclosed area;
> >
> >Are you referring to the small loop approximation in Kraus? As far as
> >radiation resistance is concerned, I don't see that it applies to the
> >various antenna's you or Steve have been discussing in the context of

> >the 'challenge'.
>
> It most certainly does not apply because it is an incorrect generalization
for
> small loops. THAT is the point.
>
> Note that on the other extreme, Kraus also talks about the rad resistance
of
> large loops, again taking a 'uniform current' appropximation, which in
most
> cases is surely not viable. Yet the values obtain are reasonable
> approximations. They are not reasonable approximations for small
> loops--characterized by area.
>
> < Kraus makes it clear from the text and illustrations
> >that his small loop approximation for radiation resistance applies only
> >to the case of uniform loop current.
> >
>
> No; he also discusses multi turn loops, for example, which are by no means
> uniform.
>
> >The current is not uniform in either your M12, or Steve's arbitrary
> >arrangements.
>
>
>
> Absolutely!
>
> <Therefore, Kraus's derivation of the radiation resistance
> >for a small loop simply does not apply.
> >
>
> EXACTLY!
>
> >Kraus also makes the more general statement that the radiation from any
> >small loop of arbitrary geometry (and current distribution) is
> >proportional to the magnetic moment developed by the current. This
> >relationship follows directly from the classical formulation of the far
> >field vector magnetic potential. The only approximation is that the
> >physical extent of the antenna must be small enough so that the
> >variation in phase retardation across the antenna is negligable.
> >
>
> That comment does not help vis a vis understanding a small loop. The point
is
> that a multi current max resonant loop which is electrically small is a
> previously unknown--or at least little studied --beast. Perhaps you can
help us
> with a ref Bart? Could be much obliged.

>
> 73
> Chip N1IR
>
> >bart
> >wb6hqk
> >

It is my opinion that Kraus's work re: the Small Loop Approximation is being taken out of the intended context and used inappropriately in the discussion of
fractal loop antennas.

Kraus's discussion begins with the straight-forward circular loop. He discusses the situation where the loop is small with respect to the operating wavelength. He clearly states that the circular loop radius is "<< wavelength". In this case, he assumes that since the loop is electrically small, the current distribution on the loop is essentially uniform. He then goes on to develop "approximations" for describing the properties of the electrically small loop antenna with uniform current distribution. There is nothing incorrect about Kraus' analysis or conclusions in this context.

As for the shape of the loop, he also addresses the issue of a square loop, where again it is assumed that the loop is electrically small and has a uniform current distribution. He specifically defines electrically small to be the situation where the enclosed loop area is less than (wavelength^2 / 100). He states that "as a generalization, we may say that the properties depend only on the area and that the shape of the loop has no effect when the loop is small. However, this is not the case when the loop is large." Clearly, Kraus recognizes that this is a generalization for electrically small loops and that it does not apply for large loops or for loops where the current distribution in not uniform.

To make a statement as follows ...

"the Small Loop Approximation (see, for example Kraus's ANTENNAS) , which ascribes the rad resistance to the enclosed area of the loop, is INCORRECT;
in fact, the area of the loop has nothing to do with the radiation resistance."

... is, in my opinion, technically incorrect and an unfair characterization of Kraus's work for two reasons:

1) Kraus's statement that the antenna properties depend only on the loop area are clearly made in the
context of a discussion of electrically small loops with uniform current distribution. Kraus would and has recognized that this statement would not apply to large loops or to loops with non-uniform current distributions.

2) The fact of the matter is that in most cases, the
area of a loop does impact the radiation resistance of the loop. A fractal

loop antenna of area X, would not have the same radiation resistance of a fractal loop antenna of area X/2, where both have the same geometry basis and the resistance is determined at the same frequency. We must recognize that as loop area changes, the total wire length changes as well since the geometric shape is scaled.

The MI2 fractal loop antenna and the other "random" or arbitrary antennas we have been discussing have a physical aperture of 2.8 m by 2.66 m for a total enclosed loop area of 7.45 m^2. The resonant frequency of these antennas as modeled by EZNEC varies slightly but is typically around 15 MHz. In the case of the MI2 as I modeled it, the resonant frequency is about 15.155 MHz. Using Kraus's formula for the definition of a small loop, the loop area would have to be less than 3.91 m^2 to be considered "small'. The MI2 loop and the other antennas we have been discussing are not electrically small antennas. Additionally, based on the EZNEC analysis, all of the antennas we have been discussing have two current maxima, so they do not have uniform current distribution. To relate Kraus's discussion of small loops with uniform current distribution to these antennas and then declare his work to be "incorrect" is clearly inappropriate since neither condition exists with these antennas.

Now from the other perspective, let's consider the case where the MI2 fractal loop antenna is small with respect to the operating wavelength. With the MI2 as I modeled it, the resonant frequency is approximately 15.155 MHz. At this frequency, the antenna current distribution has two maxima and therefore, the current distribution in not uniform. At a frequency of 10 MHz, the antenna no longer has two distinct current maxima and the current distribution is starting to become more uniform over the loop structure. At this frequency, the loop is still not "small" according to Kraus's definition. At a frequency of 4 MHz, the antenna current distribution on the MI2 is now uniform and exhibits no maxima. The loop is "small" according to Kraus's definition which would require the loop to have an enclosed area
less than 55 m^2. Although I have not checked to see if there any segment problems in the EZNEC model, it appears that as the fractal loop gets smaller with respect to the wavelength, the current distribution does become more uniform as Kraus assumes. Additionally, the radiation resistance does change with aperture size (area) as Kraus indicates. In fact, at this enclosed area
size, the approximate radiation resistance of the MI2 at 4 MHz, predicted using Kraus' formula is about 0.055 ohms. EZNEC calculates it to be 0.067 ohms. The
efficiency of the MI2 loop at this frequency is approximately 3%. The predicted gain is approximately -13.8 dBi. Kraus's "approximation" isn't so "incorrect"
after all.

In general, the radiation resistance of any loop is a function of numerous characteristics, which include the total enclosed area, the total wire length in the loop, the feedpoint location and the loop geometry. None of this contradicts Kraus's small loop "approximation".

Steve, VE9SRB

1515. Re: Antenna Choice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 18:14:14 UTC
From: Willie Peloquin <wpeloqui@ismi.net>
Message-ID: <8tn25d$45p$1@nnrp1.deja.com>
Source record: 177365

Hi,

I currently tow a Jeep behind my Pace Arrow. I use a High Sierra screwdriver on the Jeep, and love it. I plan on getting a second mount and perhaps and extension mast for the RV. It is an easy swapable mount, should take less than a minute to remove or replace.

I agree that dial spinning and knob tweeking is a bad thing while driving. I like to keep my 706 tuned to one of the marine mobile nets or one of the traveling nets, ie. 14.300, MICARS or EACARS while driving. I check in and chat on occasion from the Jeep.

73,

Willie
N8WP

In article <39FD02F3.A57F2CDA@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> Roland S Geter Sr wrote:
> > What kind of antenna would you recommend for use both stationary and in
> > motion on a 40 foot motorhome for 75 - 10 meters?
>
> I have the HighSierra HS-1600 on my pickup with the camper bottom
> section option and a large top hat. It's hard to beat.
> --
> http://www.mindspring.com/~w6rca
>

--
Willie Peloquin
Senior Software Engineer - Contract
http://www.ismi.net/~wpeloqui

Sent via Deja.com http://www.deja.com/
Before you buy.

1516. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 18:22:54 UTC
From: cathexis@erols.com
Message-ID: <39ff0ba3.132730805@news.erols.com>
Source record: 177364

On Tue, 31 Oct 2000 12:25:37 -0500, "jimmy john" <jj@sandwitch.org> wrote:

>Since openwire is pennies per foot, why not just order some? You won't find
>it all that much cheaper at a hamfest.
>
>What is "bottom drops out?"

Answer: No problem receive. Can achieve reasonable SWR on tune-up
(say 2:1) but in reality, ERP is down 50% or more and based on signal reports
I'm clearly just not putting out much of a signal. As you probably know, a
FT-980 will power down if too much is bouncing back into it. It is my
understanding that the best cure for this is to put up a more balanced antenna
that will in turn put a better signal out. Remember that MFJ is showing 2:1 on
a cross-needle display and you could technically have those needles pointing
way up and still get " 2:1 " but you'd be putting out peanuts. Leastwise that's
my best understanding of it. You also state, "why not just order some?" Well,
that was kinda what I was asking. Other respondents didn't seem to think it
would really make much of a diff. If you feel differently I'd be happy to hear
what you've got to say.

73,

Andrew
KG4JBM

Can't tune the SWR down or receive signals are
>weak? I've stayed away from unbalanced antennas, so I'm certainly without
>direct knowledge - but I read that for the lower bands the importance of
>grounding becomes all the more significant and is critical to effective 160M
>radiation. Just what I've read, mind you.
>.
>
>Set'em up Joe <cathexis@erols.com> wrote in message
>news:39feeef8.125391038@news.erols.com...
>>
>> Others here have told me that coax or coax/balun will not broadband as
>> well as twinlead. My current antenna is approx. 240ft.+ random up about
>40ft.
>> and I'm using a MFJ 941-E to tune. This does very well for 17 and 12 in
>> particular. Fine for 10 and 20. But the bottom drops out when I go to
>40/80/160.
>> Especially 80/160. The antenna that's being proposed would be 264ft.
>Dipole
>> up about 50-60ft. and roughly bent to an open "C" shape. Feedline length
>would
>> be around, say, 40ft. vertical down and addt'l 30 or so feet to shack. If

>you're
>> interested, rig is FT-980 with 100W peak. No plans for linear at this
>time. If
>> you've any thoughts you'd like to contribute I'd welcome them.
>>
>> Andrew
>> KG4JBM
>>
>
>

1517. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 18:37:04 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FF1150.373D201F@bigfoot.com>
Source record: 177366

Richard Harrison wrote:
> So, if our 9-foot whip has 2.7 ohms of r-f resistance, and it has more
> than 10 times that value of radiation resistance, the loss resistance is
> almost negligible.

True for 10m, but the situation is completely different for a 9-foot
whip used with a base autotuner on 75m where the radiation resistance
is more like 1/10 the RF resistance.
--
http://www.mindspring.com/~w6rca

1518. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 18:38:41 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FF11B1.E41CDEAF@bigfoot.com>
Source record: 177367

Wes Stewart wrote:
> Fortunately, you have enough length that operation on 160 is not compromised too
> much, although if you are going to use this on all bands, the pattern is going
> to be a mess.

Sometimes it's a good mess. :-)
--
http://www.mindspring.com/~w6rca

1519. Re: PHOTO AND SWR PLOT OF MI2 FRACTAL LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:01:51 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39FF171F.6818C0CB@uci.edu>
Source record: 177368

Fractenna wrote:

> I again repeat my offer to send gif files of a N3's MI2 installation and his
> SWR plot.

What's an N3?

1520. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:10:43 UTC
From: "andrew.young5" <andrew.young5@ntlworld.com>
Message-ID: <5UZL5.1141$1B5.24892@news2-win.server.ntlworld.com>
Source record: 177293

WOW how much free space do you have ? more than my 30ft by 15ft i suppose
!!
de
M0 CQL
ANDY
Richard Harrison <richardharrison@webtv.net> wrote in message
news:9291-39FAE9BE-4@storefull-117.iap.bryant.webtv.net...
> Rhatt wrote:
> "I would like to try a Rhonbic array for working 10 meters."
>
> The U.S. Army supplied rhombics for use with radio sets AN/TRC-1, -3.
> and -4. in WW-2. Using the 70-MHz version having 4 wave lengths per
> side, this would scale to 29 MHz as follows:
> Leg length: 115 ft. (2 ea. 230 ft. wires)
> Height: Use 4 ea. 60 ft. poles for support.
> End poles: 290 ft apart
> Side poles: 125 ft. apart
> A 600 to 800 ohm resistor is used to terminate the target end of the
> rhombic.
> A balun and match is used between the 600-800 ohm rhombic and 50 ohm
> coax used with the radio set.
>
> Gain would be about 11 dbd in free space, but depends on ground
> conductivity under and around the rhombic and could be more or less than
> 11dbd. Gain is the same if the termination resistance is omitted, but
> the rhombic will be bidirectional. The resistor makes it unidirectional.
>
> The advantage of a rhombic is is ability to operate over a wide
> frequency range while maintaining a relatively constant impedance.
>
> For single-band operation, doesn`t a Yagi look very good as it needs
> only a single support, can be rotated, and takes up much less real
> estate?
>
> Best regards, Richard Harrison, KB5WZI
>

1521. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:15:17 UTC
From: tom_bruhns@agilent.com
Message-ID: <8tn5ns$7ln$1@nnrp1.deja.com>
Source record: 177223

Egad, Mark, I've personally asked Chip for substantive fractal antenna information, and complained that links in his postings claiming to be to serious information always lead me to smoke and mirrors (or even less than that). I've never been able to get such info. I love learing about new things, but get more than a bit discouraged when nothing to help me with the learning is ever offered--belay that--delivered. I could only laugh when Chip claimed that HP Journal was as uninformative as the FAS website was. That one wasn't even worthy of further comment, and at that point I gave up all hope of getting any information that would actually let me evaluate fractal antenna ideas through Chip.

Cheers,
Tom

In article <39FCABDA.625DE10B@home.com>,
Mark Fergerson <mfergerson1@home.com> wrote:
> Fractenna wrote:
> >
> > Congratulations you turkeys. You've taken someone whose done
something positive
> > and through jeaolusy and hatred changed his life. You are to be
pitied.
> >
> > Nathan Cohen has his position terminated on 1 Nov.
>
> Looks like the neo-Luddites won this round. It doesn't come out of a
> box ready to run, so kill it. So much for experimentation.
>
> I subscribed to this NG in hopes of seeing information on advances
> in antennas, because Hams are historically famous for thinking outside
> the box.
>
> Instead I find a bunch of people who give rednecks a bad name.
>
> Bye.
>
> Mark L. Fergerson
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

1522. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:16:39 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FF1A97.17649726@hiwaay.net>
Source record: 177219

Ed-Richard
The error in the address probably occured recently- I sent a post to
Ed's ARRL.net address late last month (9/20), and it apparently got
through. Something has happened to it since then.

Bill

"Ed Hare, W1RFI" wrote:
>
> Bill Aycock <baycock@hiwaay.net> wrote in message
> news:39FEA48D.E74C61B5@hiwaay.net...
>
> > > Bill Aycock wrote:
>
> > > "Have you found out what you misspelled in Ed`s address?"
>
> > > No, I typed nothing in his address. I just clicked om "reply" to the
> > > address Ed provided. I looked for the usual "No Spam Garbage", etc.
>
> > Puzzling- I have done exactly that, and got through fine.
>
> That is puzzling, indeed. My newsreader is configured to supply
> w1rfi@arrl.net as my reply address. I just sent email to w1rfi@arrl.net and
> got a failed mail message. For some reason that is not apparent when I look
> on the ARRL members-only page, the system thinks it should send the email to
> 3Dw1rfi@arrl.org. That is NOT a valid address, so I would expect it would
> fail. I have reported this to our IS folks.
>
> I can be reached at:
>
> w1rfi@arrl.org
> w1rfi@aol.com
>
> If Richard wants to send me his email that criticizing spelling errors is in
> poor taste on newsgroups, he can use either of those two addresses.
>
> 73,
> Ed Hare, W1RFI

1523. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:20:53 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <w_EL5.101$WN.734802@news.ntplx.net>
Source record: 177220

Bill Aycock <baycock@hiwaay.net> wrote in message
news:39FF1A97.17649726@hiwaay.net...

> Ed-Richard

> The error in the address probably occured recently- I sent a post to
> Ed's ARRL.net address late last month (9/20), and it apparently got
> through. Something has happened to it since then.

It looks like sometime over the past 3-4 days. It is fixed now, so those who want to send me email can now use the Reply function on their newsreader. Misspelling is allowed. :-)

73,
Ed Hare, W1RFI

1524. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:22:06 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8tn6ga$e6e$1@slb0.atl.mindspring.net>
Source record: 177222

Probably Chips hackers. They haven't done much recently and probably got
bored.

Bill Aycock <baycock@hiwaay.net> wrote in message
news:39FF1A97.17649726@hiwaay.net...
> Ed-Richard
> The error in the address probably occured recently- I sent a post to
> Ed's ARRL.net address late last month (9/20), and it apparently got
> through. Something has happened to it since then.
>
> Bill
>
> "Ed Hare, W1RFI" wrote:
> >
> > Bill Aycock <baycock@hiwaay.net> wrote in message
> > news:39FEA48D.E74C61B5@hiwaay.net...
> >
> > > > > Bill Aycock wrote:
> >
> > > > > "Have you found out what you misspelled in Ed`s address?"
> >
> > > > > No, I typed nothing in his address. I just clicked om "reply" to the
> > > > > address Ed provided. I looked for the usual "No Spam Garbage", etc.
> >
> > > > Puzzling- I have done exactly that, and got through fine.
> >
> > That is puzzling, indeed. My newsreader is configured to supply
> > w1rfi@arrl.net as my reply address. I just sent email to w1rfi@arrl.net
and
> > got a failed mail message. For some reason that is not apparent when I
look
> > on the ARRL members-only page, the system thinks it should send the
email to
> > 3Dw1rfi@arrl.org. That is NOT a valid address, so I would expect it
would
> > fail. I have reported this to our IS folks.
> >
> > I can be reached at:
> >
> > w1rfi@arrl.org
> > w1rfi@aol.com
> >
> > If Richard wants to send me his email that criticizing spelling errors
is in

> > poor taste on newsgroups, he can use either of those two addresses.
> >
> > 73,
> > Ed Hare, W1RFI
>
>

1525. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 19:24:50 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <b2FL5.102$WN.735075@news.ntplx.net>
Source record: 177221

Set'em up Joe <cathexis@erols.com> wrote in message
news:39ff0ba3.132730805@news.erols.com...

> On Tue, 31 Oct 2000 12:25:37 -0500, "jimmy john" <jj@sandwitch.org> wrote:

> >Since openwire is pennies per foot, why not just order some? You won't
find
> >it all that much cheaper at a hamfest.

> >What is "bottom drops out?"

> Answer: No problem receive. Can achieve reasonable SWR on tune-up
> (say 2:1) but in reality, ERP is down 50% or more and based on signal
reports

It would probably have to be more than 50%. A 50% reduction in radiated
signal would be 3 dB. This is 1/2 S unit, and it would be somewhat
difficult to tell that from signal reports.

> I'm clearly just not putting out much of a signal. As you probably know, a
> FT-980 will power down if too much is bouncing back into it. It is my
> understanding that the best cure for this is to put up a more balanced
antenna
> that will in turn put a better signal out. Remember that MFJ is showing
2:1 on
> a cross-needle display and you could technically have those needles
pointing
> way up and still get " 2:1 " but you'd be putting out peanuts. Leastwise
that's
> my best understanding of it. You also state, "why not just order some?"
Well,
> that was kinda what I was asking. Other respondents didn't seem to think
it
> would really make much of a diff. If you feel differently I'd be happy to
hear
> what you've got to say.

Some rigs will start to reduce power at 2:1 SWR, so you may want to look at
the measured forward power. You can operate any feed line, including
coaxial cable, at a 2:1 SWR without excessive loss (maybe really long runs
of RG-58 or medium size runs of RG-174 would be unacceptable at 2:1 on HF).
Perhaps you could best solve your problem with an antenna tuner.

73,
Ed Hare, W1RFI

1526. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 20:27:09 UTC
From: richardharrison@webtv.net
Message-ID: <25855-39FF2B1D-7@storefull-112.iap.bryant.webtv.net>
Source record: 177224

Cecil, W6RCA wrote:
"True for 10m, but the situation is completely different for a 9-foot whip used with a base autotuner on 75m where the radiation resistance is more like 1/10 the RF resistance."

It`s true that the 9-ft whip radiation resistance is probably between 0.4 ohm and 1 ohm, depending on current distribution. The 9-ft whip is 90 degrees at 27 MHz (and a few more degrees at 10 meters) but it is only about 13 degrees at 4 MHz (and a few less at 75 meters). So, loss resistance dissipates a corresponding fraction of power as its fraction of the total resistance dictates. An offsetting improvement occurs with the lowered frequency. Skin depth increases and this lowers the resistance which dissipated power in the whip.

A more serious problem may arise from loss in the autotuner`s loading coil. This was not needed when using the whip at 10 or 11 meters.

Best regards, Richard Harrison, KB5WZI

1527. Re: Frequency Counter Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 20:30:43 UTC
From: K7MEM <meserve@my-deja.com>
Message-ID: <39FF2BF3.237C228A@my-deja.com>
Source record: 177227

CJ Jeff wrote:
>
> I just picked up an older rig and need to get a frequency counter for it .
> Any suggestions as to whats good for NEW ones or what are the older
> favorites or reliable ones ? I am looking at a older Heathkit IM-2410 ,
> whats it worth or should I just buy new ? I dont want to spend tons of money
> on it either. Anyone have a good one forsale ? Thanks a bunch
>
> Jeff VE7GMX

Unless the older rig is the absolute simplest rig you will not get
a direct operating frequency reading from the Heathkit IM-2410.
If the rig has 1 or more local oscillators, which most SSB rigs
have, the counter will only show the oscillator you are monitoring.
In most cases there is only one oscillator for tuning and any
others are crystal controlled.

Roger, K6XQ, made a great recomendation with http://www.aade.com/
but if you want to keep with older equipment, Heath in particular,
you need to be looking for a SB-650. The SB-650 is capable of
counting and adding/subtracting multiple oscillators and is
made for adding on to almost any old rig. The problem you will
have is finding one. I bought a working one at a hamfest in
Northern Arizona for $65.00. An even bigger problem to finding
one, is finding one that works. The unit uses Nixie tubes and
replacements, althought available, are expensive.

My recomendation is to go with http://www.aade.com/". You will
need to determine if the rig is single or dual conversion, so
you can select the correct display.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

--------== Posted via Deja News, The Discussion Network ==---------
http://www.deja.com/ Search, Read, Discuss, or Start Your Own

1528. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 21:01:34 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FF332E.2F6C037E@hiwaay.net>
Source record: 177225

Bored? thats better than "bent out of shape"

Bill

KB9WFK wrote:
>
> Probably Chips hackers. They haven't done much recently and probably got
> bored.
>
> Bill Aycock <baycock@hiwaay.net> wrote in message
> news:39FF1A97.17649726@hiwaay.net...
> > Ed-Richard
> > The error in the address probably occured recently- I sent a post to
> > Ed's ARRL.net address late last month (9/20), and it apparently got
> > through. Something has happened to it since then.
> >
> > Bill
> >
> > "Ed Hare, W1RFI" wrote:
> > >
> > > Bill Aycock <baycock@hiwaay.net> wrote in message
> > > news:39FEA48D.E74C61B5@hiwaay.net...
> > > >
> > > > > Bill Aycock wrote:
> > > >
> > > > > "Have you found out what you misspelled in Ed`s address?"
> > > >
> > > > > No, I typed nothing in his address. I just clicked om "reply" to the
> > > > > address Ed provided. I looked for the usual "No Spam Garbage", etc.
> > > >
> > > > > Puzzling- I have done exactly that, and got through fine.
> > > >
> > > That is puzzling, indeed. My newsreader is configured to supply
> > > w1rfi@arrl.net as my reply address. I just sent email to w1rfi@arrl.net
> and
> > > got a failed mail message. For some reason that is not apparent when I
> look
> > > on the ARRL members-only page, the system thinks it should send the
> email to
> > > 3Dw1rfi@arrl.org. That is NOT a valid address, so I would expect it
> would
> > > fail. I have reported this to our IS folks.
> > >
> > > I can be reached at:
> > >

> > > w1rfi@arrl.org
> > > w1rfi@aol.com
> > >
> > > If Richard wants to send me his email that criticizing spelling errors
> is in
> > > poor taste on newsgroups, he can use either of those two addresses.
> > >
> > > 73,
> > > Ed Hare, W1RFI
> >
> >

1529. Re: PHOTO AND SWR PLOT OF MI2 FRACTAL LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 21:13:27 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39FF35F7.A3188449@hiwaay.net>
Source record: 177226

I would ask, but I dont need the N3's data- the MI2 has already been
beat- Bad.

Besides, why give Chip an excuse to turn me down-?-That's what he wants.
He has refused on the last requests I made in reply to offers he made.
He has never come through.

Bill

Fractenna wrote:
>
> I again repeat my offer to send gif files of a N3's MI2 installation and his
> SWR plot.
> This is not a model but an actual installation.
>
> The best SWR he gets is about 1.2:1 and I believe most, of not all, of the 10M
> band has less than a 2:1 SWR.
>
> This is one of many MI2 designs which have excellent 50 ohm match.
>
> Please query at chipn1ir@aol.com soon, because I send these out at one time and
> already have many requests.
>
> 73
> Chip N1IR

1530. Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-10-31 21:47:08 UTC
From: k4ia@aol.com
Message-ID: <20001031164708.07486.00000469@ng-bk1.aol.com>
Source record: 177228

I recall seeing a program that would let you plug in diameter, wire size, number of windings and it would tell you the inductance generated.

Anyone have a reference / link?

Thanks
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

1531. Re: More 'Challenge' files

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 01:25:00 UTC
From: k1bqt@aol.com
Message-ID: <20001031202500.04998.00002375@ng-fc1.aol.com>
Source record: 177229

Hi Dick--

>Beware! Nathan Cohen Ph.Dip is clearly a nut.<

Bahh Bahh black sheep, have you any wool? I think I'd rather read more about how Kraus is full of bananas and Chip has "found him out". That oughta be good.

Rick K1BQT

1532. Re: trouble with a4s

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 01:44:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tnsh8nvp0@208.206.142.111>
Source record: 177230

ki8fb@my-deja.com wrote:
>
> the tem meter band on my cushcraft a4s just quit working(friday before
> last weeks contest). how do i check the traps to see if they are bad?
> can the trap be taken apart and fixed? any other ideas?
> thanks for the help.
>

My only experience with trap failure was with an old Mosley TA33 tribander years ago. I bought it knowing it had some problems and took the traps apart before attempting to use it. Turns out that the defective traps were filled up with spider webs which had became damp from humidity in the air and caused the traps to arc, burning some of the plastic coil form inside the traps. Evidently the carbon path changes the operation of the traps.
The spiders which work their way into the weep holes in the bottom of the traps float in the air on a long string of their web material as they migrate each fall, and can get caught on your beam, them find their way inside the traps.
The only thing you can do is disassemble the traps and determine what you need to do to restore them. Hopefully replacement parts will be available from the manufacturer as they were for the TA33. If not you can always attempt to fabricate your own.

Dick

1533. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 01:47:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tnsii$f6i$1@neptunium.btinternet.com>
Source record: 177231

Download program SOLNOID2 from following website.
++++++++++++++++++++++++++++++++
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp
++++++++++++++++++++++++++++++++
K4IA <k4ia@aol.com> wrote in message
news:20001031164708.07486.00000469@ng-bk1.aol.com...
> I recall seeing a program that would let you plug in
diameter, wire size,
> number of windings and it would tell you the inductance
generated.
>
> Anyone have a reference / link?

1534. Re: PHOTO AND SWR PLOT OF MI2 FRACTAL LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 01:56:29 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tnt8dnvp1@208.206.142.111>
Source record: 177232

Bill Aycock wrote:
>
> I would ask, but I dont need the N3's data- the MI2 has already been
> beat- Bad.
>
> Besides, why give Chip an excuse to turn me down-?-That's what he wants.
> He has refused on the last requests I made in reply to offers he made.
> He has never come through.

Nor will he ever.

1535. Re: telescoping mechanism question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 02:32:34 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <39FF80C2.61A0BC11@nettally.com>
Source record: 177233

The mechanism I described is similar to that of my US Tower TX489-mdpl

Joe Leikhim wrote:

> Picture the mast as follows:
>
> Section one, largest diameter, is fixed to foundation and forms the lowest
> section
> Section two, telescopes within section one, and forms middle section
> Section three, telescopes within section two, and forms upper most section.
>
> Two pulleys and two cables are required at a minimum.
>
> Sections one and two each have a pulley affixed near their tops.
>
> A winch fastened to side of section one lifts bottom of section two via a cable
> through the pulley atop of section one.
>
> A second cable is attached to top of section one, passes through pulley on top
> of section two and is attached to bottom of section three.
>
> The action of raising section two, is transferred through the second cable and
> lifts section three.
>
> Sufficient clearance is required between the telescoping tubes to accomodate
> the cables and pulley sheaves.
>
> Cable working strength, loads and stresses are another matter for which I offer
> no liability. Keep fingers and other limbs out of the works at all times.
>
> JD wrote:
>
> > Hi all. I want to put up a 3 piece telescoping mast. Does anybody have a
> > drawing of the cable setup to raise and lower the thing?? Or a webpage that
> > may have one??. Been drawing pictures and can't seem to come up with a
> > workable idea. Duh.
> > tnx es 73 Judd
>
> --
> Joe Leikhim K4SAT
> Jleikhim@nettally.com
>
> "tv dinner by the pool,
> i'm so glad i finished school" -F.Zappa 1967
>

> "The Revolution will NOT be televised" -Gil Scott Heron
>
> "Whats he building in there?"- Tom Waits
>
> WARNING TO UNSOLICITED SPAMMERS!!!
>
> Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
> "Any and all non-solicited commercial E-mail (SPAM) sent to
> this address is subject to a download and archival fee of
> $500.00 U.S."! E-mailing denotes acceptance of these terms.

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

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"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

1536. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 03:30:24 UTC
From: richardharrison@webtv.net
Message-ID: <3663-39FF8E50-49@storefull-114.iap.bryant.webtv.net>
Source record: 177234

K4IA wrote:
"I recall seeing a program that would let you plug in diameter, wire size, number of windings and it would tell you the inductance generated."

I have a cardboard slide rule that does that and more. My father-in-law, W1DBM, gave it to me years ago as evidenced by the $2.00 price printed right on its face. It is the "L / C / F Calulator Type A" from ARRL. It works fine and no batteries required. But, Reg`s price and delivery are certain to be better.

Best regards, Richard Harrison, KB5WZI

1537. MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 03:57:31 UTC
From: mikezabel@uswest.net
Message-ID: <39ff91dd.114879001@news.uswest.net>
Source record: 177235

Hello,
I just received the new sale flyer from Radio Shack and noticed an antenna analyzer on sale for $199.95 that looks exactly like the MFJ-259b. It has the Vectronics brand name and is Radio Shack item #9400683.
I wondered if anyone has used the Vectronics unit and could verify if it has the same features as the 259b? I had no luck finding a manual to download for this unit on radioshack.com.
I have been waiting to get an analyzer, but at this price I just may have an early Christmas present.
All replys appreciated.

73 Mike Zabel KC5UOJ
In the mountains of New Mexico

1538. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 04:22:06 UTC
From: raiar@slacc.com.nospam
Message-ID: <39ff99fd.310214973@news.galilei.com>
Source record: 177236

Hi David

Ouch, Ouch, Ouch.....

I pay about $5.00 for 500 feet of insulated 14g copper wire and about
$9.00 for 150 yards of self-adhesive copper foil tape. StLooooo.

TTUL
Gary

1539. Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 04:22:51 UTC
From: Alex Wiecek VE3GOP <alexwiecek@my-deja.com>
Message-ID: <8to5qn$2od$1@nnrp1.deja.com>
Source record: 177237
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Hi all,

My name is Alex Wiecek VE3GOP, and I'm a member of the Polish Amateur Radio Club VE3XPL here in Toronto. We are currently trying to establish a listing of all polish speaking Canadian Ham Radio Operators living either in Canada or abroad. The purpose of this activity is to present a petition to the Industry Canada to obtain a temporary special event callsign to commemorate the 75th aniversary of the Polish Ham Radio Society in Poland. We tried contacting the IC office in Ottawa but they don't seem to be responsive and as such, we have decided that the next approach would be to present them with as many e-mail petitions as possible to make our voices heard.

We need your help, if you are a polish speaking amateur or know someone who is, we would like to hear from you.

Please contact me at alexwiecek@home.com, and if you'd like to learn more about our club, please visit
http://web.ionsys.com/~magnum/ve3xpl/index.htm

your help would be greatly appreciated.

Thank you.

73's Alex VE3GOP

Sent via Deja.com http://www.deja.com/
Before you buy.

1540. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 04:38:07 UTC
From: Barry Ornitz <ornitz@dpnet.net>
Message-ID: <u7NL5.2395$qP1.1645289@news-west.usenetserver.com>
Source record: 177238

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:20985-39FEF6F5-31@storefull-114.iap.bryant.webtv.net...
> Barry, WA4VZQ wrote:
> "There is a reason commercial CB antennas use stainless steel whips- the
> added RF loss."
>
> I think the whips are stainless steel for mechanical reasons.

Not entirely. Stainless also offers corrosion resistance. See the numbers
below for the shorter whips like I was talking about.

> Electrically shallow current penetration makes resistivity more
> significant as frequency rises. But, the r-f resistance of a CB 1/4-wave
> whip is still small. It varies with diameter and resistivity.

Remember I was talking about a short, base-loaded whip, like most CB
antennas for trunk or roof mount.

> A 1-inch diameter copper surface has a resistance of 0.001 ohm per foot
> at 1 MHz. Rough scaling that for a 1/4-wave stainless steel whip
> adjusted for the resistivity of stainless steel at 30 MHz gives a
> resistance of about 0.3 ohms per foot. Current varies from maximum at
> the drive point to zero at the tip of the whip, etc. but I am only
> trying to find a ballpark value.
>
> So, if our 9-foot whip has 2.7 ohms of r-f resistance, and it has more
> than 10 times that value of radiation resistance, the loss resistance is
> almost negligible.

But consider the base-loaded 3 foot CB whip has a radiation resistance of
about 2.5 ohms. An extra ohm of loss makes a big difference here. The
same antenna will have a capacitive reactance of about 440 ohms. Also note
the permeability of most stainless steels is greater than unity, decreasing
the skin depth and increasing their RF resistance.

> If the above were not true, there would be a big market for plated
> antennas. There isn`t!

Actually there are copper plated, stainless whips available. But they are
hardly worth it until the antenna resistance is quite low - such as the
lower H.F. frequencies with reasonably sized whips.

73, Barry WA4VZQ

1541. Re: ant for WWVB Ft Collins "Atomic Clock"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 04:53:08 UTC
From: z005381b@bc.seflin.org
Message-ID: <8to7jk$bcu@nntp.seflin.org>
Source record: 177239

Art Clemons (n8blk@aol.com) wrote:
: In article <9RX4OXHStrrr5XOMTyoP=u+vWU6k@4ax.com>, Bob Miller
: <bamiller@texas.net> writes:
[snip]

: WWVB is on 60kHz, I'm sure of it. It isn't WWV or WWVH, but rather a different
: service with no voice broadcasting. If you go to the NBS site, you can
: hopefully get a detailed description of the broadcast services offered.
: -art clemons-

Radio Shack (and others) sell small WWVB (60kHz) "Atomic Clocks" which receive the WWVB signal late in the evening here in South Florida.

The clocks that have a seperate "antenna" (on a short cable) actually have the 60kHz receiver in the "antenna" blob. I recently bought a discontinued radio shack clock for ~$15 that is set up this way.

Do a search on "Atomic clocks" for information. I found the blob info on a site where people are recording earthquake tremors and needed an acurate clock. The site tells which wire in the cable does what.

I have a HP VLF Receiver that uses a tuned loop with a pair of 6CW4 Nuvisors AND a **VERY** narrow Collins (10Hz if I remember correctly) Mechanical filter in the base. Later revisions of the loop use FETs and no real filtering in the antenna itself.

The "receiver" portion consists of several 6CW4 TRF stages for a total antenna to detector gain of ~120dB (at 60 kHz)!! They recommend that the antenna be mounted at least 35' away from the receiver to prevent feedback (and they are right ;)

Until WWVB raised their power, even all that gain that wasn't enough to receive a good signal in South Florida. Now it's no problemo.
--
Jim Rosenthal, WA4STJ

1542. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 05:13:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8to8kr$h6o$1@neptunium.btinternet.com>
Source record: 177240

If the common mode impedance looking into the line is very
high there are hardly any common-mode currents to be
reduced. The choke is surplus to requirements.

This can be checked by grounding a centre-tap of the line
and measuring the line and measuring the very small current
which flows to ground. The current will be small because the
source impedance is so high.

If the current is appreciable then the common mode impedance
cannot be so high as you think it is.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
CAM <cam2338@bigfoot.com> wrote in message
news:39FEF2BA.2DC433C@bigfoot.com...
> Reg Edwards wrote:
> > If it has a very high
> > impedance so that the choke has no effect then you don't
> > need the choke anyway.
>
> The purpose of a choke is to reduce common-mode currents.
> If the choke has no effect then it is not reducing common-
> mode currents. The result is all the problems associated
> with common-mode currents, e.g. RF-in-the-shack, feedline
> radiation, TVI, etc.
> --
> http://www.mindspring.com/~w6rca

1543. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 05:18:09 UTC
From: z005381b@bc.seflin.org
Message-ID: <8to92h$d2f@nntp.seflin.org>
Source record: 177241

Dick Carroll (dixie@townsqr.com) wrote:
[nip]

: Someone here has missed the point completely. The problem with Chip et
: al is not that he has invented new technology which has been rejected by
: ANYONE on this NG, rather that he has consistantly and almost completely
: stonewalled against any and everyone here who has asked for real, hard
: information about his supposed invention.

If the antenna is that great, we would see them being used and talked
about in various radio/technical mags.

; He repeatedly and very
: petulantly insists on directing all who ask to the most obscure of
: scientific writings which are mostly meaningless in deciphering any hard
: information on fractal shaped antennas as any improvement whatever over
: other shapes. He insists that the scientific literature supports his
: claims but so far has totally resisted any and all efforts to get him to
: tell us -right here- how and why.

Ego-stroking comes in different forms.

: It seems more than clear that when he can't or won't divulge, and
: almost all other respected and accepted antenna authorities fail to find
: any such attributes using the scientific references he quotes and their
: own scientific investigation, that his claims are vaporous at best, and
: a virtual scam attemp at worst.

: If he was a serious scientist he would be more than pleased to make
: full disclosure, and we know that if his claims were valid it wouldn't
: be that hard to do.

A simple dBi number would be a start.

: Do I believe that fractal shaped antennas work? Of course- most any
: shape antenna will work.That's not the point of contention. Whether or
: not there is any advantage to those shapes-as is apparntly claimed by
: his writings and attempts to claim patents and copyrights- is the
: contentious area.

From the little I looked into it, it seems that the antenna would be
smaller than similar ("normal") antennas. Sort of like the old "Dyna
plate" ground plate for small boats. (Or taking a 160m dipole, balling it
up and saying "I've got a 160m antenna here".)

: From here it looks like an attempt to force his claims onto the rest
: of the world, like it or not, by mostly bafflegab, bluster and threats

: of lawsuit.

One has to wonder why he would bother to try to convince Amateur Radio operators that his antenna is.... whatever it is he's been trying to prove. He should be too busy making the things for commercial users.

Please note that I for one, will NOT be sending any email to what's-his-name.
--
Jim Rosenthal, WA4STJ

1544. Re: Fractal Geometry Siignificant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 05:23:02 UTC
From: z005381b@bc.seflin.org
Message-ID: <8to9bm$d2f@nntp.seflin.org>
Source record: 177242

Ed Hare, W1RFI (w1rfi@arrl.net) wrote:

: If Richard wants to send me his email that criticizing spelling errors is in
: poor taste on newsgroups, he can use either of those two addresses.

: 73, Ed Hare, W1RFI

Ed u got 2 stop misspeelig thknks on inturnet! who we gonna undstand u if
yu do tat? fer shame for shure!
--
Jim Rosenthal, WA4STJ

1545. Re: 160M dipole feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 05:33:04 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FFAB10.1FC2@wt.net>
Source record: 177243

Set'em up Joe wrote:
>
> On Tue, 31 Oct 2000 12:25:37 -0500, "jimmy john" <jj@sandwitch.org> wrote:
>
> >Since openwire is pennies per foot, why not just order some? You won't find
> >it all that much cheaper at a hamfest.
> >
> >What is "bottom drops out?"
>
> Answer: No problem receive. Can achieve reasonable SWR on tune-up
> (say 2:1) but in reality, ERP is down 50% or more and based on signal reports
> I'm clearly just not putting out much of a signal.

I think switching to a balanced antenna would help quite a bit. A 240 ft wire is pretty long even for 40/80 meters but you have a few problems with isolating the feedline, and avoiding excess loss in the tuner. Also the pattern is likely to be fairly random. I've tried a few random wires in my time, and except for high band use as a long wire, I've never had any real luck with them. At least compared to a normal dipole. And rf problems in the shack too. I think in your case being you want all band use, if using the same wire, I'd split it down the middle and feed with 450 ohm line as a 160 dipole if you want 160 meters included. If you only run 80-10, I'd only use 120-130 ft and run a 80 dipole. The reason being is I think it would perform better on 40m as two half waves in phase rather than two full waves in phase. The higher band use should be ok. I'd expect 12 and 10m to be a bit low in performance but thats normal with a 80m dipole on 10m. It will still work. But with a 80 dipole fed with 450 line , 80,40,30,20 would be good. 17 and 15 should be ok also. Myself I run parallel dipoles 160,80,40 fed with coax. But not for the faint of heart. It's 440 ft of wire in the air. Looks like a big skinny legged bug in the air. But I do have the advantage of no tuner or the losses involved. Also instant bandswitching. I use a 989c to tune to other bands if needed. Works ok usually. 30m real good. 20 not so good. 17 ok, 15 good, 12 and 10 ok. But I also have a 1/2 vertical for 10m. I know some like the random wires, but I've just never had that good a luck. I have seen long wires work well on the high bands though, much as you see there. BTW, the 300 ohm line will work ok, but I'd go ahead and get the 450 ohm line. It's quite a bit better. Also I get the thick gauge stuff for lower loss and strength. It's not really the impedance, but the thickness of the wires and covering or lack of it that makes the difference. The impedance is just determined by the spacing of the wires. The wider the higher. It's easier to avoid wx effects with a wider spacing so most end up using a higher impedance line. It's not that anything is magic about 450 ohms. MK

http://web.wt.net/~nm5k

1546. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 06:05:58 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FFB2C6.5B52@wt.net>
Source record: 177245

tom_bruhns@agilent.com wrote:
>
> Egad, Mark, I've personally asked Chip for substantive fractal antenna
> information, and complained that links in his postings claiming to be to
> serious information always lead me to smoke and mirrors (or even less
> than that). I've never been able to get such info. I love learing
> about new things, but get more than a bit discouraged when nothing to
> help me with the learning is ever offered--belay that--delivered. I
> could only laugh when Chip claimed that HP Journal was as uninformative
> as the FAS website was. That one wasn't even worthy of further comment,
> and at that point I gave up all hope of getting any information that
> would actually let me evaluate fractal antenna ideas through Chip.
>
> Cheers,
> Tom

Yep, I know. As far as my end, I think the guy just read my posts from
this weekend and came to the conclusion that all this is just a game to
heckle poor old frac over his "newfound technology". Actually, thats
about the farthest from the truth. I've never really gave much comment
in the past on the merits of the fractel antenna. I have my own opinions
but I pretty much kept them to myself. I thought I'd just let the chips
fall where they may. The only reason I jump on him is his constant BS,
threat of lawsuits,whining, etc. I've always been open to new ideas,
good or not. But being this is an open forum I expect new ideas to get a
good grilling over before being excepted as fact. It seems when it comes
to fractel antennas no one is ever correct except fracky.
That, coupled with his huge library of usable data, "NOT!" would make
anyone suspicious. The only real usable data of any extent seems to be
on Richard Clarks website. Of course, that chaps fracky to no end.
MK

--
http://web.wt.net/~nm5k

1547. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 06:16:46 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39FFB54E.E2EE3D89@bigfoot.com>
Source record: 177247

Reg Edwards wrote:
> If the current is appreciable then the common mode impedance
> cannot be so high as you think it is.

That's the problem - the common mode impedance is much less than
the load impedance.

The current on the coax center conductor is matched by a differential
current on the inside of the coax braid. At the coax to balanced line
junction, the current can flow into the balanced line *OR* down the
outside of the braid. Assume 200 ohms of choking impedance on the
outside braid and a 2000+j2000 load. Where will the current go?
--
http://www.mindspring.com/~w6rca

1548. Re: New job for NC [Fractal] [Noise]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 06:25:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39FFB73C.7907@wt.net>
Source record: 177246

Gilbert Mouget wrote:
>
> Tue, 31 Oct 2000 12:05:12 -0500 dans l'article
> <8tmu6o$5bb$1@iac5.navix.net>
> l'honorable W4JLE <w4jle@alltel.net> escrivit :
>
> :Has our favorite antenna personality got a new gig?
> :http://www.act.co.il/nc/sirot.html
>
> There is still the MPD problem:
>
> <quote>
> A compilation album of songs performed by Nathan Cohen and "The Pure Souls".
> Music by Nathan Cohen. Compiled and released by Hed-Arzi in 1991.
> The Pure Souls were: Natan Cohen, Nava Baruchin, Yoram Yeruhami.
> </quote>
>
> One Nathan for the music, and one _Natan_ in "The Pure Souls".

With lyrics by Dudu...:{ MK
--
http://web.wt.net/~nm5k

1549. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 06:40:36 UTC
From: Roland S Geter Sr <roland@geter.org>
Message-ID: <39FFBAE2.841FBAD@geter.org>
Source record: 177244

Excuse me for eavesdropping but what does mounting a yagi vertical accomplish for tuning purposes?
Roland - WB6LNA

Bill Aycock wrote:

> What he means is--- "point it straight up"
>
> Worked for me.
>
> Bill-W4BSG
>
> "George, W5YR" wrote:
> >
> > For a better check, mount the antenna mast more or less horizontal with
> > the plane of the elements more or less vertical and the reflector next
> > to the ground. Just a few feet separation will be enough.
> >
> > This will give you a better check of the tuning, SWR, etc.
> >
> > 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> > Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
> >
> > Howard Kowall wrote:
> > >
> > > i just bought a used ta33jr
> > > put it together about 10ft above ground to test
> > > 20,15 mters seems to be ok out a little but should clear up when up 40 ft
> > > 10 mtrs way out to lunch (help)
> > > when i checked it before i bought it the 10mtrs was also still out
> > > the 20,15 mtr portion was ok set on cw
> > > i am going to call mosley on monday anyway
> > > any thoughts??
> > > thanx
> > > howard

1550. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 10:21:35 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <91SL5.1842$fP1.1632@newsfeed.slurp.net>
Source record: 177249

Yeh, been there, seen and used those. You can make small loops and other things more easily with materials which are a bit closer to self-supporting.

What's 'TTUL'?

73, Dave, K3BHJ

1551. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 10:48:42 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <39FFF4F2.F48620EC@sccoast.net>
Source record: 177250
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Alex Wiecek VE3GOP wrote:
>
> [snip] The purpose of this activity is
> to present a petition to the Industry
> Canada to obtain a temporary special
> event callsign to commemorate the 75th
> aniversary of the Polish Ham Radio
> Society in Poland. [snip]

I hope you don't mind a dumb question but, if you're Canadian, why
would you commemorate the aniversary of a radio group in Poland?

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1552. Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 11:55:47 UTC
From: w1rfi@aol.com
Message-ID: <20001101065547.24689.00000002@ng-cr1.aol.com>
Source record: 177251

>From: 2w8ji@contesting.com (Tom W8JI)

>It amazes me that 80% of the traffic here surrounds Cohen and his
>nonsense.

Generally, when 80% of a NG is on a subtopic of that NG, it is usually considered time to start a new newsgroup, especially if a majority of the NG readers would prefer not to read posts on that topic.

It is time for rec.radio.amateur.antenna.fractal?

73,
Ed Hare, W1RFI

1553. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 12:06:29 UTC
From: w1rfi@aol.com
Message-ID: <20001101070629.24689.00000003@ng-cr1.aol.com>
Source record: 177252

>From: z005381b@bc.seflin.org (James Rosenthal)

>: If he was a serious scientist he would be more than pleased to make
>: full disclosure, and we know that if his claims were valid it wouldn't
>: be that hard to do.

>A simple dBi number would be a start.

His web page gives a figure of 5.41 dBi in free space for a 2-element, 10-meter fractal quad.

>From the little I looked into it, it seems that the antenna would be
>smaller than similar ("normal") antennas. Sort of like the old "Dyna
>plate" ground plate for small boats. (Or taking a 160m dipole, balling it
>up and saying "I've got a 160m antenna here".)

Yes, but if the current distribution is such that one gets a reasonable feed-point impedance and relatively low ohmic losses, then the antenna can still be useful. It has been a valid technique for years to bend an antenna around to fit a small lot, and, it does work. The real disagreement, or at least the real question, is whether there is any specific advantage gained with a fractal bending as opposed to arbitrary bending of the same basic physical size. I think that if that question was answered with a statement to what those specific advantages are, most of the discussion could move on. Of course, an answer to the question would mean that most of the discussion would move on. :-)

73,
Ed Hare, W1RFI

1554. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 12:11:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A000854.22291758@hiwaay.net>
Source record: 177253

Roland- the problem of checking a Yagi before taking it to the top of
the tower is the interference with the ground. A common trick that gets
a good first check (not final tweaking) is to point it up. The effect of
the ground is somewhat masked behind the reflector. This looks (to the
antenna) much more like the fields around the final position than just
mounting it on a pole a few feet above the ground, in its normal
orientation.

It's an old trick, and it worked for me.

Bill-W4BSG

Roland S Geter Sr wrote:
>
> Excuse me for eavesdropping but what does mounting a yagi vertical accomplish for
> tuning purposes?
> Roland - WB6LNA
>
> Bill Aycock wrote:
>
> > What he means is--- "point it straight up"
> >
> > Worked for me.
> >
> > Bill-W4BSG
> >
> > "George, W5YR" wrote:
> > >
> > > For a better check, mount the antenna mast more or less horizontal with
> > > the plane of the elements more or less vertical and the reflector next
> > > to the ground. Just a few feet separation will be enough.
> > >
> > > This will give you a better check of the tuning, SWR, etc.
> > >
> > > 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> > > Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > > Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> > > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
> > >
> > > Howard Kowall wrote:
> > > >
> > > > i just bought a used ta33jr
> > > > put it together about 10ft above ground to test
> > > > 20,15 mters seems to be ok out a little but should clear up when up 40 ft
> > > > 10 mtrs way out to lunch (help)

> > > > when i checked it before i bought it the 10mtrs was also still out
> > > > the 20,15 mtr portion was ok set on cw
> > > > i am going to call mosley on monday anyway
> > > > any thoughts??
> > > > thanx
> > > > howard

1555. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 12:55:34 UTC
From: fractenna@aol.com
Message-ID: <20001101075534.17622.00000013@ng-fl1.aol.com>
Source record: 177254

>>From: z005381b@bc.seflin.org (James Rosenthal)
>
>>: If he was a serious scientist he would be more than pleased to make
>>: full disclosure, and we know that if his claims were valid it wouldn't
>>: be that hard to do.
>
>>A simple dBi number would be a start.
>
>His web page gives a figure of 5.41 dBi in free space for a 2-element,
>10-meter
>fractal quad.
>
>>From the little I looked into it, it seems that the antenna would be
>>smaller than similar ("normal") antennas. Sort of like the old "Dyna
>>plate" ground plate for small boats. (Or taking a 160m dipole, balling it
>>up and saying "I've got a 160m antenna here".)
>
>Yes, but if the current distribution is such that one gets a reasonable
>feed-point impedance and relatively low ohmic losses, then the antenna can
>still be useful. It has been a valid technique for years to bend an antenna
>around to fit a small lot, and, it does work. The real disagreement, or at
>least the real question, is whether there is any specific advantage gained
>with
>a fractal bending as opposed to arbitrary bending of the same basic physical
>size. I think that if that question was answered with a statement to what
>those specific advantages are, most of the discussion could move on. Of
>course, an answer to the question would mean that most of the discussion
>would
>move on. :-)
>
>73,
>Ed Hare, W1RFI
>

Hello Ed;

Could you tell me what you found inadequate with my previous answers to this?

Let me summarize to make this easier for you.

1) The advantage of the Mi2 Loop designs is they offer an OPTIMUM FIGURE OF MERIT for performance: that is, the greatest directivity , efficiency, bandwidth, and match for their very small size, WITHOUT THE USE OF ADDITIONAL COMPONENTS.
2) the general question of a fractal advantage is many-fold, I will concentrate

on two: 1) all frequency independent antennas must be self similar and are thus fractal; you cannot construct a freq indep antenna which does not incorporate self similarity; 2) it has been shown that oprtimized antenna designs are fractal. A good place to start on this is OPTIMIZATION OF WIRE ANTENNAS by Landstorfer and Sacher.

Fractal antennas are experiencing an explosive growth in commercial uses, chiefly because they offer small, high performance antennae without the issues of matching, reliability, and manufacturing cost associated with conventional designs.

I am astounded, I must admit, by your description of the Steve Best designs as "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and meanders; and, indeed, are thus covered by prior art of extant pending patents.

The real issue with the Best antennas, besides the fact that they are neither 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how accurate are they as models cpmared to real antenna versions? One particular problem is that one ignorant perdson has claimed is that "550 segments! Wow! You don't need that many!" In such a claim and by reducing the current density so that small wires have disparate current samplings from longer ones, that person has substantially increased the imprecision and systemic inaccuracy of the model. Mr. Best, I must stress, is not guilty of this.

The meanders are less accurate than the others; I have made a scaled version of the meanders on 4003 substrate and find them no where near the return loss, directivity, or resonance so predicted. In fact, I think it is important for Best or others to actually make and test these antennas, which is straight forward as scaled etchings.

As I have stated, I applaude Mr. Best in his effort to find better loops, and frankly it is heartening to see that he, for himself, has discovered better fractal loops! However, the need for more methodical approaches is clear, and thus my allusion to a MS I will submit in a few weeks.

As far as the ham MI2 design, I have been unable to produce an HF MI2 loop with a 26 ohm impedance. Neither has anyone else.The drive resistances are always far higher, in excess of 40 ohms (with very little of this ohmic) .

Try it yourself. Bend an MI2 as described on the web page link on

http://www.fractenna.com

and tell us what drive resistance you get. I bet you a cookie you will get a nearly flat SWR across a large bandwidth. Furthermore, the only way to get a 26 ohm resistance is to have the inside corners nearly touching, as suggested by the nuance of the model. In practice this does not occur and is not shown in any pictures of the MI2 or its FQY version.

I remind readers that the issue that has noxiously been applied is the unuathorized distribution and publication of the MI2 file and its clearly derivative copies. This is not a 'science' issue but an intellectual property issue and both Fractal Antenna Systems,Inc. and I are starting the first steps

to legally stop and punish the two major offendors of the respective ifringements of MI2 and other files..

I also remind readers that, for private use, I have ALWAYS provided copies of the MI2 file as requested from members of the fractal antenna reflector. Thus the file is readily available and always has been. This does not, and will not, however, in any way justify or allow for illegal publishing and distribution of said copyright material.

With Best Wishes,

Chip N1IR

1556. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 12:58:26 UTC
From: fractenna@aol.com
Message-ID: <20001101075826.17622.00000014@ng-fl1.aol.com>
Source record: 177255

>
>>From: 2w8ji@contesting.com (Tom W8JI)
>
>>It amazes me that 80% of the traffic here surrounds Cohen and his
>>nonsense.
>
>Generally, when 80% of a NG is on a subtopic of that NG, it is usually
>considered time to start a new newsgroup, especially if a majority of the NG
>readers would prefer not to read posts on that topic.
>
>It is time for rec.radio.amateur.antenna.fractal?
>
>73,
>Ed Hare, W1RFI
>

What an appalling statement!

LOOK at the vast majority of traffic in the last week. ALMOST NONE--repeat ALMOST NONE-- originates from me. ALMOST ALL of the posts which allude to me in some way are PERSONAL ATTACKS filled with FALSE INFORMATION; DIRECTED INSULTS; and LIBEL.

Ed, if you want to do sometrhing constucutive then help clean up the trash right here. I cannot be blamed for it.

73
Chip N1IR

1557. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 13:10:25 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <IxUAOgOQiRCXu0dvoRho2H3+xeqC@4ax.com>
Source record: 177256

mikezabel@uswest.net (Mike Zabel) wrote:

>Hello,
>I just received the new sale flyer from Radio Shack and noticed an
>antenna analyzer on sale for $199.95 that looks exactly like the
>MFJ-259b. It has the Vectronics brand name and is Radio Shack item
>#9400683.
>I wondered if anyone has used the Vectronics unit and could verify if
>it has the same features as the 259b? I had no luck finding a manual
>to download for this unit on radioshack.com.
>I have been waiting to get an analyzer, but at this price I just may
>have an early Christmas present.
>All replys appreciated.
>
>73 Mike Zabel KC5UOJ
>In the mountains of New Mexico

Well, recently MFJ bought out Vectronics, so it would be no surprise
if the units are the same or similar. Go to the Vectronics site,
www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
can compare the units directly.

Bob
k5qwg

1558. NOTICE: RICHARD CLARK COPYRIGHT INFRINGEMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 13:22:08 UTC
From: fractenna@aol.com
Message-ID: <20001101082208.28051.00000011@ng-cu1.aol.com>
Source record: 177257

>
>
>Hi All,
>
>With permissions granted, I have made those EZNEC files available (the
>originals) and added screen shots of the antennas themselves to my web
>page that follows. They are quite an assembly of twisted wire and it
>is instructive that the best antennas are not always those found in
>text books.
>
>
>http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winn
er.htm
>
>In a nutshell the results were:
>VE9SRB Random2 First Place [Challenge FOM = 4.155]
>VE9SRB Random3 Second Place [Challenge FOM = 4.122]
>VE9SRB Random4 Third Place [Challenge FOM = 3.968]
>VE9SRB Random5 Fourth Place [Challenge FOM = 3.682]
>VE9SRB MI2 Fifth Place [Challenge FOM = 2.009]
>VE9SRB Random1 Sixth Place [Challenge FOM = 1.005]
>n1ir MI2 [Challenge FOM = 1.000]
>
>All designs had to be adjusted in some manner to resonate at
>the specified frequency of 14.15 MHz. All antennas were
>judged to be "about" 1/8 wavelength dimension on each side
>of the antenna. As NONE were at, or under, that spec. I
>normalized FOM's to the n1ir MI2 design (all 6 other designs
>took a scoring hit).
>
>Other issues drove me to make subtle changes (like one wire
>table with 550 segments - come on now!). Such twiddling may
>shift the line-up at the bottom of the pack - but the
>leaders are clear. In any event, having introduced some
>error, no matter how slight, I make all designs available at
>
>http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winn
er.htm
>with approval.
>
>73's
>Richard Clark, KB7QHC
>

Richard Clark is in violation of copyright for the MI2 EZNEC file and its derivative, so placed and made available on the above site.

I am the copyright holder and said files .

Mr. Clark is publicly requested to cease and desist further publication and distribution of these copyright files.

Furthermore, Mr. Clark's public assertion that he has obtained permission to publish and distribute these MI2 files is a prevarication and indicative of intent of copyright infringement.

If Mr. Clark does not remove said files before 1 January, 2001, then legal injunctive measures will be initiated against him and his ISP.

Nathan Cohen, Ph.D.

1559. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 13:24:35 UTC
From: fractenna@aol.com
Message-ID: <20001101082435.28057.00000008@ng-cu1.aol.com>
Source record: 177258

>
>mikezabel@uswest.net (Mike Zabel) wrote:
>
>>Hello,
>>I just received the new sale flyer from Radio Shack and noticed an
>>antenna analyzer on sale for $199.95 that looks exactly like the
>>MFJ-259b. It has the Vectronics brand name and is Radio Shack item
>>#9400683.
>>I wondered if anyone has used the Vectronics unit and could verify if
>>it has the same features as the 259b? I had no luck finding a manual
>>to download for this unit on radioshack.com.
>>I have been waiting to get an analyzer, but at this price I just may
>>have an early Christmas present.
>>All replys appreciated.
>>
>>73 Mike Zabel KC5UOJ
>>In the mountains of New Mexico
>
>Well, recently MFJ bought out Vectronics, so it would be no surprise
>if the units are the same or similar. Go to the Vectronics site,
>www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
>can compare the units directly.
>
>Bob
>k5qwg

You may assume it is the same. Vectronics is one of the brand names being used
by MFJ Enterprises.

73
Chip N1IR

1560. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 13:32:47 UTC
From: richardharrison@webtv.net
Message-ID: <1609-3A001B7F-11@storefull-113.iap.bryant.webtv.net>
Source record: 177259

Barry, WA4VZQ wrote:
"Remember I was talking about a short base-loaded whip, like most CB antennas for trunk or roof mount."

Kevin, the original questioner, wrote:
"1) Can you recommend a 10 meter antenna to me?"

Jeff gave the first response:
"On antennas. For under $29.00, use a Francis 108" whip and add a little length to it."

We are all free to be responsive or divert the discussion. We are also free to tease CBers by suggesting their antennas need more length.

My point was that the ordinary stainless 108-inch CB antenna was pretty good at 10 and 11 meters, and that other materials would not make enough improvement to be worth the trouble.

Best regards, Richard Harrison, KB5WZI

1561. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:03:51 UTC
From: richardharrison@webtv.net
Message-ID: <1609-3A0022C7-15@storefull-113.iap.bryant.webtv.net>
Source record: 177260

Chip, N1IR wrote:
"1) All frequency independent antennas must be self similar---."

Long ago, I think you wrote something like, "even my little daughter knows what this means."

Fine! But, "self-similarity" isn`t in my dictionary. If you mean symmetry, please say so. If you don`t, perhaps you will be good enough to say how self-similarity differs from symmetry.

Best regards, Richard Harrison, KB5WZI

1562. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:19:51 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A002687.D324E630@bigfoot.com>
Source record: 177263

Richard Harrison wrote:
> Fine! But, "self-similarity" isn`t in my dictionary.

From "The Science of Fractal Images" by Peitgen and Saupe:

"This property of objects whereby magnified subsets look like
(or are identical to) the whole and to each other is known as
self-similarity. It is characteristic of fractals and differentiates
them from the more traditional Euclidean shapes (which, in general,
become ever smoother upon magnification)."
--
http://www.mindspring.com/~w6rca

1563. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:21:05 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8tp9e0$6pc$1@iac5.navix.net>
Source record: 177264

Once again you state that ALL antennas are fractals because they are self similar.

Next you claim that you have all the patent pendings on fractal antennas.

While your recent posts show a return to rationality, your claims unfortunately have failed to make the same turn.

"Fractenna" <fractenna@aol.com> wrote in message
1) all frequency independent antennas must be self similar and are thus
> fractal; you cannot construct a freq indep antenna which does not incorporate
> self similarity; 2) it has been shown that oprtimized antenna designs are
> fractal. A good place to start on this is OPTIMIZATION OF WIRE ANTENNAS by
> Landstorfer and Sacher.
>
> Fractal antennas are experiencing an explosive growth in commercial uses,
> chiefly because they offer small, high performance antennae without the issues
> of matching, reliability, and manufacturing cost associated with conventional
> designs.
>
> I am astounded, I must admit, by your description of the Steve Best designs as
> "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and meanders;
> and, indeed, are thus covered by prior art of extant pending patents.
>
> The real issue with the Best antennas, besides the fact that they are neither
> 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how
This is not a 'science' issue but an intellectual property
> issue and both Fractal Antenna Systems,Inc. and I are starting the first steps
> to legally stop and punish the two major offendors of the respective
> ifringements of MI2 and other files..
>
> I also remind readers that, for private use, I have ALWAYS provided copies of
> the MI2 file as requested from members of the fractal antenna reflector. Thus
> the file is readily available and always has been. This does not, and will not,
> however, in any way justify or allow for illegal publishing and

distribution of
> said copyright material.
>
> With Best Wishes,
>
> Chip N1IR
>

1564. 1/4 wave Vs. 1/2 wave mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:21:24 UTC
From: Scott <yetbbwa@grove.iup.edu>
Message-ID: <3A0026E3.8A68F7AC@grove.iup.edu>
Source record: 177261

I was wondering if there would be any advantage to using a continuously loaded 1/2 wave antenna (wound on a 9 foot length of fiberglass) over using a straight 1/4 wave whip on 10 meters? Would winding the 1/2 wave on a 9 foot section be too short to provide any benefits of the 1/4 wave? Is shunt fed the best way to feed the 1/2 wave?

Scott.

1565. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:26:55 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A00282F.B943B41@bigfoot.com>
Source record: 177265

Mike Zabel wrote:

> I just received the new sale flyer from Radio Shack and noticed an
> antenna analyzer on sale for $199.95 that looks exactly like the
> MFJ-259b. It has the Vectronics brand name and is Radio Shack item
> #9400683.

Be sure and check the specifications. MFJ makes a number of antenna
analyzers that look similiar to the MFJ-259B.
--
http://www.mindspring.com/~w6rca

1566. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:30:03 UTC
From: mikezabel@uswest.net
Message-ID: <3a002860.153415344@news.uswest.net>
Source record: 177262

Thanks Guys!
This is just the info I needed. Looks like I will be getting a neat
new toy. Experimenting should help my understanding of antennas a
bit!
73 Mike Zabel KC5UOJ

On Wed, 01 Nov 2000 13:10:25 GMT, Bob Miller <bamiller@texas.net>
wrote:

>mikezabel@uswest.net (Mike Zabel) wrote:
>
>>Hello,
>>I just received the new sale flyer from Radio Shack and noticed an
>>antenna analyzer on sale for $199.95 that looks exactly like the
>>MFJ-259b. It has the Vectronics brand name and is Radio Shack item
>>#9400683.
>>I wondered if anyone has used the Vectronics unit and could verify if
>>it has the same features as the 259b? I had no luck finding a manual
>>to download for this unit on radioshack.com.
>>I have been waiting to get an analyzer, but at this price I just may
>>have an early Christmas present.
>>All replys appreciated.
>>
>>73 Mike Zabel KC5UOJ
>>In the mountains of New Mexico
>
>Well, recently MFJ bought out Vectronics, so it would be no surprise
>if the units are the same or similar. Go to the Vectronics site,
>www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
>can compare the units directly.
>
>Bob
>k5qwg
>

1567. Re: YAGI for UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:34:53 UTC
From: richardharrison@webtv.net
Message-ID: <14509-3A002A0D-2@storefull-116.iap.bryant.webtv.net>
Source record: 177267

Robert Bukowski wrote:
"Now I am using an antenna consisting of 7 elements, but the signal is weak (44dB)."

A 7-element UKW (ultrashortwave) antenna should have good gain and directivity.

First, make sure that the antenna performs. Gain is important to capture the distant 94.3 station. Directivity which causes the gain is important to reject signals from unwanted directions.

Use the best antenna you can. Put it as high as you can. Signal strength from a distant station is proportional to antenna height. Rotate the antenna for best reception (either most signal or least interference).

Check antenna cable and connections.

Best regards, Richard Harrison, KB5WZI

1568. Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:45:04 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Q%VL5.964$dB6.44215@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177266

"Fractenna" <fractenna@aol.com> wrote in message
news:20001101075534.17622.00000013@ng-fl1.aol.com...
>
> I am astounded, I must admit, by your description of the Steve Best
designs as
> "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and
meanders;
> and, indeed, are thus covered by prior art of extant pending patents.
>
> The real issue with the Best antennas, besides the fact that they are
neither
> 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how
> accurate are they as models cpmared to real antenna versions? > With Best
Wishes,
>
> Chip N1IR
>

The "Best Antennas" are NOT fractal antennas!

Fractal antennas represent a class of electromagnetic radiators whose overall structure is comprised of a series of repetitions of a single geometry (the geometry basis), where each repetition is on different (or in some cases, the same) scale. Most fractal geometries are self-similar in that some portion of their geometry has the same shape as the overall geometry, only at a reduced scale.

Here is the definition of fractal antennas per N. Cohen in a paper entitled "Fractal Antennas Part 1 - Introduction and the Fractal Quad", Comm Quart, Summer 1995: ".... Following in that tradition of nonlinearity, the newest branch of geometry is called fractal geometry. Here a complex structure us built up through the repetition of a design or motif (sometimes called a generator) on a series of different scales. Such structures are called self-similar."

Here is the definition of fractal antennas per C. Puente-Baliarda in a paper entitled "On the Behavior of the Sierpinski Multiband Fractal Antenna", IEEE Transaction on Antennas and Propagation, April 1998: "Most fractal objects have self-similar shapes, which means that some of their parts have the same shape as the whole object but at a different scale. ..... In such an interactive procedure, an initial structure called a generator is replicated many times at different scales, positions and directions, to grow the final fractal structure."

In the MI2 loop antenna, the "generator" sits in the center of the structure and it is repeated four additional times in the structure from each corner

of the generator. The antennas that I designed are arbitrary in shape, in that in one quadrant, I rearranged the wire length into an arbitrary shape. I then created the total antenna by mirror imaging the wire shape in the first quadrant into the other three quadrants, thus the antennas are symmetrical. An antenna being symmetrical does not mean that it is a fractal.

At this point, Chip is declaring that my antennas are fractal. I can only assume that this claim is made on the basis that the antennas are symmetrical in shape. If this is true, then Chip is stating that all symmetrical antennas are fractal. This would then mean that "fractal" antennas have been designed and used for well over 50 years and we have now just decided to call them "fractals" rather than symmetrical. This has serious implications for all IP and patent claims. One cannot have it both ways.

Steve, VE9SRB

1569. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:47:22 UTC
From: richardharrison@webtv.net
Message-ID: <14507-3A002CFA-8@storefull-116.iap.bryant.webtv.net>
Source record: 177273

Cecil, W6RCA wrote:
"From "The Science of Fractal Images"---."

That definition is not clear to me. I need examples of what is
self-similar and what is not and why.

Best regards, Richard Harrison, KB5WZI

1570. Re: NOTICE: RICHARD CLARK COPYRIGHT INFRINGEMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:52:53 UTC
From: k3bu@aol.com
Message-ID: <20001101095253.18299.00000010@ng-fe1.aol.com>
Source record: 177268

>Mr. Clark is publicly requested to cease and desist further publication and
>distribution of these copyright files.
>
>Nathan Cohen, Ph.D.
>
>

You are publicly requested to cease and desist posting crap on this NG, get the hell outta here!!! Enough!!!

Get help while it is not too late!!!

1571. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:54:12 UTC
From: k3bu@aol.com
Message-ID: <20001101095412.18299.00000011@ng-fe1.aol.com>
Source record: 177269

Do not respond to TROLLS!!!!
Frack him!

1572. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 14:59:19 UTC
From: fractenna@aol.com
Message-ID: <20001101095919.27102.00000068@ng-cs1.aol.com>
Source record: 177270

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001101075534.17622.00000013@ng-fl1.aol.com...
>>
>> I am astounded, I must admit, by your description of the Steve Best
>designs as
>> "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and
>meanders;
>> and, indeed, are thus covered by prior art of extant pending patents.
>>
>> The real issue with the Best antennas, besides the fact that they are
>neither
>> 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how
>> accurate are they as models cpmared to real antenna versions? > With Best
>Wishes,
>>
>> Chip N1IR
>>
>
>The "Best Antennas" are NOT fractal antennas!
>
>Fractal antennas represent a class of electromagnetic radiators whose
>overall structure is comprised of a series of repetitions of a single
>geometry (the geometry basis), where each repetition is on different (or in
>some cases, the same) scale. Most fractal geometries are self-similar in
>that some portion of their geometry has the same shape as the overall
>geometry, only at a reduced scale.
>
>Here is the definition of fractal antennas per N. Cohen in a paper entitled
>"Fractal Antennas Part 1 - Introduction and the Fractal Quad", Comm Quart,
>Summer 1995: ".... Following in that tradition of nonlinearity, the newest
>branch of geometry is called fractal geometry. Here a complex structure us
>built up through the repetition of a design or motif (sometimes called a
>generator) on a series of different scales. Such structures are called
>self-similar."
>
>Here is the definition of fractal antennas per C. Puente-Baliarda in a paper
>entitled "On the Behavior of the Sierpinski Multiband Fractal Antenna", IEEE
>Transaction on Antennas and Propagation, April 1998: "Most fractal objects
>have self-similar shapes, which means that some of their parts have the same
>shape as the whole object but at a different scale. ..... In such an
>interactive procedure, an initial structure called a generator is replicated
>many times at different scales, positions and directions, to grow the final
>fractal structure."

>
>In the MI2 loop antenna, the "generator" sits in the center of the structure
>and it is repeated four additional times in the structure from each corner
>of the generator. The antennas that I designed are arbitrary in shape, in
>that in one quadrant, I rearranged the wire length into an arbitrary shape.
>I then created the total antenna by mirror imaging the wire shape in the
>first quadrant into the other three quadrants, thus the antennas are
>symmetrical. An antenna being symmetrical does not mean that it is a
>fractal.
>
>At this point, Chip is declaring that my antennas are fractal. I can only
>assume that this claim is made on the basis that the antennas are
>symmetrical in shape. If this is true, then Chip is stating that all
>symmetrical antennas are fractal. This would then mean that "fractal"
>antennas have been designed and used for well over 50 years and we have now
>just decided to call them "fractals" rather than symmetrical. This has
>serious implications for all IP and patent claims. One cannot have it both
>ways.
>
>Steve, VE9SRB
>
>
>

Hi Steve,

You do not do justice to the definition of fractal geometry by quoting me incompletely and out of context. For example: how do you thus deal with the fact that random fractals are thus described at length in the same article?

Are clouds fractal? Are mountains fractal? These are examples which you may choose to explore in greater depth.

It would be unfair to you and certainly to others who read your posts, for your absence of knowledge of fractal geometry to be repeated and even used legally.

All my statements are accurate --especially regarding the non-meander designs you have described-- which are covered by pending patents--and havebeen for some time-- by Fractal Antenna Systems,Inc.

They are not random and not arbitrary.

I make no claims whatsoever about the fractality of a shape merely because it is symmetrical. I am well aware of the difference between self similarity and symmetry.

I regret that I am not in a position to further aid you on these issues, as you have systematically ignored my efforts to assist you previously, and there is a large body of published work extant on fractals.

Cordially,

NC

1573. Mast in vertically polarized antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:00:46 UTC
From: k3bu@aol.com
Message-ID: <20001101100046.18299.00000016@ng-fe1.aol.com>
Source record: 177271

Question about some practical experiences and requirements for the metal mast in the vertically polarized antennas.
Let's say we have Quad or Yagi that is vertically polarized and we want to have it on a single mast (vertical). Is using the balun for the feedline enough to decouple it? Should mast also be "broken up" into non resonant lengths or would it appear "invisible" if it is half way up in the antenna?
No Freakin' theories, just the practical or measured experiences please.

Yuri, K3BU

1574. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:01:42 UTC
From: richardharrison@webtv.net
Message-ID: <14507-3A003056-9@storefull-116.iap.bryant.webtv.net>
Source record: 177272

Dwight Stewart, W5NET wrote:
"---if you are Canadian, why would you want to commemorate the
anniversary of a radio group in Poland?"

Because his name is Wiecek?

Best regards, Richard Harrison, KB5WZI

1575. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:12:32 UTC
From: richardharrison@webtv.net
Message-ID: <14508-3A0032E0-3@storefull-116.iap.bryant.webtv.net>
Source record: 177275

I wrote:
"I have a cardboard slide rule that does that and more."

I think this used to be called the "Lightning Coil Calculator". Don`t know if ARRL still sells it.

Best regards, Richard Harrison, KB5WZI

1576. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:20:28 UTC
From: k3bu@aol.com
Message-ID: <20001101102028.18299.00000020@ng-fe1.aol.com>
Source record: 177274

>
>Are clouds fractal? Are mountains fractal? These are examples which you may
choose to explore in greater depth.

>I regret that I am not in a position to further aid you on these issues, as
>you have systematically ignored my efforts to assist you previously,

same frectal yadayada troll

>Cordially,
>
>NC

What's next? Patent and Copyright on clouds and mountains? No more pictures of
clouds and mountains, they belong to Freak?

His Frucken brain is fractal! Enough already, you can get better arguments from
a brick wall. Haven't you guys realized it yet? No PhD needed to figure that
one out - you talk one thing, he talks another one, he posts garbage, lies,
twisted, frectal "facts" and troll to get the attention, you jump on it (argue)
and feed it.
Where was he in CQ WW? Haven't heard a frucktal peep. Must have been in PhD
(Phrectal Dummies) with dummy loads category.

You wanna join the freakin team, go to his reflector and have fun there!
Don't feed the TROLL here!

Can we have some normal antenna discussions here again?

1577. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:39:04 UTC
From: richardharrison@webtv.net
Message-ID: <14507-3A003918-11@storefull-116.iap.bryant.webtv.net>
Source record: 177276

Steve Best, VE9SRB wrote:
"Most fractal geometries are self-similar in that some portion of their geometry has te same shape as the overall geometry, only at a reduced scale."

Does this mean the "log periodic" antenna is a fractal?

Best regards, Richard Harrison, KB5WZI

1578. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:49:41 UTC
From: dinod@deltanet.com
Message-ID: <pYWL5.149599$g6.68071524@news2.rdc2.tx.home.com>
Source record: 177277

Do you also know that MFJ owns Hy-Gain Antennas which still sells
the Ham-IV and Tailtwister rotators!

Dino

>Well, recently MFJ bought out Vectronics, so it would be no surprise
>if the units are the same or similar. Go to the Vectronics site,
>www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
>can compare the units directly.
>
>Bob
>k5qwg
>

1579. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:52:20 UTC
From: arrow146@aol.com
Message-ID: <20001101105220.24553.00000033@ng-cr1.aol.com>
Source record: 177278

>You may assume it is the same. Vectronics is one of the brand names being
>used
>by MFJ Enterprises.
>
>73
>Chip N1IR

The box looks the same, but the last time I compared them
it was obvious the software is not the same.
I don't remember what the difference was.

73 Al Lowe N0IMW

1580. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 15:54:31 UTC
From: dinod@deltanet.com
Message-ID: <X0XL5.149632$g6.68075019@news2.rdc2.tx.home.com>
Source record: 177279

To answer your question...Yes! To quote a great actor..."Make it so!"

Dino

>Generally, when 80% of a NG is on a subtopic of that NG, it is usually
>considered time to start a new newsgroup, especially if a majority of the NG
>readers would prefer not to read posts on that topic.
>
>It is time for rec.radio.amateur.antenna.fractal?
>
>73,
>Ed Hare, W1RFI
>

1581. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:15:07 UTC
From: rwclark@seanet.com
Message-ID: <3a133cf5.587088468@news.seanet.com>
Source record: 177286

On Wed, 1 Nov 2000 09:47:22 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Cecil, W6RCA wrote:
>"From "The Science of Fractal Images"---."
>
>That definition is not clear to me. I need examples of what is
>self-similar and what is not and why.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

One imperfect example would be to look closely at a log periodic antenna - say 5 or 6 elements of a much longer construction. As you examine these elements you will note a basic underlying principle of construction.

Then step back so that you see even more elements (let's pretend that's 10 or 12 of them on a much longer construction). As you examine these elements you will note a basic underlying principle of construction.

The basic underlying principles of the two examinations will be the same even though scale and number of elements have changed.

A log periodic thus appears to be scale independent, or self-similar at any scale.

This, however, is NOT the principle mechanism of discussion with the popular conception of fractal antennas (which is largely based on the employment of standard forms). Here when self similarity is trotted out to explain them, it is the similarity between iterations of the form. In this sense, you might imagine a snowflake being built. As the ice crystals accumulate to construct the flake, it changes form, but generally always exhibits one principle shape (hexagonal).

I have a page that illustrates the progression of iterations:
http://www.qsl.net/kb7qhc/antenna/fractal/Triangle%20Sweep/index.htm
and it is said, a picture is worth 100 zipped up bytes.

This is about the simplest form, and you will note that each iteration has two copies of the previous iteration in it. Going through 5 iterations reveals a complex form made up of the original first iteration in many combinations still filling roughly the same footprint.

73's
Richard Clark, KB7QHC

1582. Re: NOTICE: RICHARD CLARK UNCOPYRIGHT FRINGEMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:27:34 UTC
From: rwclark@seanet.com
Message-ID: <3a1441be.588313329@news.seanet.com>
Source record: 177287

On 01 Nov 2000 13:22:08 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>
>>Hi All,
>>
>>With permissions granted, I have made those EZNEC files available (the
>>originals) and added screen shots of the antennas themselves to my web
>>page that follows. They are quite an assembly of twisted wire and it
>>is instructive that the best antennas are not always those found in
>>text books.
>>
>>
>>http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winn
>er.htm
>>
>>In a nutshell the results were:
>>VE9SRB Random2 First Place [Challenge FOM = 4.155]
>>VE9SRB Random3 Second Place [Challenge FOM = 4.122]
>>VE9SRB Random4 Third Place [Challenge FOM = 3.968]
>>VE9SRB Random5 Fourth Place [Challenge FOM = 3.682]
>>VE9SRB MI2 Fifth Place [Challenge FOM = 2.009]
>>VE9SRB Random1 Sixth Place [Challenge FOM = 1.005]
>>n1ir MI2 [Challenge FOM = 1.000]
>>
>>All designs had to be adjusted in some manner to resonate at
>>the specified frequency of 14.15 MHz. All antennas were
>>judged to be "about" 1/8 wavelength dimension on each side
>>of the antenna. As NONE were at, or under, that spec. I
>>normalized FOM's to the n1ir MI2 design (all 6 other designs
>>took a scoring hit).
>>
>>Other issues drove me to make subtle changes (like one wire
>>table with 550 segments - come on now!). Such twiddling may
>>shift the line-up at the bottom of the pack - but the
>>leaders are clear. In any event, having introduced some
>>error, no matter how slight, I make all designs available at
>>
>>http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm
>>with approval.
>>
>>73's
>>Richard Clark, KB7QHC
>>

Hi All,

With as many responses to this page as I've had, come one and all and download your own copies of these files and determine for yourself why the n1ir design is so tepid. Continue the grand tradition of improving on a design that has been anointed as optimal!

Just recently the k2 ground warmer was proclaimed to be unbeatable (we've heard that one too often) by its designer - only to be improved by my own poor attempts to copy it. You may find that you too have that magic touch that turns fractals into shinola!

and remember
DO NOT RESPOND TO TROLLS AND ESPECIALLY FRAUDS

73's
Richard Clark, KB7QHC

1583. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:39:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A00470F.2E6739C2@att.net>
Source record: 177280

In general, the Vectronics counterparts of similar MFJ products are NOT
the same. The differences are much more than just changed brand names.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Arrow146 wrote:
>
> >You may assume it is the same. Vectronics is one of the brand names being
> >used
> >by MFJ Enterprises.
> >
> >73
> >Chip N1IR
>
> The box looks the same, but the last time I compared them
> it was obvious the software is not the same.
> I don't remember what the difference was.
>
> 73 Al Lowe N0IMW

1584. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:39:29 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <5HXL5.13890$UL.825676@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177281

"Fractenna" <fractenna@aol.com> wrote in message
news:20001101095919.27102.00000068@ng-cs1.aol.com...
>
> Hi Steve,
>
> You do not do justice to the definition of fractal geometry by quoting me
> incompletely and out of context. For example: how do you thus deal with
the
> fact that random fractals are thus described at length in the same
article?
>
> Are clouds fractal? Are mountains fractal? These are examples which you
may
> choose to explore in greater depth.
>
> It would be unfair to you and certainly to others who read your posts,
for
> your absence of knowledge of fractal geometry to be repeated and even used
> legally.
>
> All my statements are accurate --especially regarding the non-meander
designs
> you have described-- which are covered by pending patents--and havebeen
for
> some time-- by Fractal Antenna Systems,Inc.
>
> They are not random and not arbitrary.
>
> I make no claims whatsoever about the fractality of a shape merely because
it
> is symmetrical. I am well aware of the difference between self similarity
and
> symmetry.
>
> I regret that I am not in a position to further aid you on these issues,
as you
> have systematically ignored my efforts to assist you previously, and there
is a
> large body of published work extant on fractals.
>
> Cordially,
>
> NC

Nathan:

Aside from the "absence of knowledge" dig, thank you for the mostly straightforward and respectful post. I think its much better to deal with people respectfully and on par.

My quoting of your definitions were not meant to be taken out of context as the definition seems to be consistent with those presented by others. The issue then, is how do you define a fractal loop antenna? If a loop antenna is not self-similar why is it a fractal? What is an example of a non-fractal loop?

On the Kraus SLA issue, I would appreciate a technical rebuttal (one that does not begin with "Steve has an absence of knowledge issue ....."). Looking further, I would agree that Kraus's SLA approximation does not provide accurate results for the MI2 loop at the upper end of the area limit. I still think its inappropriate to declare it "incorrect". "Not applicable" might be a more politically correct term to use since anyone could say you were using the SLA out of the intended context. I will probably sent out one more post on the Kraus issue - I will maintain the technical nature of the discussion and would appreciate the same from you.

Steve

1585. Re: ta33jr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:42:24 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A0047DC.7658112A@att.net>
Source record: 177282

It minimizes the influence of a near earth ground. Mounting a Yagi
horizontal on a short mast close to the earth for convenience in tuning
causes the results generally to be quite different when the antenna is
mounted at its service height.

On the other hand, nounting it so that "it points straight up" tends to
minimize near earth effects and allows one to make tuning adjustments
that are only slightly changed when the antenna is elevated.

This is a very old dodge for tuning directive arrays near the earth
without getting near-earth effects.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Roland S Geter Sr wrote:
>
> Excuse me for eavesdropping but what does mounting a yagi vertical accomplish for
> tuning purposes?
> Roland - WB6LNA

1586. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 16:46:58 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A004902.9B90E85D@hiwaay.net>
Source record: 177283

Fractenna wrote:

SNIP- see comments interspersed

> Are clouds fractal? Are mountains fractal? These are examples which you may
> choose to explore in greater depth.
>
Clouds and mountains may be visually described by fractal processes, but
are not themselves fractal- (they are not 'self-similar', which can be
demonstrated))

> All my statements are accurate --especially regarding the non-meander designs
> you have described-- which are covered by pending patents--and havebeen for
> some time-- by Fractal Antenna Systems,Inc.
>
> They are not random and not arbitrary.

MAybe not, (open to dispute) but they are often capricious.- example-
the hilarious assertion that Steves and Richard's work is a violation of
one of your copyrights, when you will not display the material you claim
is being copied.-

>
> I make no claims whatsoever about the fractality of a shape merely because it
> is symmetrical. I am well aware of the difference between self similarity and
> symmetry.
>
> I regret that I am not in a position to further aid you on these issues, as you
> have systematically ignored my efforts to assist you previously, and there is a
> large body of published work extant on fractals.

You- Help anyone- ? that's a joke, right?
>
> Cordially,
>
> NC

1587. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 17:07:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tpig5hcq1@neptunium.btinternet.com>
Source record: 177284

Rich, but I have to admit the Lightning Coil Calculator in
North America has one undeniable great advantage - it works
with inches and not millimetres - or perhaps both.

Reg.

****
Richard Harrison <richardharrison@webtv.net> wrote in
message
news:14508-3A0032E0-3@storefull-116.iap.bryant.webtv.net...
> I wrote:
> "I have a cardboard slide rule that does that and more."
>
> I think this used to be called the "Lightning Coil
Calculator". Don`t
> know if ARRL still sells it.
>
> Best regards, Richard Harrison, KB5WZI
>

1588. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 17:11:08 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8053A87B8@www.indianarep.com>
Source record: 177285

And Ameritron.

Dino <dinod@deltanet.com> wrote in message
news:pYWL5.149599$g6.68071524@news2.rdc2.tx.home.com...
> Do you also know that MFJ owns Hy-Gain Antennas which still sells
> the Ham-IV and Tailtwister rotators!
>
> Dino
>
>
> >Well, recently MFJ bought out Vectronics, so it would be no surprise
> >if the units are the same or similar. Go to the Vectronics site,
> >www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
> >can compare the units directly.
> >
> >Bob
> >k5qwg
> >

1589. YAGI for UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 17:12:24 UTC
From: Robert Bukowski <r.bukowski@gmx.at>
Message-ID: <3A004EF7.5466496C@gmx.at>
Source record: 177248

I am in search of a good YAGI for receiving a far distant radio station
(94.3 MHz).
Now I am using an antenna consisting of 7 elements, but the signal is to
weak (44 dB).
Does someone know a good product/link?
Another problem are the local radiostations. Are there parts, which can
weaken their
signal?

Thanks in advance for your tips

Robert

1590. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 18:16:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A005DF0.47B4@wt.net>
Source record: 177288

K4IA wrote:
>
> I recall seeing a program that would let you plug in diameter, wire size,
> number of windings and it would tell you the inductance generated.
>
> Anyone have a reference / link?
>
> Thanks
> K4IA
> Buck
> Fredericksburg, Virginia USA
>
> REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
> International, Toll Free, Callback, Calling Cards, Pagers and more Check out
> http://www.ld.net/?bucksavers

Try solenoid.exe at reg's web site. He may have already sent a post on
it, but I can't tell yet with my erratic news feed lately. MK
http://www.btinternet.com/~g4fgq.regp
--
http://web.wt.net/~nm5k

1591. Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 18:29:47 UTC
From: Al <ABurzynski@swri.edu>
Message-ID: <t00o8v7kvh8r21@corp.supernews.com>
Source record: 177289

Is all PVC coax cable buryable? If not, what characteristic makes coax cable buryable? Specifically, I plan on getting an RG6 with quad shielding and I plan to bury about 15 feet of it. All I know about the jacket is that it is PVC.

Thanks for any info.
Al
KA5JGV

1592. Re: Coil winding formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 18:39:36 UTC
From: tom_bruhns@agilent.com
Message-ID: <8tpo17$b4d$1@nnrp1.deja.com>
Source record: 177290

Hahaha! And you consider than an _advantage_?? :-)

There's another similarly inexpensive program that works in inches,
and also makes it easy to use standard US machine screws for forming
the turns, if you wish. It gives an estimate of Q and self-resonances
as well, as I believe Reg's program does. (The two don't agree
exactly, but either should be close enough for any design work that
amateurs would normally be doing.) The "other" program is available
at http://www.saratogasoftware.com/pages/freesoft.htm

(It's also quite easy to put the old but very useful
L=(n^2*r^2/(9*r+10*l)) formula into a spreadsheet, and even munge it
around to accomodate mm, cm, inch, cubit, or whatever measurements. But
it's really nice to have the Q and self-resonance figures that the other
programs give, too.)

Cheers,
Tom

In article <8tpig5hcq1@neptunium.btinternet.com>,
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
> Rich, but I have to admit the Lightning Coil Calculator in
> North America has one undeniable great advantage - it works
> with inches and not millimetres - or perhaps both.
> ----
> Reg.
>
> **********
> Richard Harrison <richardharrison@webtv.net> wrote in
> message
> news:14508-3A0032E0-3@storefull-116.iap.bryant.webtv.net...
> > I wrote:
> > "I have a cardboard slide rule that does that and more."
> >
> > I think this used to be called the "Lightning Coil
> Calculator". Don`t
> > know if ARRL still sells it.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

1593. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 18:50:56 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tpomcboj1@nnrp1.deja.com>
Source record: 177291

In article <xGqL5.140376$g6.65758256@news2.rdc2.tx.home.com>,
dinod@deltanet.com (Dino) wrote:
> Another fool!
>

Are you saying that GW didn't say the quote below?

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1594. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:00:40 UTC
From: dennis@wawa.juniper.net
Message-ID: <8tpp8o$2vc8$1@heap.juniper.net>
Source record: 177296

VE9SRB <srbest@worldnet.att.net> wrote:
>The "Best Antennas" are NOT fractal antennas!
>
>Fractal antennas represent a class of electromagnetic radiators whose
>overall structure is comprised of a series of repetitions of a single
>geometry (the geometry basis), where each repetition is on different (or in
>some cases, the same) scale. Most fractal geometries are self-similar in
>that some portion of their geometry has the same shape as the overall
>geometry, only at a reduced scale.

Note that the definitions for "fractal" you quote are over-constrained.
A fractal has some characteristic which is invariant at several scales,
but that characteristic need not be a particular, unvarying shape. The
scale-invariant characteristic may instead be some statistical measure
of the geometry. For example, a cloud is often given as an example of
a fractal geometry in nature. Clouds are randomly shaped, so there is
no deterministic generator geometry which defines their "fractalness",
they are instead fractal because some statistical measure of the geometry
is invariant at several scales.

It hence isn't the case that your antennas are not fractal antennas
simply because they lack a fixed generator geometry. On the other hand,
it isn't the case that all bent-up shapes are fractals either. For the
shapes to be fractal there needs to be some characteristic which is
invariant at several scales.

>At this point, Chip is declaring that my antennas are fractal. I can only
>assume that this claim is made on the basis that the antennas are
>symmetrical in shape. If this is true, then Chip is stating that all
>symmetrical antennas are fractal. This would then mean that "fractal"
>antennas have been designed and used for well over 50 years and we have now
>just decided to call them "fractals" rather than symmetrical. This has
>serious implications for all IP and patent claims. One cannot have it both
>ways.

I don't think he is making the claim based on the symmetry of the
antenna (even deterministic fractals are often not symmetrical). The
real problem is that he is declaring the antennas to be fractal while
giving no hint at all about the scale-invariant characteristic on
which the declaration is based. Without a description of the latter
the declaration has no basis.

Dennis Ferguson

1595. WTB-SERVICE MANUAL

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:02:56 UTC
From: n2ion@aol.com
Message-ID: <20001101140256.05489.00000112@ng-cg1.aol.com>
Source record: 177292

I'M IN NEED OF A SERVICE MANUAL FOR A GE MASTER II 100W REPEATER.
EMAIL ME IF YOU HAVE ONE TO SELL

1596. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:04:38 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A006946.14F1A710@bigfoot.com>
Source record: 177294

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "From "The Science of Fractal Images"---."
>
> That definition is not clear to me. I need examples of what is
> self-similar and what is not and why.

The Mandelbrot set is self-similiar. The closer you look, the more little Mandelbrot characters you see.

A coastline is self-similiar. Just from the jagged line defining a coastline, it is difficult to say whether it appears that way from 30,000 ft or from 100 ft away.

A von Koch snowflake is somewhat like an antenna. The first stage looks like:

```
/\
/ \
/ \
/ \
-------- --------
```

There are four lines. Take each of those four lines and turn it into a smaller design like the above. You have 16 small lines. Take each of those 16 lines and turn each line into a smaller design like the above. You have 64 small lines. Keep it up to your heart's content. The smallest set of four lines will have the above form factor. The area occupied by the lines remains approximately the same while the total length of the lines gets larger and larger. Feed it in the middle and keep bending until it is resonant on the desired frequency.
--
http://www.mindspring.com/~w6rca

1597. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:24:17 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A006E85.21D835F0@bellatlantic.net>
Source record: 177295

I just looked at the Vectronics web site. The one shown there -
Vectronics model SWR-584 is NOT the MFJ 259B. It looks
like the older one - the MFJ 259 without the B

Mike Zabel wrote:

> Thanks Guys!
> This is just the info I needed. Looks like I will be getting a neat
> new toy. Experimenting should help my understanding of antennas a
> bit!
> 73 Mike Zabel KC5UOJ
>
> On Wed, 01 Nov 2000 13:10:25 GMT, Bob Miller <bamiller@texas.net>
> wrote:
>
> >mikezabel@uswest.net (Mike Zabel) wrote:
> >
> >>Hello,
> >>I just received the new sale flyer from Radio Shack and noticed an
> >>antenna analyzer on sale for $199.95 that looks exactly like the
> >>MFJ-259b. It has the Vectronics brand name and is Radio Shack item
> >>#9400683.
> >>I wondered if anyone has used the Vectronics unit and could verify if
> >>it has the same features as the 259b? I had no luck finding a manual
> >>to download for this unit on radioshack.com.
> >>I have been waiting to get an analyzer, but at this price I just may
> >>have an early Christmas present.
> >>All replys appreciated.
> >>
> >>73 Mike Zabel KC5UOJ
> >>In the mountains of New Mexico
> >
> >Well, recently MFJ bought out Vectronics, so it would be no surprise
> >if the units are the same or similar. Go to the Vectronics site,
> >www.vectronics.com and the MFJ site, www.mfjenterprises.com and you
> >can compare the units directly.
> >
> >Bob
> >k5qwg
> >

1598. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:36:25 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8tprbo$ed3$1@nnrp1.deja.com>
Source record: 177299

In article <t00o8v7kvh8r21@corp.supernews.com>,
"Al" <ABurzynski@swri.edu> wrote:
> Is all PVC coax cable buryable? If not, what characteristic makes
coax cable
> buryable? Specifically, I plan on getting an RG6 with quad shielding
and I
> plan to bury about 15 feet of it. All I know about the jacket is that
it is
> PVC.
>
> Thanks for any info.
> Al
> KA5JGV
>
>
Al, yes your RG-6 quad is buriable. There is a version designed for
underground. It is flooded cable. There is a sticky flooding compound
between the jacket and the braid. This will seal small nicks in the
jacket and help prevent moisture contamination.The flooded would be
preferable, but since it is a short run, you will probably be fine with
whatever you have.
73,
--
BillN6VLR

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1599. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:39:13 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tprjvefc1@iac5.navix.net>
Source record: 177297

How quick we forget...

I invented the internet
I was the model for love story
My mother pays more for her medicine than the same medicine for her dog
I voted for campaign reform (Before I was even in elected office)

ad nasium

Now would you care to quote the context of the Bush remark or shall I?

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8tpomcboj1@nnrp1.deja.com...
> In article <xGqL5.140376$g6.65758256@news2.rdc2.tx.home.com>,
> dinod@deltanet.com (Dino) wrote:
> > Another fool!
> >
>
> Are you saying that GW didn't say the quote below?
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1600. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:45:28 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A007378.10BC7D18@bellatlantic.net>
Source record: 177298

TTUL: Talk To yoU Later

"David J. Windisch" wrote:

> Yeh, been there, seen and used those. You can make small loops and other
> things more easily with materials which are a bit closer to self-supporting.
>
> What's 'TTUL'?
>
> 73, Dave, K3BHJ

1601. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:50:53 UTC
From: richardharrison@webtv.net
Message-ID: <14508-3A00741D-15@storefull-116.iap.bryant.webtv.net>
Source record: 177302

Cecil, W6RCA wrote:
"Take 4 lines. (comprising a design) Take each of those four lines and turn it into a smaller design like the above."

Now, that makes sense! Thanks, Cecil.

Best regards, Richard Harrison, KB5WZI

1602. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 19:53:09 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <Fw_L5.843$Vk6.155017@paloalto-snr1.gtei.net>
Source record: 177300

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8tpomcboj1@nnrp1.deja.com...
> In article <xGqL5.140376$g6.65758256@news2.rdc2.tx.home.com>,
> dinod@deltanet.com (Dino) wrote:
> > Another fool!
> >
>
> Are you saying that GW didn't say the quote below?
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com

He may have said it as part of a complete thought, but taken out of context
to put a liberal spin on it is typical.

To use your tactic, I could quote your post as:

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8tpomcboj1@nnrp1.deja.com...

"Not a crackhead anymore!"

---
73 de W6DKN

1603. READING THIS COULD CHANGE YOUR LIFE!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 20:11:57 UTC
From: ewald-kerkhoff@home.COM
Message-ID: <000801c04440$3a393fc0$86b24218@okfv1.bc.wave.home.com>
Source record: 177301
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0005_01C043FD.2BDC0400

charset="iso-8859-1"

DOC5024 4:54 PM Oct.31 2000
Message 3 of 4=20
=20
HOW TO TURN SIX DOLLARS INTO SIX THOUSAND DOLLARS: : READING THIS =
COULD CHANGE YOUR LIFE! IT DOES WORK! : I found this on a bulletin board =
and decided to try it. A little : while back, I was browsing through =
newsgroups, just like you are now, : and came across an article similar =
to this that said you could make : thousands of dollars within weeks =
with only an initial investment of : $6.00! So I thought, "Yeah right, =
this must be a scam", but : like most of us, I was curious, so I kept =
reading. Anyway, it said : that you send $1.00 to each of the 6 names =
and address stated in the : article. You then place your own name and =
address in the bottom of : the list at #6, and post the article in at =
least 200 newsgroups. : (There are thousands) No catch, that was it. So =
after thinking it : over, and talking to a few people first, I thought =
about trying it. I : figured: "what have I got to lose except 6 stamps =
and $6.00, : right?" Then I invested the measly $6.00. Well GUESS =
WHAT!?... : within 7 days, I started getting money in the mail! I was =
shocked! I : figured it would end soon, but the money just kept coming =
in. In my : first week, I made about $25.00. By the end of the second =
week I had : made a total of over $1,000.00! In the third week I had =
over : $10,000.00 and it's still growing. This is now my fourth week and =
I : have made a total of just over $42,000.00 and it's still coming in : =
rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more : =
than that on the lottery!! Let me tell you how this works and most : =
importantly, WHY it works... Also, make sure you print a copy of this : =
article NOW, so you can get the information off of it as you need it. : =
I promise you that if you follow the directions exactly, that you : will =
start making more money than you thought possible by doing : something =
so easy! : Suggestion: Read this entire message carefully! (print it out =
or : download it.) Follow the simple directions and watch the money come =
: in! : It's easy. It's legal. And, your investment is only $6.00 (Plus =
: postage) : IMPORTANT: This is not a rip-off; it is not indecent; it is =
not : illegal; and it is 99% no risk - it really works! : If all of the =
following instructions are adhered to, you will receive : extraordinary =
dividends. : PLEASE NOTE: : Please follow these directions EXACTLY, and =
$50,000 or more can be : yours in 20 to 60 days. This program remains =
successful because of : the honesty and integrity of the participants. =
```

Please continue its : success by carefully adhering to the instructions. =
: You will now become part of the Mail Order business. In this business =
: your product is not solid and tangible, it's a service. You are in : =
the business of developing Mailing Lists. Many large corporations are : =
happy to pay big bucks for quality lists. However, the money made : from =
the mailing lists is secondary to the income which is made from : people =
like you and me asking to be included in that list. : Here are the 4 =
easy steps to success: : STEP 1: Get 6 separate pieces of paper and =
write the following on : each piece of paper "PLEASE PUT ME ON YOUR =
MAILING LIST." Now : get 6 US $1.00 bills and place ONE inside EACH of =
the 6 pieces of : paper so the bill will not be seen through the =
envelope (to prevent : thievery). Next, place one paper in each of the 6 =
envelopes and seal : them. You should now have 6 sealed envelopes, each =
with a piece of : paper stating the above phrase, your name and address, =
and a $1.00 : bill. What you are doing is creating a service. THIS IS =
ABSOLUTELY : LEGAL! You are requesting a legitimate service and you are =
paying for : it! Like most of us I was a little skeptical and a little =
worried : about the legal aspects of it all. So I checked it out with =
the U.S. : Post Office (1-800-725-2161) and they confirmed that it is =
indeed : legal. Mail the 6 envelopes to the following addresses: : #1)=20

E. Benford : 6656 Mableton Pwky APT.#D4 : Mableton, GA.. 30126 : =
#2) Kim Williams : 3334 Kingsland Avenue : Bronx, NY 10469 : #3) Yury =
Konev : 823 Pavonia Avenue : Jersey City, NJ 07306 : #4 A. Campbell : =
P.O. Box 432 : Nellysford, VA.. 22958 : #5B. Page. PO Box 5024 Kendall =
Park NJ 08824 #6 Ewald Kerkhoff site 41 comp. 30 Penticton, B.C. V2A =
7K8 Canada : STEP 2: Now take the #1 name off the list that you see =
above, move : the other names up (6 becomes 5, 5 becomes 4, etc...) and =
add YOUR : Name as number 6 on the list. : STEP 3: Change anything you =
need to, but try to keep this article as : close to original as =
possible. Now, post your amended article to at : least 200 newsgroups. =
(I think there are close to 24,000 groups) All : you need is 200, but =
remember, the more you post, the more money you : make! You won't get =
very much unless you post like crazy. :) : This is perfectly legal! If =
you have any doubts, refer to Title 18 : Sec. 1302 & 1341 of the Postal =
lottery laws. : Keep a copy of these steps for yourself and, whenever =
you need money, : you can use it again, and again. : PLEASE REMEMBER =
that this program remains successful because of the : honesty and =
integrity of the participants and by their carefully : adhering to the =
directions. Look at it this way. If you are of : integrity, the program =
will continue and the money that so many : others have received will =
come your way. : NOTE: You may want to retain every name and address =
sent to you, : either on a computer or hard copy and keep the notes =
people send you. : This VERIFIES that you are truly providing a service. =
(Also, it might : be a good idea to wrap the $1 bill in dark paper to =
reduce the risk : of mail theft.) : So, as each post is downloaded and =
the directions carefully followed, : six members will be reimbursed for =
their participation as a List : Developer with one dollar each. Your =
name will move up the list : geometrically so that when your name =
reaches the #1 position you will : be receiving thousands of dollars in =

CASH!!! What an opportunity for : only $6.00 ($1.00 for each of the =
first six people listed above) Send : it now, add your own name to the =
list and you're in business! : ---DIRECTIONS ----- FOR HOW TO POST TO =
NEWSGROUPS---------- : Step 1) You do not need to re-type this entire =
letter to do your own : posting. Simply put your cursor at the beginning =
of this letter and : drag your cursor to the bottom of this document, =
and select 'copy' : from the edit menu. This will copy the entire letter =
into the : computer's memory. : Step 2) Open a blank 'notepad' file and =
place your cursor at the top : of the blank page. From the 'edit' menu =
select 'paste'. This will : paste a copy of the letter into notepad so =
that you can add your name : to the list. Step 3) Save your new notepad =
file as a .txt file. If : you want to do your postings in different =
settings, you'll always : have this file to go back to. : Step 4) Use =
Netscape or Internet explorer and try searching for : various newsgroups =
(on-line forums, message boards, chat sites, : discussions.) : Step 5) =
Visit these message boards and post this article as a new : message by =
highlighting the text of this letter and selecting paste : from the edit =
menu. Fill in the Subject, this will be the header that : everyone sees =
as they scroll through the list of postings in a : particular group, =
click the post message button. You're done with : your first one! =
Congratulations...THAT'S IT! All you have to do is : jump to different =
newsgroups and post away, after you get the hang of : it, it will take =
about 30 seconds for each newsgroup! **REMEMBER, THE : MORE NEWSGROUPS =
YOU POST IN, THE MORE MONEY YOU WILL MAKE! BUT : YOU HAVE TO POST A =
MINIMUM OF 200** That's it! You will begin receiving : money from around =
the world within days! You may eventually want to : rent a P.O.Box due =
to the large amount of mail you will receive. If : you wish to stay =
anonymous, you can invent a name to use, as long as : the postman will =
deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE : CORRECT.** : Now, : =
each of the 5 persons who just sent me $1.00 make the MINIMUM 200 : =
postings, each with my name at #5 and only 5 persons respond to each : =
of the original 5, that is another $25.00 for me, now those 25 each : =
make 200 MINIMUM posts with my name at #4 and only 5 replies each, I : =
will bring in an additional $125.00! Now, those 125 persons turn : =
around and post the MINIMUM 200 with my name at #3 and only receive 5 : =
replies each, I will make an additional $625.00! OK, now here is the : =
fun part, each of those 625 persons post a MINIMUM 200 letters with : my =
name at #2 and they each only receive 5 replies, that just made me : =
$3,125.00!!! Those 3,125 persons will all deliver this message to 200 : =
newsgroups with my name at #1 and if still 5 persons per 200 : =
newsgroups react I will receive $15,625,00! With an original : =
investment of only $6.00! AMAZING! When your name is no longer on the : =
list, you just take the latest posting in the newsgroups, and send : out =
another $6.00 to names on the list, putting your name at number 6 : =
again. And start posting again. The thing to remember is: do you : =
realize that thousands of people all over the world are joining the : =
internet and reading these articles everyday?, JUST LIKE YOU are : now!! =
So, can you afford $6.00 and see if it really works?? I think : so... =
People have said, "what if the plan is played out and no : one sends you =
the money? So what! What are the chances of that : happening when there =

are tons of new honest users and new honest : people who are joining the =
internet and newsgroups everyday and are : willing to give it a try? =
Estimates are at 20,000 to 50,000 new : users, every day, with thousands =
of those joining the actual : internet. Remember, play FAIRLY and =
HONESTLY and this will really : work.=20
=20

=20

------=_NextPart_000_0005_01C043FD.2BDC0400

charset="iso-8859-1"

DOC5024 4:54 PM =
Oct.31=20
2000

Message 3 of =

4=20

HOW TO =
TURN SIX=20
DOLLARS INTO SIX THOUSAND DOLLARS: : READING THIS COULD CHANGE =
YOUR LIFE!=20
IT DOES WORK! : I found this on a bulletin board and decided to =
try it. A=20
little : while back, I was browsing through newsgroups, just like =
you are=20
now, : and came across an article similar to this that said you =
could make=20
: thousands of dollars within weeks with only an initial =
investment of :=20
$6.00! So I thought, "Yeah right, this must be a scam", but : like =
most of=20
us, I was curious, so I kept reading. Anyway, it said : that you =
send=20
$1.00 to each of the 6 names and address stated in the : article. =
You then=20
place your own name and address in the bottom of : the list at #6, =
and=20
post the article in at least 200 newsgroups. : (There are =
thousands) No=20
catch, that was it. So after thinking it : over, and talking to a =
few=20
people first, I thought about trying it. I : figured: "what have I =
got to=20
lose except 6 stamps and $6.00, : right?" Then I invested the =
measly=20
$6.00. Well GUESS WHAT!?... : within 7 days, I started getting =
money in=20
the mail! I was shocked! I : figured it would end soon, but the =

money just=20
kept coming in. In my : first week, I made about $25.00. By the =
end of the=20
second week I had : made a total of over $1,000.00! In the third =
week I=20
had over : $10,000.00 and it's still growing. This is now my =
fourth week=20
and I : have made a total of just over $42,000.00 and it's still =
coming in=20
: rapidly. It's certainly worth $6.00, and 6 stamps, I have spent =
more :=20
than that on the lottery!! Let me tell you how this works and most =
:=20
importantly, WHY it works... Also, make sure you print a copy of =
this :=20
article NOW, so you can get the information off of it as you need =
it. : I=20
promise you that if you follow the directions exactly, that you : =
will=20
start making more money than you thought possible by doing : =
something so=20
easy! : Suggestion: Read this entire message carefully! (print it =
out or :=20
download it.) Follow the simple directions and watch the money =
come : in!=20
: It's easy. It's legal. And, your investment is only $6.00 (Plus =
:=20
postage) : IMPORTANT: This is not a rip-off; it is not indecent; =
it is not=20
: illegal; and it is 99% no risk - it really works! : If all of =
the=20
following instructions are adhered to, you will receive : =
extraordinary=20
dividends. : PLEASE NOTE: : Please follow these directions =
EXACTLY, and=20
$50,000 or more can be : yours in 20 to 60 days. This program =
remains=20
successful because of : the honesty and integrity of the =
participants.=20
Please continue its : success by carefully adhering to the =
instructions. :=20
You will now become part of the Mail Order business. In this =
business :=20
your product is not solid and tangible, it's a service. You are in =
: the=20
business of developing Mailing Lists. Many large corporations are =
: happy=20
to pay big bucks for quality lists. However, the money made : from =
the=20
mailing lists is secondary to the income which is made from : =

people like=20
you and me asking to be included in that list. : Here are the 4 =
easy steps=20
to success: : STEP 1: Get 6 separate pieces of paper and write the =

following on : each piece of paper "PLEASE PUT ME ON YOUR MAILING =
LIST."=20
Now : get 6 US $1.00 bills and place ONE inside EACH of the 6 =
pieces of :=20
paper so the bill will not be seen through the envelope (to =
prevent :=20
thievery). Next, place one paper in each of the 6 envelopes and =
seal :=20
them. You should now have 6 sealed envelopes, each with a piece of =
: paper=20
stating the above phrase, your name and address, and a $1.00 : =
bill. What=20
you are doing is creating a service. THIS IS ABSOLUTELY : LEGAL! =
You are=20
requesting a legitimate service and you are paying for : it! Like =
most of=20
us I was a little skeptical and a little worried : about the legal =
aspects=20
of it all. So I checked it out with the U.S. : Post Office=20
(1-800-725-2161) and they confirmed that it is indeed : legal. =
Mail the 6=20
envelopes to the following addresses: : #1)

E. Benford =
: 6656=20
Mableton Pwky APT.#D4 : Mableton, GA.. 30126 : #2) Kim Williams : =
3334=20
Kingsland Avenue : Bronx, NY 10469 : #3) Yury Konev : 823 Pavonia =
Avenue :=20
Jersey City, NJ 07306 : #4 A. Campbell : P.O. Box 432 : =
Nellysford, VA..=20
22958 : #5B. Page. PO Box 5024 Kendall Park NJ 08824 #6 Ewald =
Kerkhoff=20
site 41 comp. =
30 Penticton, B.C. V2A 7K8 =
Canada :=20
STEP 2: Now take the #1 name off the list that you see above, move =
: the=20
other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR : =
Name as=20
number 6 on the list. : STEP 3: Change anything you need to, but =
try to=20
keep this article as : close to original as possible. Now, post =
your=20
amended article to at : least 200 newsgroups. (I think there are =
close to=20

24,000 groups) All : you need is 200, but remember, the more you =
post, the=20
more money you : make! You won't get very much unless you post =
like crazy.=20
:) : This is perfectly legal! If you have any doubts, refer to =
Title 18 :=20
Sec. 1302 & 1341 of the Postal lottery laws. : Keep a copy of =
these=20
steps for yourself and, whenever you need money, : you can use it =
again,=20
and again. : PLEASE REMEMBER that this program remains successful =
because=20
of the : honesty and integrity of the participants and by their =
carefully=20
: adhering to the directions. Look at it this way. If you are of : =

integrity, the program will continue and the money that so many : =
others=20
have received will come your way. : NOTE: You may want to retain =
every=20
name and address sent to you, : either on a computer or hard copy =
and keep=20
the notes people send you. : This VERIFIES that you are truly =
providing a=20
service. (Also, it might : be a good idea to wrap the $1 bill in =
dark=20
paper to reduce the risk : of mail theft.) : So, as each post is=20
downloaded and the directions carefully followed, : six members =
will be=20
reimbursed for their participation as a List : Developer with one =
dollar=20
each. Your name will move up the list : geometrically so that when =
your=20
name reaches the #1 position you will : be receiving thousands of =
dollars=20
in CASH!!! What an opportunity for : only $6.00 ($1.00 for each of =
the=20
first six people listed above) Send : it now, add your own name to =
the=20
list and you're in business! : ---DIRECTIONS ----- FOR HOW TO POST =
TO=20
NEWSGROUPS---------- : Step 1) You do not need to re-type this =
entire=20
letter to do your own : posting. Simply put your cursor at the =
beginning=20
of this letter and : drag your cursor to the bottom of this =
document, and=20
select 'copy' : from the edit menu. This will copy the entire =
letter into=20
the : computer's memory. : Step 2) Open a blank 'notepad' file and =

place=20
your cursor at the top : of the blank page. From the 'edit' menu =
select=20
'paste'. This will : paste a copy of the letter into notepad so =
that you=20
can add your name : to the list. Step 3) Save your new notepad =
file as a=20
.txt file. If : you want to do your postings in different =
settings, you'll=20
always : have this file to go back to. : Step 4) Use Netscape or =
Internet=20
explorer and try searching for : various newsgroups (on-line =
forums,=20
message boards, chat sites, : discussions.) : Step 5) Visit these =
message=20
boards and post this article as a new : message by highlighting =
the text=20
of this letter and selecting paste : from the edit menu. Fill in =
the=20
Subject, this will be the header that : everyone sees as they =
scroll=20
through the list of postings in a : particular group, click the =
post=20
message button. You're done with : your first one!=20
Congratulations...THAT'S IT! All you have to do is : jump to =
different=20
newsgroups and post away, after you get the hang of : it, it will =
take=20
about 30 seconds for each newsgroup! **REMEMBER, THE : MORE =
NEWSGROUPS YOU=20
POST IN, THE MORE MONEY YOU WILL MAKE! BUT : YOU HAVE TO POST A =
MINIMUM OF=20
200** That's it! You will begin receiving : money from around the =
world=20
within days! You may eventually want to : rent a P.O.Box due to =
the large=20
amount of mail you =
will=20
receive. If : you wish to stay anonymous, you can invent a name to =
use, as=20
long as : the postman will deliver it. **JUST MAKE SURE ALL THE =
ADDRESSES=20
ARE : CORRECT.** : Now, : each of the 5 persons who just sent me =
$1.00=20
make the MINIMUM 200 : postings, each with my name at #5 and only =
5=20
persons respond to each : of the original 5, that is another =
$25.00 for=20
me, now those 25 each : make 200 MINIMUM posts with my name at #4 =
and only=20

5 replies each, I : will bring in an additional $125.00! Now, =
those 125=20
persons turn : around and post the MINIMUM 200 with my name at #3 =
and only=20
receive 5 : replies each, I will make an additional $625.00! OK, =
now here=20
is the : fun part, each of those 625 persons post a MINIMUM 200 =
letters=20
with : my name at #2 and they each only receive 5 replies, that =
just made=20
me : $3,125.00!!! Those 3,125 persons will all deliver this =
message to 200=20
: newsgroups with my name at #1 and if still 5 persons per 200 :=20
newsgroups react I will receive $15,625,00! With an original : =
investment=20
of only $6.00! AMAZING! When your name is no longer on the : list, =
you=20
just take the latest posting in the newsgroups, and send : out =
another=20
$6.00 to names on the list, putting your name at number 6 : again. =
And=20
start posting again. The thing to remember is: do you : realize =
that=20
thousands of people all over the world are joining the : internet =
and=20
reading these articles everyday?, JUST LIKE YOU are : now!! So, =
can you=20
afford $6.00 and see if it really works?? I think : so... People =
have=20
said, "what if the plan is played out and no : one sends you the =
money? So=20
what! What are the chances of that : happening when there are tons =
of new=20
honest users and new honest : people who are joining the internet =
and=20
newsgroups everyday and are : willing to give it a try? Estimates =
are at=20
20,000 to 50,000 new : users, every day, with thousands of those =
joining=20
the actual : internet. Remember, play FAIRLY and HONESTLY and this =
will=20
really : work.

------=_NextPart_000_0005_01C043FD.2BDC0400--

1604. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 20:20:16 UTC
From: richardharrison@webtv.net
Message-ID: <14510-3A007B00-2@storefull-116.iap.bryant.webtv.net>
Source record: 177304

Andrew Young wropte:
"WOW how much free space do you have?"

Andrew`s 50 ft by 15 ft antenna space might work almost like free space were he to scale down the rhombic by a factor of 100 except for the antenna support poles which remain at 60 feet. The rhombic should then deliver very nearly the predicted 11 dbd gain at 3 Gigahertz.

Best regards, Richard Harrison, KB5WZI

1605. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 20:33:18 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tpumehct1@nnrp1.deja.com>
Source record: 177303

In article <8tprjvefc1@iac5.navix.net>,
"Fred Hambrecht" <Fred@w4jle.com> wrote:
> How quick we forget...
>
> I invented the internet

Well, Al Gore never said he invented the internet. Please post the
exact quote to back-up your statement. YOU CAN'T! IT NEVER HAPPENED!

>
> Now would you care to quote the context of the Bush remark or shall I?
>

I gave you the context before, but I will do it again in the hopes that
you will be more receptive this time.

A web site, http://www.gwbush.com , was giving GW Bush a pretty hard
time on their web site. Bush was confronted about it by reporters. GW
BUSH made the now infamous statement listed below. He was saying that
the web site should not be able to use his name to bash him on the
internet. GW wanted to limit his freedom to publish a parity site
about GW.

Now, post the quote from Al Gore that said as you say "he invented the
internet."

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1606. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 20:35:19 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tpuq6hfs1@nnrp1.deja.com>
Source record: 177305

In article <Fw_L5.843$Vk6.155017@paloalto-snr1.gtei.net>,
"Dan K Nelson" <w6dkn@qsl.net> wrote:
>
> He may have said it as part of a complete thought, but taken out of
context
> to put a liberal spin on it is typical.
>

Alright, put it in context! I have posted what the complete thought is
and you have just refused to believe it. YOU put it in context as to
not allow a "liberal" spin on it.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1607. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 20:42:09 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tpv70$hv0$1@nnrp1.deja.com>
Source record: 177306

In article <Fw_L5.843$Vk6.155017@paloalto-snr1.gtei.net>,
"Dan K Nelson" <w6dkn@qsl.net> wrote:

> He may have said it as part of a complete thought, but taken out of
context
> to put a liberal spin on it is typical.
>
> To use your tactic, I could quote your post as:

Since you were unwilling to research it for yourself, I did a little
work for you. Here is the news story by the Dallas Morning News. Go
read it for yourself and THEN andn ONLY THEN say I took it out of
context.

http://www.dallasnews.com/specials/bush_campaign/0522bush1bushsite.htm

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1608. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 21:21:24 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tq1h8$94o$1@bob.news.rcn.net>
Source record: 177307

"Al" <ABurzynski@swri.edu> wrote in message
news:t00o8v7kvh8r21@corp.supernews.com...
> Is all PVC coax cable buryable? If not, what characteristic makes coax
cable
> buryable? Specifically, I plan on getting an RG6 with quad shielding and I
> plan to bury about 15 feet of it. All I know about the jacket is that it
is
> PVC.

Use electrical PVC conduit to protect the cable. The conduit will also
allow you to remove and replace the coax at will with out redigging the
trench.

Peter

>
> Thanks for any info.
> Al
> KA5JGV
>

1609. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 22:06:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0093E1.60E996B@eznec.com>
Source record: 177308

It's a common misconception that an antenna mounted high above ground will act like an antenna in free space. This is true only if there's no path from the antenna to the observation point (where the antenna pattern is observed) via reflection from the ground. This might be the case, for example, for a highly directive antenna mounted on a hilltop when observed from another nearby hilltop located in the main beam. But overall, the pattern of a very high antenna has many, many lobes and looks nothing like a free space pattern. Ground reflection doesn't cease as you get higher -- it just occurs farther and farther from the antenna for a given elevation angle. In practice, ground irregularities, multipath, and so forth will fill in and/or move the pattern nulls. And the flat-ground approximation used by the modeling programs will become increasingly inaccurate as the height is increased to the point where the Earth's curvature is significant. But even with these considerations, the pattern of an antenna mounted high above the ground is very different from that of a free space antenna.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Andrew Young wropte:
> "WOW how much free space do you have?"
>
> Andrew`s 50 ft by 15 ft antenna space might work almost like free space
> were he to scale down the rhombic by a factor of 100 except for the
> antenna support poles which remain at 60 feet. The rhombic should then
> deliver very nearly the predicted 11 dbd gain at 3 Gigahertz.
>
> Best regards, Richard Harrison, KB5WZI

1610. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 22:24:39 UTC
From: fractenna@aol.com
Message-ID: <20001101172439.01154.00000069@ng-cc1.aol.com>
Source record: 177309

>This, however, is NOT the principle mechanism of discussion with the
>popular conception of fractal antennas (

Mr. Clark is incorrect.

Even the very first fractal antenna article made a point of staing--and showing--that log periodic antenna arrays are fractals, and that this was very much not an extension, but a realization. of the discussion of fractal ELEMENTS.

Nathan Cohen, Ph.D.

1611. Re: Fractal Geometry Significant ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 22:45:48 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A009D1C.1E03C925@uci.edu>
Source record: 177310

Fractenna wrote:

> >Fractenna wrote:
> >> I don't understand. The journals I am thinkling about are peer-reviewed.
> >> I don't know what else I can add to clarify this.

> >The names of the journals?

> I will be happy to tell you the name after acceptance of the MS. Frankly, in 25
> years of scientific publishing, no layman has asked me such a question.

Only clergy? Preposterous.

> Just
> out of curiousity, why is it important for you to know this?

The more interesting question is why is it important for you to be
secretive about it.

You wanted to know what you could add to clarify, and I suggested that
the names of the journals might do it. Each type journal has its own
type of review process. The names of the journals would allow us to
know the type of review your MS will undergo.

1612. Re: 1/4 wave Vs. 1/2 wave mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 23:05:17 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A00A1AD.1F18@wt.net>
Source record: 177311

Scott wrote:
>
> I was wondering if there would be any advantage to using a continuously
> loaded 1/2 wave antenna (wound on a 9 foot length of fiberglass) over
> using a straight 1/4 wave whip on 10 meters? Would winding the 1/2 wave
> on a 9 foot section be too short to provide any benefits of the 1/4
> wave? Is shunt fed the best way to feed the 1/2 wave?
>
> Scott.

I'm just guessing, but I would think would depend on how good the radial or ground system is underneath the radiator. If the radial system was good, I don't think it would make much difference. If the radial system was poor or non existent I would think the short 1/2 wl ant "could" be better. It is pretty much complete in itself, and wouldn't "require" radials to operate. An example of this is the short glass antennas, and some of the 1/2 wl HT antennas. But, I don't think the gain of the short 1/2 wave would equal the full size halfwave.
Being it's about 1/4 wl in actual length , I'd think the gain about the same as the 1/4 wave, except a little different current distribution. MK
--
http://web.wt.net/~nm5k

1613. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-01 23:18:06 UTC
From: richardharrison@webtv.net
Message-ID: <19782-3A00A4AE-25@storefull-111.iap.bryant.webtv.net>
Source record: 177312

Roy Lewallen wrote:
"It`s a common misconception that an antenna mounted high above ground
will act like an antenna in free space."

Of course, if ground is around to produce a reflection it will affect
propagation of a wave.
It won`t have much effect on gain and directivity of a rhombic looking
like a reshaped coathanger atop a 60-ft wooden pole operating at 3 GHz.
This antenna will act as an antenna in free space. The receiver may very
well get a direct signal and a reflected signal from the ground. Dry
ground is usually not too good as a 3 GHz reflector, but the reflection
point will be far from the antenna and have more to do with performance
of a point to point path than the attributes of the antenna.

Best regards, Richard Harrison, KB5WZI

1614. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 00:12:51 UTC
From: Barry Ornitz <ornitz@dpnet.net>
Message-ID: <Uk2M5.2447$qP1.1828511@news-west.usenetserver.com>
Source record: 177313

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:1609-3A001B7F-11@storefull-113.iap.bryant.webtv.net...
> Barry, WA4VZQ wrote:
> "Remember I was talking about a short base-loaded whip, like most CB
> antennas for trunk or roof mount."
>
> Kevin, the original questioner, wrote:
> "1) Can you recommend a 10 meter antenna to me?"
>
> Jeff gave the first response:
> "On antennas. For under $29.00, use a Francis 108" whip and add a little
> length to it."
>
> We are all free to be responsive or divert the discussion. We are also
> free to tease CBers by suggesting their antennas need more length.
>
> My point was that the ordinary stainless 108-inch CB antenna was pretty
> good at 10 and 11 meters, and that other materials would not make enough
> improvement to be worth the trouble.

Since Richard wants to be offended, so be it. He obviously did not read my posts in detail. At no point did I fault a full quarter wave whip. My first post was to agree with Bill Nelson who pointed out that KG4FET's statement that a Wilson 1000 magnetic-mount antenna (I have never seen a magnetic mount 108 inch whip) had a 2:1 VSWR bandwidth of 3 MHz is just not possible without this antenna being quite lossy.

My example showed how a shortened antenna could perform almost as well as a full sized one, but at the expense of an extremely small bandwidth.

In the case of the Wilson 1000 antenna KG4FET suggested, the length is 54 inches of precipitation hardening 17-4 stainless. At DC this has approximately 52 times the resistivity of copper. At RF the ratio will be even higher. With only about 6.4 ohms feed impedance, an extra ohm or two of resistance will do a lot to widen the bandwidth - at the expense of efficiency.

A full sized quarter-wave whip will have about six times the feed impedance of the Wilson KG4FET suggested. An extra ohm or two or resistance due to stainless here is a far small percentage and the added loss will be minimal.

73, Barry L. Ornitz WA4VZQ

1615. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 00:37:31 UTC
From: Alex Wiecek VE3GOP <alexwiecek@my-deja.com>
Message-ID: <8tqd0buhn1@nnrp1.deja.com>
Source record: 177315
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dwight, first of all it's not a group but a society. Something that's equivalent to your ARRL, though a lot smaller but it's an organization with the same purpose as ARRL.

Second, as many have pointed out, why not? There is quite a large group here in Toronto with their roots in Poland, may it be first or second generation Canadians. They would simply like to celebrate the 75th anniversary not only amongst themselves but also with their polish ham friends in Poland and those scattered around the world. Many of them were active members of PZK (Polish Ham Radio Society) and being 4000 miles away from Poland, for one reason or another, are not able to participate in PZK's activities in full capacity.

73's Alex VE3GOP

In article <39FFF4F2.F48620EC@sccoast.net>,
stewartx@sccoast.net wrote:
> Alex Wiecek VE3GOP wrote:
> >
> > [snip] The purpose of this activity is
> > to present a petition to the Industry
> > Canada to obtain a temporary special
> > event callsign to commemorate the 75th
> > aniversary of the Polish Ham Radio
> > Society in Poland. [snip]
>
> I hope you don't mind a dumb question but, if you're Canadian, why
> would you commemorate the aniversary of a radio group in Poland?
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1616. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 00:44:32 UTC
From: n7ws@azstarnet.com
Message-ID: <3a00b8e7.209503061@news.azstarnet.com>
Source record: 177314

On Wed, 1 Nov 2000 18:18:06 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Roy Lewallen wrote:
>"It`s a common misconception that an antenna mounted high above ground
>will act like an antenna in free space."
>
>Of course, if ground is around to produce a reflection it will affect
>propagation of a wave.
>It won`t have much effect on gain and directivity of a rhombic looking
>like a reshaped coathanger atop a 60-ft wooden pole operating at 3 GHz.
>This antenna will act as an antenna in free space. The receiver may very
>well get a direct signal and a reflected signal from the ground. Dry
>ground is usually not too good as a 3 GHz reflector, but the reflection
>point will be far from the antenna and have more to do with performance
>of a point to point path than the attributes of the antenna.
>
>Best regards, Richard Harrison, KB5WZI

Sixty feet is about 20 lambda at 3GHz. Suggest you model an antenna 20 lambda high and report back.

No way is it anything like free space.

Wes
>

1617. Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:08:28 UTC
From: Gerry Welford <gerard.welford@xtra.co.nz>
Message-ID: <f83M5.607$Gd0e.13500519@news.xtra.co.nz>
Source record: 177316

We here in N.Z. have a three wire system in our mains supply. I am not an electrician so I don't know the correct terminology but I do know that one wire is the phase or hot wire, one is the neutral and the third is the earth.
Now I have always believed that a good earth is essential for the antenna/earth system but I have now been told that a separate earth in the shack as separate from the electrical household wiring earth will create all sorts of problems with earth loops (whatever they are) and that you can even get a belt from your rig to the shack earth. Any comments from experts please and no quips about being down to earth.
Cheers.....Gerry ZL1AWW Auckland New Zealand.

1618. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:17:23 UTC
From: richardharrison@webtv.net
Message-ID: <1609-3A00C0A3-77@storefull-113.iap.bryant.webtv.net>
Source record: 177119

Roy Lewallen wrote:
"---the pattern of an antenna mounted high above the ground is very
different from that of a free space antenna."

Free space antenna gains are used in point-to-point path calculations
for terrestrial radio circuits. Real world measurements match
calculations to the decibel during normal propagation.

So, the antennas must be operating as if they were in free space.

Reflection at the path grazing point could affect signal levels. To
minimize this effect, the path is often engineered for 0.6 Fresnel zone
clearance, which would be neutral to path loss. The ringer is, of
course, that a certain atmospheric refraction index is needed to produce
the exact clearance, But the usual practices work very well anyway.

Best regards, Richard Harrison, KB5WZI

1619. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:18:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A00C0CE.E1A29BFE@eznec.com>
Source record: 177317

For sure, the feedpoint impedance, current distribution, and efficiency of an antenna this high will be virtually the same as for the same antenna in free space. The gain, directivity, and pattern shape definitely will not, as I pointed out in my earlier posting.

What properties do you consider to be "attributes of the antenna" and which aren't? Are these attributes independent of the antenna's environment?

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "It`s a common misconception that an antenna mounted high above ground
> will act like an antenna in free space."
>
> Of course, if ground is around to produce a reflection it will affect
> propagation of a wave.
> It won`t have much effect on gain and directivity of a rhombic looking
> like a reshaped coathanger atop a 60-ft wooden pole operating at 3 GHz.
> This antenna will act as an antenna in free space. The receiver may very
> well get a direct signal and a reflected signal from the ground. Dry
> ground is usually not too good as a 3 GHz reflector, but the reflection
> point will be far from the antenna and have more to do with performance
> of a point to point path than the attributes of the antenna.
>
> Best regards, Richard Harrison, KB5WZI

1620. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:22:30 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8tqfko$1po$1@bob.news.rcn.net>
Source record: 177318

"Gerry Welford" <gerard.welford@xtra.co.nz> wrote in message
news:f83M5.607$Gd0e.13500519@news.xtra.co.nz...
> We here in N.Z. have a three wire system in our mains supply. I am not an
> electrician so I don't know the correct terminology but I do know that one
> wire is the phase or hot wire, one is the neutral and the third is the
> earth.
> Now I have always believed that a good earth is essential for the
> antenna/earth system but I have now been told that a separate earth in the
> shack as separate from the electrical household wiring earth will create
all
> sorts of problems with earth loops (whatever they are) and that you can
> even get a belt from your rig to the shack earth. Any comments from
experts
> please and no quips about being down to earth.
> Cheers.....Gerry ZL1AWW Auckland New Zealand.
>
>

The electrical "earth" should be connected to an outside groundrod via a
ground wire from the electrical panel.

Your electrical "ground" is a safety ground, it is not intended for RF
"grounding" or heavy-duty lightning protection. Simply put,
your electrical wiring is much too long to provide an effective antenna
ground, it simply has too much inductance to "ground" RF energy.

Your ham cables should be properly grounded to an outside ground
rod using suitable protectors that offer tranverse and longitudinal
protection.

All ground rods should be electrically joined together.

Most of this applies to US standards, NZ electrical codes may be
entirely different. I suggest you visit the PolyPhaser website and
read their material regarding proper grounding techiques.

73

Pete

1621. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:44:47 UTC
From: richardharrison@webtv.net
Message-ID: <1609-3A00C70F-79@storefull-113.iap.bryant.webtv.net>
Source record: 177122

Wes, N7WS wrote:
"Sixty feet is about 20 lambda at 3 GHz."

Let`s make the math easy.
150 MHz is 2M.
300 MHz is 1M.
3 GHz is 10 cm.
10 cm is about 4 in.
2.54 cm = 1 in.
60 ft is 720 in.
720 in / 4 in = 180 wavelengths.

Correction: Sixty feet is about 180 lambda at 3 GHZ.

A signal loses 22db in its first wavelength of travel and an additional 6 db every time the distance traveled doubles after the initial loss of the first wavelength`s travel. Any signal reflected from a surface 180 wavelengths away will be insignificant in its interaction with the radiating element. Mutual impedance is insignificant.

The antenna will behave as if in free space.

Best regards, Richard Harrison, KB5WZI

1622. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 01:57:59 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3a00ca6f_1@news2.one.net>
Source record: 177120

Your resorting to name calling tells me a lot about you, Dino. I notice
that you had to do that in more than one post.

Open your eyes. Do you even know what I'm talking about? Do you know about
the games "W" tried to play within the NY Republican party? Do you know
about the lawsuits he filed on Long Island to try to keep recognized,
respected opponents off the ballot?

I can't think of a more solid reason for voting against "W". How could you
vote for that man for President when he has *demonstrated* that he will
fight *against* democracy if it gets him what he wants?

... Rich

"Dino" <dinod@deltanet.com> wrote in message
news:aDqL5.140328$g6.65750483@news2.rdc2.tx.home.com...
> Rich, you're a fool. And toanswer your question....YES! W is for
> personal freedom.
>
> Dino
>
> >George Bush conspired with Gov. Pataki to keep John McCain, Steve Forbes,
> >and his other competitors off the ballot in the Republican primary in New
> >York State. They nearly succeeded until a federal judge embarrassed them
> >into giving up this crassly antidemocratic effort.
> >
> >If Bush had his way, you would have no vote. His would be the only name
on
> >the ballot.
> >
> >And you think he's for personal freedoms?
> >
> >... Rich
>

1623. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:02:20 UTC
From: Jerry France <grf@ctaz.com>
Message-ID: <3A00CB1A.86CC08BB@ctaz.com>
Source record: 177121

Why in the world would all of you clog up an antenna news group with
this crap? Please take it elsewhere. Thank you.
Jerry France
K7LY

RanHefner wrote:
>
> In article <Fw_L5.843$Vk6.155017@paloalto-snr1.gtei.net>,
> "Dan K Nelson" <w6dkn@qsl.net> wrote:
>
> > He may have said it as part of a complete thought, but taken out of
> context
> > to put a liberal spin on it is typical.
> >
> > To use your tactic, I could quote your post as:
>
> Since you were unwilling to research it for yourself, I did a little
> work for you. Here is the news story by the Dallas Morning News. Go
> read it for yourself and THEN andn ONLY THEN say I took it out of
> context.
>
> http://www.dallasnews.com/specials/bush_campaign/0522bush1bushsite.htm
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1624. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:15:12 UTC
From: richardharrison@webtv.net
Message-ID: <10488-3A00CE30-80@storefull-117.iap.bryant.webtv.net>
Source record: 177129

Roy Lewallen wrote:
"For sure, the feedpoint impedance, current distribution, and efficiency of an antenna this high will be virtually the same as for the same antenna in free space. The gain, directivity, and pattern shape definitely will not,"

The attributes of an antenna are the above listed characteristics. The gain, directivity, and pattern shape are the same as in free space.

Changes in signal levels caused by distant reflections which produce multipath problems are path characteristics, not antenna characteristics.

Best regards, Richard Harrison, KB5WZI

1625. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:19:52 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqj08$cl7$0@208.207.71.161>
Source record: 177123

W1RFI wrote:
>
> >From: z005381b@bc.seflin.org (James Rosenthal)
>
> >: If he was a serious scientist he would be more than pleased to make
> >: full disclosure, and we know that if his claims were valid it wouldn't
> >: be that hard to do.
>
> >A simple dBi number would be a start.
>
> His web page gives a figure of 5.41 dBi in free space for a 2-element, 10-meter
> fractal quad.
>
> >From the little I looked into it, it seems that the antenna would be
> >smaller than similar ("normal") antennas. Sort of like the old "Dyna
> >plate" ground plate for small boats. (Or taking a 160m dipole, balling it
> >up and saying "I've got a 160m antenna here".)
>
> Yes, but if the current distribution is such that one gets a reasonable
> feed-point impedance and relatively low ohmic losses, then the antenna can
> still be useful. It has been a valid technique for years to bend an antenna
> around to fit a small lot, and, it does work. The real disagreement, or at
> least the real question, is whether there is any specific advantage gained with
> a fractal bending as opposed to arbitrary bending of the same basic physical
> size. I think that if that question was answered with a statement to what
> those specific advantages are, most of the discussion could move on. Of
> course, an answer to the question would mean that most of the discussion would
> move on. :-)
>

The "Fractal mystique" perhaps?

1626. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:26:59 UTC
From: k1bqt@aol.com
Message-ID: <20001101212659.09466.00000134@ng-fy1.aol.com>
Source record: 177125

>LOOK at the vast majority of traffic in the last week.<

I have noticed, Chip, and with great relief! All one need do is poll the back archives to discover who the number-one poster boy normally is on here (the deja-digits speak for themselves). I'd bet, if you keep up the good work for a couple more weeks, most of your non-technical cat-callers will simply go away. Then you can just deal with....well...the technical ones!

Rick K1BQT

1627. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:27:05 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A00D0E1.3BFA409F@sccoast.net>
Source record: 177124
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Alex Wiecek VE3GOP wrote:
>
> Dwight, first of all it's not a group
> but a society. Something that's
> equivalent to your ARRL, though a
> lot smaller but it's an organization
> with the same purpose as ARRL.

I certainly understand the desire to maintain roots with the "motherland," but this just seems a strange way to do it - a "special event" to "celebrate" the anniversary of an radio organization on Poland (an organization that no longer has anything specific to do with that person in Canada). It just makes me wonder if the actual goal is to maintain roots with the "motherland," or to maintain roots with this organization.

I base that wonder on the fact that I've spent many years overseas during the last twenty years and never once did I even consider the notion of a special event to celebrate the anniversary of some organization here in the US.

Of course, it doesn't really matter what I think - you're free to do what you want. Its just that your announcement seemed odd to me, so I decided to ask rather than just walk away with a wrong impression of your intent.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1628. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:34:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqjr5$cl7$1@208.207.71.161>
Source record: 177126

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001101075534.17622.00000013@ng-fl1.aol.com...
> >
> > I am astounded, I must admit, by your description of the Steve Best
> designs as
> > "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and
> meanders;
> > and, indeed, are thus covered by prior art of extant pending patents.
> >
> > The real issue with the Best antennas, besides the fact that they are
> neither
> > 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how
> > accurate are they as models cpmared to real antenna versions? > With Best
> Wishes,
> >
> > Chip N1IR
> >
>
> The "Best Antennas" are NOT fractal antennas!
>
> Fractal antennas represent a class of electromagnetic radiators whose
> overall structure is comprised of a series of repetitions of a single
> geometry (the geometry basis), where each repetition is on different (or in
> some cases, the same) scale. Most fractal geometries are self-similar in
> that some portion of their geometry has the same shape as the overall
> geometry, only at a reduced scale.
>
> Here is the definition of fractal antennas per N. Cohen in a paper entitled
> "Fractal Antennas Part 1 - Introduction and the Fractal Quad", Comm Quart,
> Summer 1995: ".... Following in that tradition of nonlinearity, the newest
> branch of geometry is called fractal geometry. Here a complex structure us
> built up through the repetition of a design or motif (sometimes called a
> generator) on a series of different scales. Such structures are called
> self-similar."
>
> Here is the definition of fractal antennas per C. Puente-Baliarda in a paper
> entitled "On the Behavior of the Sierpinski Multiband Fractal Antenna", IEEE
> Transaction on Antennas and Propagation, April 1998: "Most fractal objects
> have self-similar shapes, which means that some of their parts have the same
> shape as the whole object but at a different scale. ..... In such an
> interactive procedure, an initial structure called a generator is replicated
> many times at different scales, positions and directions, to grow the final

> fractal structure."
>
> In the MI2 loop antenna, the "generator" sits in the center of the structure
> and it is repeated four additional times in the structure from each corner
> of the generator. The antennas that I designed are arbitrary in shape, in
> that in one quadrant, I rearranged the wire length into an arbitrary shape.
> I then created the total antenna by mirror imaging the wire shape in the
> first quadrant into the other three quadrants, thus the antennas are
> symmetrical. An antenna being symmetrical does not mean that it is a
> fractal.
>
> At this point, Chip is declaring that my antennas are fractal. I can only
> assume that this claim is made on the basis that the antennas are
> symmetrical in shape. If this is true, then Chip is stating that all
> symmetrical antennas are fractal. This would then mean that "fractal"
> antennas have been designed and used for well over 50 years and we have now
> just decided to call them "fractals" rather than symmetrical. This has
> serious implications for all IP and patent claims. One cannot have it both
> ways.
>

Chip can!

1629. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:35:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqjub$cl7$2@208.207.71.161>
Source record: 177127

Fractenna wrote:
>
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001101075534.17622.00000013@ng-fl1.aol.com...
> >>
> >> I am astounded, I must admit, by your description of the Steve Best
> >designs as
> >> "arbitrary". Wow! In fact, NONE is arbitrary; all are fractals and
> >meanders;
> >> and, indeed, are thus covered by prior art of extant pending patents.
> >>
> >> The real issue with the Best antennas, besides the fact that they are
> >neither
> >> 'random' nor 'arbitrary', but are in fact 'fractal' or 'meander' is: how
> >> accurate are they as models cpmared to real antenna versions? > With Best
> >Wishes,
> >>
> >> Chip N1IR
> >>
> >
> >The "Best Antennas" are NOT fractal antennas!
> >
> >Fractal antennas represent a class of electromagnetic radiators whose
> >overall structure is comprised of a series of repetitions of a single
> >geometry (the geometry basis), where each repetition is on different (or in
> >some cases, the same) scale. Most fractal geometries are self-similar in
> >that some portion of their geometry has the same shape as the overall
> >geometry, only at a reduced scale.
> >
> >Here is the definition of fractal antennas per N. Cohen in a paper entitled
> >"Fractal Antennas Part 1 - Introduction and the Fractal Quad", Comm Quart,
> >Summer 1995: ".... Following in that tradition of nonlinearity, the newest
> >branch of geometry is called fractal geometry. Here a complex structure us
> >built up through the repetition of a design or motif (sometimes called a
> >generator) on a series of different scales. Such structures are called
> >self-similar."
> >
> >Here is the definition of fractal antennas per C. Puente-Baliarda in a paper
> >entitled "On the Behavior of the Sierpinski Multiband Fractal Antenna", IEEE
> >Transaction on Antennas and Propagation, April 1998: "Most fractal objects
> >have self-similar shapes, which means that some of their parts have the same
> >shape as the whole object but at a different scale. ..... In such an
> >interactive procedure, an initial structure called a generator is replicated

> >many times at different scales, positions and directions, to grow the final
> >fractal structure."
> >
> >In the MI2 loop antenna, the "generator" sits in the center of the structure
> >and it is repeated four additional times in the structure from each corner
> >of the generator. The antennas that I designed are arbitrary in shape, in
> >that in one quadrant, I rearranged the wire length into an arbitrary shape.
> >I then created the total antenna by mirror imaging the wire shape in the
> >first quadrant into the other three quadrants, thus the antennas are
> >symmetrical. An antenna being symmetrical does not mean that it is a
> >fractal.
> >
> >At this point, Chip is declaring that my antennas are fractal. I can only
> >assume that this claim is made on the basis that the antennas are
> >symmetrical in shape. If this is true, then Chip is stating that all
> >symmetrical antennas are fractal. This would then mean that "fractal"
> >antennas have been designed and used for well over 50 years and we have now
> >just decided to call them "fractals" rather than symmetrical. This has
> >serious implications for all IP and patent claims. One cannot have it both
> >ways.
> >
> >Steve, VE9SRB
> >
> >
> >
>
> Hi Steve,
>
> You do not do justice to the definition of fractal geometry by quoting me
> incompletely and out of context. For example: how do you thus deal with the
> fact that random fractals are thus described at length in the same article?
>
> Are clouds fractal? Are mountains fractal? These are examples which you may
> choose to explore in greater depth.
>
> It would be unfair to you and certainly to others who read your posts, for
> your absence of knowledge of fractal geometry to be repeated and even used
> legally.
>
> All my statements are accurate --especially regarding the non-meander designs
> you have described-- which are covered by pending patents--and havebeen for
> some time-- by Fractal Antenna Systems,Inc.
>
> They are not random and not arbitrary.
>
> I make no claims whatsoever about the fractality of a shape merely because it
> is symmetrical. I am well aware of the difference between self similarity and
> symmetry.
>
> I regret that I am not in a position to further aid you on these issues, as you

> have systematically ignored my efforts to assist you previously, and there is a
> large body of published work extant on fractals.
>
> Cordially,
>
> NC

You are nuts.

1630. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 02:39:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqk5k$cl7$3@208.207.71.161>
Source record: 177128

Richard Harrison wrote:
>
> Steve Best, VE9SRB wrote:
> "Most fractal geometries are self-similar in that some portion of their
> geometry has te same shape as the overall geometry, only at a reduced
> scale."
>
> Does this mean the "log periodic" antenna is a fractal?

It would seem to mean that EVERY antenna where one half is the mirror
image of the other is fractal and Dipschit has a patent on all of them!
I guess the rest of us are reduced to long wires.

1631. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:00:42 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqlcq$cl7$4@208.207.71.161>
Source record: 177130

RanHefner wrote:
>
> In article <8tprjvefc1@iac5.navix.net>,
> "Fred Hambrecht" <Fred@w4jle.com> wrote:
> > How quick we forget...
> >
> > I invented the internet
>
> Well, Al Gore never said he invented the internet. Please post the
> exact quote to back-up your statement. YOU CAN'T! IT NEVER HAPPENED!
>

I beg your pardon! I was watching him on TV when he said it. His exact
words were "......I took the initiative and invented the Internet."

It HAPPENED. I saw it and I'm certain many others did as well

It is quite typical of him -and his minions- to now deny that he said
it.

Here's something else he did. My brother watched this on TV-

Gore walked in to Monticello where Clinton and his group awaited.
Observing the busts of all the Founding Fathers on display there, he
commented "And who are all these fine people?" The dingaling didn't
recognize Washington, Jefferson, and the rest! Clinton's jaw dropped
about 8 inches, he clearly was dumfounded by that display of ignorance.

> >
> > Now would you care to quote the context of the Bush remark or shall I?
> >
>
> I gave you the context before, but I will do it again in the hopes that
> you will be more receptive this time.
>
> A web site, http://www.gwbush.com , was giving GW Bush a pretty hard
> time on their web site. Bush was confronted about it by reporters. GW
> BUSH made the now infamous statement listed below. He was saying that
> the web site should not be able to use his name to bash him on the
> internet. GW wanted to limit his freedom to publish a parity site
> about GW.
>
> Now, post the quote from Al Gore that said as you say "he invented the
> internet."
>
> --

> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1632. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:03:55 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A00D99B.1D5EBCC0@hiwaay.net>
Source record: 177131

Dick- I hate to tell you- but, because a long wire is infinitely
"self-similar", it has to be considered to be a fractal.

Bill

Dick Carroll wrote:
>
SNIP
> I guess the rest of us are reduced to long wires.

1633. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:14:39 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A00DBFA.9FD518ED@sccoast.net>
Source record: 177132

Gerry Welford wrote:
>
> We here in N.Z. have a three wire system
> in our mains supply. I am not an electrician
> so I don't know the correct terminology but
> I do know that one wire is the phase or hot
> wire, one is the neutral and the third is the
> earth.
> Now I have always believed that a good earth
> is essential for the antenna/earth system but
> I have now been told that a separate earth in the
> shack as separate from the electrical household
> wiring earth will create all sorts of problems
> with earth loops (whatever they are) and that
> you can even get a belt from your rig to the
> shack earth. Any comments from experts
> please and no quips about being down to earth.
> Cheers.....Gerry ZL1AWW Auckland New Zealand.

Well, someone is telling you wrong, Gerry. A properly designed grounding system should not cause ground loops at all. The wiring in your house is simply not designed to provide sufficient RF ground for a radio transmitter. You need a dedicated ground rod, or rods, to do this job right.

Furthermore, you need the additional protection from lightning if you install additional equipment than is normally installed in a home (antennas, etc). Again, the house wiring was not designed with this additional equipment in mind.

Install addition grounding for your system (antennas and radio). Use the proper ground rods, installed close to the various parts of your equipment. And use proper ground wire, but keep this as short as possible (it loses effectiveness as an RF ground as it gets longer).

If you find that you have created a ground loop, it can usually be solved by simply moving the ground rods to a slightly different location. If that does not solve it, locate a good book on antenna installations for more things to try.

Of course, all this is accurate here in the northern hemisphere - things might be opposite from this down under. ;-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1634. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:26:12 UTC
From: richardharrison@webtv.net
Message-ID: <22901-3A00DED4-78@storefull-112.iap.bryant.webtv.net>
Source record: 177136

Barry, WA4VZQ wrote:
"Since Richard wants to be offended, so be it."

If I`m the Richard you mean, I`m not offended. If I`m not, I`m still not offended. You were talking about one antenna, and I was talking about another. I haven`t disputed anything you have posted in this thread.

My CRC Handbook doesn`t seem to give RF resistivities for stainless steel, and neither does my RSGB Handbook. I used to work with these in making dissipation lines for rhombics, but that was almost 50 years ago, and I forget.

RSGB does give aerial efficiencies for 1/8-in diameter wires of copper, aluminium, zinc, and brass, which are: 99.75%, 99.7%, 99.5%, and 99.4%. Not a whole lot of difference.

A saving grace seems to be deeper penetration as the material becomes more resistive, which evens out the differences between the various non-ferrous metals.

Best regards, Richard Harrison, KB5WZI

1635. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:31:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqn6d$cl7$5@208.207.71.161>
Source record: 177133

Bill Aycock wrote:
>
> Dick- I hate to tell you- but, because a long wire is infinitely
> "self-similar", it has to be considered to be a fractal.
>
> Bill
>
> Dick Carroll wrote:
> >
> SNIP
> > I guess the rest of us are reduced to long wires.

O really?? I guess the wire is similiar unto itself, ok, but certainly not unto its 'other half', the counterpoise.

I usually use a 60 ft long wire fed with an Alinco EDX2 autotuner and 40 ft of magnet wire laid or coiled on the ground underneath my motorhome when I go camping. Works quite well, but if that's an example of a Fractal antenna then this entire "scientific" subject has gone through rational, past sublime and into sheer and total nonsense.

1636. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:32:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A00E03F.261322B4@eznec.com>
Source record: 177134

Thanks for the clarification. Sure, if you define the antenna gain and pattern to be the free space gain and pattern, then certainly they don't change when the antenna is put into a different environment, including being buried underground, let alone being elevated.

I'm sure this is a useful concept when dealing with highly directional point-to-point communication antennas where any signal reaching one from the other from a ground reflection is much smaller than the direct signal. This is seldom the case for most amateur applications, so gain, pattern shape, and directivity generally include the effect of the environment in that context. It's good to be reminded that other conventions are used than the ones we're used to.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "For sure, the feedpoint impedance, current distribution, and efficiency
> of an antenna this high will be virtually the same as for the same
> antenna in free space. The gain, directivity, and pattern shape
> definitely will not,"
>
> The attributes of an antenna are the above listed characteristics. The
> gain, directivity, and pattern shape are the same as in free space.
>
> Changes in signal levels caused by distant reflections which produce
> multipath problems are path characteristics, not antenna
> characteristics.
>
> Best regards, Richard Harrison, KB5WZI

1637. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:44:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tqnu6$cl7$6@208.207.71.161>
Source record: 177135

Gerry Welford wrote:
>
> We here in N.Z. have a three wire system in our mains supply. I am not an
> electrician so I don't know the correct terminology but I do know that one
> wire is the phase or hot wire, one is the neutral and the third is the
> earth.

Sounds typical of modern electrical systems most everywhere.

> Now I have always believed that a good earth is essential for the
> antenna/earth system

Why? If you use balanced antenna systems with common mode decoupling
there is no reason for needing separate ground systems for your radio
gear. The safety ground in your house wiring takes care of that aspect.
The RF appearing at your antenna doesn't come back to your shack. Why do
you need a RF ground? I don't use one and haven't for many years.

but I have now been told that a separate earth in the
> shack as separate from the electrical household wiring earth will create all
> sorts of problems with earth loops (whatever they are) and that you can
> even get a belt from your rig to the shack earth.

My experience is that most "RF ground" systems cause more such trouble
then they ever begin to solve. Just make sure that your house wiring is
done correctly and that it does indeed provide the necessary safety
ground. If your area experiences thunderstorms and lightning you will
need to deal with that as a separate issue. I unhook all my RF, remote
antenna switch and rotator cables and get them away from the house when
not in use. I also unplug all gear from the AC mains when not in use.

Dick W0EX

1638. Re: 1/4 wave Vs. 1/2 wave mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 03:58:58 UTC
From: Scott <yetbbwa@grove.iup.edu>
Message-ID: <3A00E682.A191E9E0@grove.iup.edu>
Source record: 177137

Yeah, I was wondering if a shortened 1/2 wave would produce the more
desirable lobe shape a 1/2 wave has over the 1/4 wave. But I suspect
mounting it so close to the ground might negate that advantage as well.

Scott

Mark Keith wrote:

>
> I'm just guessing, but I would think would depend on how good the radial
> or ground system is underneath the radiator. If the radial system was
> good, I don't think it would make much difference. If the radial system
> was poor or non existent I would think the short 1/2 wl ant "could" be
> better. It is pretty much complete in itself, and wouldn't "require"
> radials to operate. An example of this is the short glass antennas, and
> some of the 1/2 wl HT antennas. But, I don't think the gain of the short
> 1/2 wave would equal the full size halfwave.
> Being it's about 1/4 wl in actual length , I'd think the gain about the
> same as the 1/4 wave, except a little different current distribution. MK
> --
> http://web.wt.net/~nm5k

1639. Re: 1/4 wave Vs. 1/2 wave mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 04:28:21 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A00ED65.F9D15D4A@oio.net>
Source record: 177138

Scott wrote:
>
> I was wondering if there would be any advantage to using a continuously
> loaded 1/2 wave antenna (wound on a 9 foot length of fiberglass) over
> using a straight 1/4 wave whip on 10 meters? Would winding the 1/2 wave
> on a 9 foot section be too short to provide any benefits of the 1/4
> wave? Is shunt fed the best way to feed the 1/2 wave?
>
> Scott.

Scott,
I'm not sure if the effort needed to tune and match a 'shortened',
1/2 wave antenna would be worth the effort, compared to the 1/4 wave
antenna. There is a difference in the two radiation patterns, but
with all the other variables in mobile operations, who knows if it's
going to be worth it? Depending on the type of mobiling you do, as in
'off roading', the fibreglass whip is the draw-back. They tend to
break on the tree limbs...
'Doc

1640. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 04:29:17 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A00ED9D.CEF2B712@hiwaay.net>
Source record: 177139

Dick- so far as this NG is concerned, the subject of Fractal antennas went well past the levels of character you listed. "total nonesense" is now the average, not the limit.

Bill

Dick Carroll wrote:
>
S N I P
> I usually use a 60 ft long wire fed with an Alinco EDX2 autotuner and
> 40 ft of magnet wire laid or coiled on the ground underneath my
> motorhome when I go camping. Works quite well, but if that's an example
> of a Fractal antenna then this entire "scientific" subject has gone
> through rational, past sublime and into sheer and total nonsense.

1641. Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 04:31:01 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tqqp8son1@iac5.navix.net>
Source record: 177140

I have created a new antenna that is based on a circle, I have written patent pending all over it and copyrighted with a multitude of (C)'s.

This brings me to the meat of my concerns, I notice that many of you on the newsgroup are using my copyrights by using the letter O in your posts. This must cease, desist, stop, etc etc right now. I will be sending all violators a letter from my attorney for violation of my copyright! You have been warned DO NOT USE THE LETTER O I hold all the patent pendings and copyrights on it and woe be unto anyone who dares to violate my protections. YOU HAVE BEEN WARNED!

There is no need to reply to this post as I am already smarter than anyone on the newsgroup and plan to address totally different issues from thos you may bring up. I will be publishing my data in a pier reviewed magazine, or at least a wharf reviewed one.

1642. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 05:01:24 UTC
From: richardharrison@webtv.net
Message-ID: <14508-3A00F524-33@storefull-116.iap.bryant.webtv.net>
Source record: 177142

Gerrry Wellford wrote:
"Now I have always believed that a good earth is essential for the antenna / earth system."

Dick Carroll wrote:
"Why? If you use balanced systems with common mode decoupling there is no need for separate ground systems for your radio gear...."

Gerry, hang on to that belief. You don`t need an RF ground with a balanced antenna system. You still need a safety ground to avoid electrical shock, and a lightning ground, if you have ever heard of a lightning stroke where you live. I lived for awhile in Tierra del Fuego. Lightning had never been seen there, but you are farther north.

The reason for a separate ground return to your common earth system is so your radio stuff doesn`t have to share the path to earth with other apparatus. That other apparatus or the wires connected to it could be the source of a huge abrupt current which could cause a proportionately huge voltage drop across the ground return impedance shared with your radio stuff. That could raise the voltage on your radio to a dangerous level. Your radio stuff deserves its own separate ground return wire. It also works the other way. Your radio could be the source of a large surge which you would not want to endanger other apparatus or even the people near it.

You might envision a similar situation with the "phase or hot wire", so it is best to feed your radio stuff with separate wires and a separate breaker or fuse.

You can perhaps use the electrical ground for your electrical service for your RF ground in the unlikely case it is close enough and extensive enough. In any case it must be well connected with all your other earths or grounds.

Think about the common impedance possibilities. They cause most of the surge problems.

Best regards, Richard Harrison, KB5WZI

1643. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 05:10:05 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A010511.A207CED1@dvol.com>
Source record: 177141
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dwight Stewart wrote:

> Alex Wiecek VE3GOP wrote:
> >
> > [snip] The purpose of this activity is
> > to present a petition to the Industry
> > Canada to obtain a temporary special
> > event callsign to commemorate the 75th
> > aniversary of the Polish Ham Radio
> > Society in Poland. [snip]
>
> I hope you don't mind a dumb question but, if you're Canadian, why
> would you commemorate the aniversary of a radio group in Poland?

>
For the same freaking reasons there are Saint Patty's and Columbus Days
in this country you dim bulb!
>

>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net

>
w3rv

1644. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 05:32:44 UTC
From: z005381b@bc.seflin.org
Message-ID: <8tqu9s$p08@nntp.seflin.org>
Source record: 177144

Dick Carroll (dixie@townsqr.com) wrote:
: W1RFI wrote:
: >
: > >From: z005381b@bc.seflin.org (James Rosenthal)
: >
: > >: If he was a serious scientist he would be more than pleased to make
: > >: full disclosure, and we know that if his claims were valid it wouldn't
: > >: be that hard to do.
: >
: > >A simple dBi number would be a start.
: >
: > His web page gives a figure of 5.41 dBi in free space for a 2-element, 10-meter
: > fractal quad.

Yawwn. I'll stick with my 1968 tribander.

: > >From the little I looked into it, it seems that the antenna would be
: > >smaller than similar ("normal") antennas. Sort of like the old "Dyna
: > >plate" ground plate for small boats. (Or taking a 160m dipole, balling it
: > >up and saying "I've got a 160m antenna here".)
: >
: > Yes, but if the current distribution is such that one gets a reasonable
: > feed-point impedance and relatively low ohmic losses, then the antenna can
: > still be useful. It has been a valid technique for years to bend an antenna
: > around to fit a small lot, and, it does work.

So does a vertical. :)

: The real disagreement, or at
: > least the real question, is whether there is any specific advantage gained with
: > a fractal bending as opposed to arbitrary bending of the same basic physical
: > size. I think that if that question was answered with a statement to what
: > those specific advantages are, most of the discussion could move on. Of
: > course, an answer to the question would mean that most of the discussion would
: > move on. :-)
: >

My question is, why does he waste so much time here? Other than stroking
his ego.

: The "Fractal mystique" perhaps?

More like an obsession. Even if he sells everyone on the NG an antenna,
he's spent too much time trying.
--
Jim Rosenthal, WA4STJ

1645. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 05:34:01 UTC
From: Barry Ornitz <ornitz@dpnet.net>
Message-ID: <U17M5.2473$qP1.1923390@news-west.usenetserver.com>
Source record: 177143

"Richard Harrison" <richardharrison@webtv.net> wrote:

> My CRC Handbook doesn`t seem to give RF resistivities for stainless
> steel, and neither does my RSGB Handbook. I used to work with these in
> making dissipation lines for rhombics, but that was almost 50 years ago,
> and I forget.

DC resistivities are difficult enough to predict for the different grades
of stainless!

In the case of the commercial magnet-mount whip, 17-4PH stainless was used.
This is a semi-martensitic material. It get tougher by both work-hardening
and by heating. [The PH stands for precipitation hardening where different
alloy phases precipitate out.] The result is that its resistivity and
permeability are strongly determined by the material's past
mechanical history.

Digging into this taught me something new - even the austenitic stainless
steels like 304, 308 and 316 can, after machining, develop noticeable
magnetic permeability due to strain induced martensitic transformation.
Austenite has a face-centered cubic crystalline structure which is not
ferromagnetic. Plastic deformation during machining causes a phase change
to the martensite body-centered tetragonal crystalline structure which is
ferromagnetic. I am more familiar with the corrosion properties of the
stainless steels than I am of their electrical properties. I was aware
that machining could reduce the corrosion resistance of the austenitic
stainless grades. This explains why since the martensitic grades have less
corrosion resistance.

{Comparing the RF resistivity of copper, aluminum, zinc, and brass}
> A saving grace seems to be deeper penetration as the material becomes
> more resistive, which evens out the differences between the various
> non-ferrous metals.

Unfortunately, if the conductor is ferromagnetic, the skin depth decreases
making the RF resistance increase even more with frequency than it does
with non-magnetic conductors.

By the way, Laport in "Radio Antenna Engineering" discusses the use of
high-loss transmission lines as rhombic terminations. Both regular steel
and stainless were used.
This might be a good use for that roll of constantan thermocouple wire I
have in the garage.

Thanks for stirring up my interest in this.

73, Barry L. Ornitz WA4VZQ

1646. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 06:00:57 UTC
From: n7ws@azstarnet.com
Message-ID: <3a0101f2.228205230@news.azstarnet.com>
Source record: 177145

On Wed, 1 Nov 2000 20:44:47 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

I stand corrected. I am guilty of trying to keep track of the decimal point in my head after a trip to the dentist. I was shooting for ~200 lambda.

>Wes, N7WS wrote:
>"Sixty feet is about 20 lambda at 3 GHz."
>
>Let`s make the math easy.
>150 MHz is 2M.
>300 MHz is 1M.
>3 GHz is 10 cm.
>10 cm is about 4 in.
>2.54 cm = 1 in.
>60 ft is 720 in.
>720 in / 4 in = 180 wavelengths.
>
>Correction: Sixty feet is about 180 lambda at 3 GHZ.
>
>A signal loses 22db in its first wavelength of travel and an additional
>6 db every time the distance traveled doubles after the initial loss of
>the first wavelength`s travel. Any signal reflected from a surface 180
>wavelengths away will be insignificant in its interaction with the
>radiating element. Mutual impedance is insignificant.
>
>The antenna will behave as if in free space.
>
>Best regards, Richard Harrison, KB5WZI
>

1647. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 06:16:10 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A011495.7E043083@dvol.com>
Source record: 177146
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Alex Wiecek VE3GOP wrote:

> your help would be greatly appreciated.
>
> Thank you.
>
> 73's Alex VE3GOP

>
Down here in the lower 48 we can sometimes get the attention of
unresponsive federal bureaucrats by leaning on our local elected federal
members of Congress or the Senate. Try taking it up with your Ontario
equivalents.
>
w3rv

1648. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 07:16:59 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A0114EB.95A4398E@oio.net>
Source record: 177147

Fred,
Do you hold patents on both the capitol "O", and
small "o", or just on one of them? If so, which?
'Doc

1649. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 07:45:34 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8tr6dv$9do$1@slb7.atl.mindspring.net>
Source record: 177148

I'm n_t g_ing t_ take any chances. As of right n_w I will st_p using b_th
the upper and l_wer case "_" Unless y_o want a messy c_urt case D_c I
rec_mend y_u d_ the same.
'Doc <w5lz@oio.net> wrote in message news:3A0114EB.95A4398E@oio.net...
>
>
> Fred,
> Do you hold patents on both the capitol "O", and
> small "o", or just on one of them? If so, which?
> 'Doc

1650. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 07:56:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <QoYrvHAe4RA6EwAR@ifwtech.demon.co.uk>
Source record: 177149

Gerry Welford wrote:
>We here in N.Z. have a three wire system in our mains supply. I am not an
>electrician so I don't know the correct terminology but I do know that one
>wire is the phase or hot wire, one is the neutral and the third is the
>earth.
>Now I have always believed that a good earth is essential for the
>antenna/earth system but I have now been told that a separate earth in the
>shack as separate from the electrical household wiring earth will create all
>sorts of problems with earth loops (whatever they are) and that you can
>even get a belt from your rig to the shack earth. Any comments from experts
>please and no quips about being down to earth.

Lots of replies, and they are all correct... under specific
circumstances.

There are several considerations in adding an RF earth:

* Mains safety
* Lightning protection
* RF grounding
* RFI

In a normal household situation with a lot of pre-existing wiring, it's
very difficult to achieve all of these at the same time. (Starting from
scratch, it can be done using a common earthed entry panel for all
services - and I do mean *all* - but we seldom have that opportunity.)

Also there are mains wiring regulations that will apply to your
installation. Regulations vary from country to country, partly due to
custom but also due to the frequency/severity of lightning. Some things
we can do in the UK are justifiable in this country, but are illegal
under the US National Electrical Code. The reverse certainly applies
too. Don't know how you're fixed in NZ.

Coming to one specific point:

It's certainly true that with an upstairs shack and an antenna that is
supposed to be balanced, you don't need an RF earth. Sometimes an RF
earth or the mains earth can actually "invite" common-mode RF currents
where they wouldn't otherwise exist. Certainly the connection to mains
earth will allow RF currents to flow into the mains wiring, with a
significant risk of RFI. In such cases, an effective solution is to wind
the shack mains cable - all three cores of it together - into an RF
choke. This discourages RF currents from flowing into the mains, and has
no mains safety problems because earth continuity is maintained.

About 10 turns of 3-core mains cable on a stack of about 6 x 2in ferrite rings (or big hunk of ferrite like a scrap TV deflection yoke - which is free) will make an effective RF choke for the HF bands.

BUT if you then plan to add an RF earth at the "shack" side of the RF choke, you may run into problems with local regulations about how different earths can be joined together. Advice from outside your own country may not be valid - it may even be illegal for you - so you MUST check locally.

If you can do it, it's still a very good principle to use a separate RF earth if RF earthing is needed, and choke off the mains conductors to keep any stray RF on the "radio" side where it belongs.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1651. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 09:09:25 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8trb90$gc1$1@slb6.atl.mindspring.net>
Source record: 177150

__ps. I blew it and used a letter _. W_uld yu_ c_nsider this _ne slip t_
fall under fair usage? _h crap. I sliped up _n the w_rd "y_u" als_. I
ap_l_gize wh_le heartedly f_r the slips. I kn0w. I'll start using zer0s.
Since that makes all 0f my p0sts a list 0r table 0f numbers, a c0pyright has
n0 bearing.

KB9WFK <KB9WFK@mindspring.com> wrote in message
news:8tr6dv$9do$1@slb7.atl.mindspring.net...
> I'm n_t g_ing t_ take any chances. As of right n_w I will st_p using b_th
> the upper and l_wer case "_" Unless y_o want a messy c_urt case D_c I
> rec_mend y_u d_ the same.
> 'Doc <w5lz@oio.net> wrote in message news:3A0114EB.95A4398E@oio.net...
> >
> >
> > Fred,
> > Do you hold patents on both the capitol "O", and
> > small "o", or just on one of them? If so, which?
> > 'Doc
>
>

1652. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 10:56:41 UTC
From: Alex Wiecek VE3GOP <alexwiecek@my-deja.com>
Message-ID: <8trh98$pm7$1@nnrp1.deja.com>
Source record: 177152
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

Hello Brian, this is a way to go as well. Problem is, that the
anniversary falls sometime in December so they don't have much time to
get the ball rolling. Unfortunately, I am not the organizer of these
festivities but have been asked to see if I can drum up support on the
Internet, so I cannot really be blamed for doing this a little too late.
But as they say, better late than never.. :)

thanks Brian.

73 Alex

In article <3A011495.7E043083@dvol.com>,
Brian Kelly <kelly@dvol.com> wrote:
>
>
> Alex Wiecek VE3GOP wrote:
>
> > your help would be greatly appreciated.
> >
> > Thank you.
> >
> > 73's Alex VE3GOP
>
> >
> Down here in the lower 48 we can sometimes get the attention of
> unresponsive federal bureaucrats by leaning on our local elected
federal
> members of Congress or the Senate. Try taking it up with your Ontario
> equivalents.
> >
> w3rv
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1653. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 10:56:51 UTC
From: rrackley@my-deja.com
Message-ID: <8trh9h$pm9$1@nnrp1.deja.com>
Source record: 177151

> A math treatment of toroidal coupling to grounded towers is given by
B.
> Whitfield Griffith, Jr. in "Radio Electronic Transmission
Fundamentals",
> Library of Congress Catalog Card Number: 61-13756, pages 379-383.
>

You have cited what is, in my opinion, the best book ever written to teach the underlying fundamentals of antennas, transmission lines, RF networks, and propagation without getting into the level of math with which they teach those subjects in BSEE programs. In fact, most EEs would understand those subjects much better if they studied the book.

The book went out of print in the 1960s and has become increasingly hard to find over the past 25 years. I have good news for anyone who is interested in getting a copy, though. A reprint edition has just come out. It is available from:

http://www.noblepub.com

Pardon me for straying off topic. I wanted to share the news. I arranged for the reprint edition and traded the publisher my clean copy for that purpose, but have no financial interest in the project.

Oh yes, I have always been kinda fascinated with Griffith's treatment of toroid feeding of an antenna.

Ronald Rackley, PE
Sarasota, Florida
AD4WG

Sent via Deja.com http://www.deja.com/
Before you buy.

1654. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 11:07:50 UTC
From: Alex Wiecek VE3GOP <alexwiecek@my-deja.com>
Message-ID: <8trhu4$q2u$1@nnrp1.deja.com>
Source record: 177154
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

> I certainly understand the desire to maintain roots with the
> "motherland," but this just seems a strange way to do it - a "special
> event" to "celebrate" the anniversary of an radio organization on
Poland
> (an organization that no longer has anything specific to do with that
> person in Canada). It just makes me wonder if the actual goal is to
> maintain roots with the "motherland," or to maintain roots with this
organization.
>

Why would you say that the organization has nothing to do with that
person? Do you not find members of the ARRL in Germany or anywhere else
in the world? I'm sure of these guys are still members of PZK.

> I base that wonder on the fact that I've spent many years overseas
> during the last twenty years and never once did I even consider the
> notion of a special event to celebrate the anniversary of some
> organization here in the US.
>

Well, it depends on your mentality I suppose. Some people feel the urge
to do it, some don't.

> Of course, it doesn't really matter what I think - you're free to do
> what you want. Its just that your announcement seemed odd to me, so I
> decided to ask rather than just walk away with a wrong impression of
> your intent.
>
Well, I thought I was making myself perfectly clear and hoped that a
lot of amateurs out there would come to the same conclusion as to the
intent of this activity. Based on the responses so far, I can see that
the higher percentage of amateurs do understand what we're trying to do.

73's Alex

Sent via Deja.com http://www.deja.com/
Before you buy.

1655. MUF, OTF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 11:11:01 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <vSbM5.277$JS3.1666@newsfeed.slurp.net>
Source record: 177153

Been following that 'scratch' or 'tick' sound around using the 1-MHz up/down function on my 0.03-30MHz receiver. Seems to be higher in frequency during daytime, and lower at night.

Above it seems 'dead'; below it, signals. It seems to parallel the diurnal pattern of SWBC station audibility here in Cincinnati.

It seems always to be 'there'.

Is it an OHR? Sounder? Is it a reliable indicator (of what)?

Dave, K3BHJ

1656. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 12:00:10 UTC
From: w1rfi@aol.com
Message-ID: <20001102070010.28606.00000175@ng-cm1.aol.com>
Source record: 177155

>From: fractenna@aol.com (Fractenna)

>LOOK at the vast majority of traffic in the last week. ALMOST NONE--repeat
>ALMOST NONE-- originates from me. ALMOST ALL of the posts which allude to
>me in some way are PERSONAL ATTACKS filled with FALSE
>INFORMATION; DIRECTED INSULTS;
>and LIBEL.

It is not about you, Chip; it is about a subject that, due both the number of posts and the content, appear out-of-proportion to other antenna posts. That is generally how and why new newsgroups get started. Perhaps we could take this thread to a formal RFD and see if we can find someone who appears to be neutral to hold the vote, if the concensus appears toward forming a new NG. I just mused that if the original poster is correct, with over 80% of the posts related in some way to fractal antennas, then a new NG would be the normal recourse. Few have called the formation of a new NG "appalling."

>
>Ed, if you want to do sometrhing constucutive then help clean up the trash
>right here. I cannot be blamed for it.

>Ed, if you want to do sometrhing constucutive then help clean up the trash
>right here. I cannot be blamed for it.

I am no more able to control the actions of those posting opinions you do not like than I am able to control your actions, Chip. Are you really suggesting rraa become a moderated group and that I be appointed as moderator? :-)

When things get out of hand, as they are here in some threads, generally all who participate can assume a fair share of the blame. That includes me and you. We cannot control others, but we can control ourselves and, when we post, we should all ask ourselves what the overall effect of that post will be and whether it is really the effect we want to achieve. If we know what will happen when we post something, and do it anyway, we ARE responsible for the outcome.

73,
Ed Hare, W1RFI

1657. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 12:05:14 UTC
From: w1rfi@aol.com
Message-ID: <20001102070514.28606.00000176@ng-cm1.aol.com>
Source record: 177156

>From: "VE9SRB" srbest@worldnet.att.net

>This would then mean that "fractal"
>antennas have been designed and used for well over 50 years and we have now
>just decided to call them "fractals" rather than symmetrical. This has
>serious implications for all IP and patent claims. One cannot have it both
>ways.

Maybe it means that Chip now holds the patent on all antennas. :-)

73,
Ed Hare, W1RFI

1658. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 12:15:54 UTC
From: fractenna@aol.com
Message-ID: <20001102071554.28087.00000213@ng-cu1.aol.com>
Source record: 177157

>>From: fractenna@aol.com (Fractenna)
>
>>LOOK at the vast majority of traffic in the last week. ALMOST NONE--repeat
>>ALMOST NONE-- originates from me. ALMOST ALL of the posts which allude to
>>me in some way are PERSONAL ATTACKS filled with FALSE
>>INFORMATION; DIRECTED INSULTS;
>>and LIBEL.
>
>It is not about you, Chip; it is about a subject that, due both the number of
>posts and the content, appear out-of-proportion to other antenna posts. That
>is generally how and why new newsgroups get started. Perhaps we could take
>this thread to a formal RFD and see if we can find someone who appears to be
>neutral to hold the vote, if the concensus appears toward forming a new NG.
>I
>just mused that if the original poster is correct, with over 80% of the posts
>related in some way to fractal antennas, then a new NG would be the normal
>recourse. Few have called the formation of a new NG "appalling."
>
>
>
>>
>>Ed, if you want to do sometrhing constucutive then help clean up the trash
>>right here. I cannot be blamed for it.
>
>>Ed, if you want to do sometrhing constucutive then help clean up the trash
>>right here. I cannot be blamed for it.
>
>I am no more able to control the actions of those posting opinions you do not
>like than I am able to control your actions, Chip. Are you really suggesting
>rraa become a moderated group and that I be appointed as moderator? :-)
>
>When things get out of hand, as they are here in some threads, generally all
>who participate can assume a fair share of the blame. That includes me and
>you. We cannot control others, but we can control ourselves and, when we
>post,
>we should all ask ourselves what the overall effect of that post will be and
>whether it is really the effect we want to achieve. If we know what will
>happen when we post something, and do it anyway, we ARE responsible for the
>outcome.
>
>73,
>Ed Hare, W1RFI

Well, let's see exactly what what libel and abuse I am self-responsible for in a small tim window, as of late:

0) Writing my employer stating without any question that I am mentally ill? Nope.
1)Being called a homosexual dying of AIDS? Nope.
2) Being called a garbage man in Miami? Nope.
3) Being called a fraud; unwilling to answer questions?; Nope
4) Being called a pirate who breaks the law and downloads illegal files? Nope;
5)Being called an unemployed fiddle player--bastardized to "horse's-ass"?; Nope;
6)Being called someone who claims all antennas are fractal? Nope.
7) Being called 'fired from my academic position ' for poor treatment of students? Nope.
8) Being called "dipchit" and worse? Nope.
9) Being labelled a troll; troll; troll? Nope.

This is a very small subset of it all. Basically I have posted very, very little--and certainly encouraged and provoked no one.

Accept the fact that this NG--and ham radio--has made herculean efforts to embarrass itself. I am sure that one may fall back on: 'its only a small minority', but the fact is that there is a very serious breach of human decency here, and non one sems to want to stop it.

That I am a focus is certainly not my desire and certainly NOT my fault. The only way to stop it is for word to leak out that legal proceedings are happening. NOTHING else will stop it. If you don't believe this, then just list the posters under the relevant topics and you will see that they just feed on themselves, spreading misinformation, abuse, and libel without a word out of me.

Witness the demise of the reputation of ham radio.

Nathan Cohen, Ph.D.

1659. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 12:25:20 UTC
From: Gary Sanford <sanford1@sprynet.com>
Message-ID: <38n20t02oc50ggdpfnah3c8ue0k6asu71f@4ax.com>
Source record: 177158

On Wed, 1 Nov 2000 12:11:08 -0500 , "jimmy john" <jj@sandwitch.org>
wrote:

>And Ameritron.

And Mirage, VHF/UHF amps.

~~~~~~~~~~~~~~~~
Gary Sanford
sanford1@spectradyne.com (pgp public key available)
~~~~~~~~~~~~~~~~

1660. Re: 10 Meter Mobile Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:07:20 UTC
From: richardharrison@webtv.net
Message-ID: <18081-3A016708-5@storefull-116.iap.bryant.webtv.net>
Source record: 177159

Barry Ornitz, WA4VZQ wrote:
"---Laport in "Radio Antenna Engineering" discusses the use of high-loss transmission lines as rhombic terminations."

Ed Laport mentions Alloy 430 (18% chromimum) which has a resistivity forty times that for annealed copper and is magnetic.

There are many varieties od stainless steel, some magnetic, and some non-magnetic. The alloy we used in dissipation lines wasn`t springy like that used in whip antennas. It was probably lossier than the whip variety, too.

Thanks for reminding me of Laport`s treatment, which is really a treat.

Best regards, Richard Harrison, KB5WZI

1661. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:23:44 UTC
From: Den <dspiess@my-deja.com>
Message-ID: <8trpsq$vv2$1@nnrp1.deja.com>
Source record: 177160

I believe that MFJ now has a 269 out and the 259 can be found for right
around the $200 price. Check it out.
73
Den W2DEN _._

In article <39ff91dd.114879001@news.uswest.net>,
mikezabel@uswest.net (Mike Zabel) wrote:
> Hello,
> I just received the new sale flyer from Radio Shack and noticed an
> antenna analyzer on sale for $199.95 that looks exactly like the
> MFJ-259b. It has the Vectronics brand name and is Radio Shack item
> #9400683.
> I wondered if anyone has used the Vectronics unit and could verify if
> it has the same features as the 259b? I had no luck finding a manual
> to download for this unit on radioshack.com.
> I have been waiting to get an analyzer, but at this price I just may
> have an early Christmas present.
> All replys appreciated.
>
> 73 Mike Zabel KC5UOJ
> In the mountains of New Mexico
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1662. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:30:53 UTC
From: Walter Fairclough <wfairclo@netcom.ca>
Message-ID: <e0eM5.84240$YG5.64019@tor-nn1.netcom.ca>
Source record: 177161
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

When in Rome do as the Romans do!

Walter

1663. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:47:30 UTC
From: richardharrison@webtv.net
Message-ID: <7926-3A017072-4@storefull-118.iap.bryant.webtv.net>
Source record: 177165

Ronald Rackley wrote:
"I have good news for anyone who is interested in getting a copy
(Griffith`s "Radio Electronic Fundamentals"), though. A reprint edition
has just come out. It is available from:

http://www.noblepub.com

That is good news! I had no idea. Griffith is probably one of the best explainers that ever was. It is a pity that this book ever went out of print.

Thank you Ronald for helping a reprint get published. I, too, have no financial interest or even acquaintance with the principals in this venture.

Best regards, Richard Harrison, KB5WZI

1664. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:48:43 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <%geM5.1577$dB6.103183@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177162

"W1RFI" <w1rfi@aol.com> wrote in message
news:20001102070514.28606.00000176@ng-cm1.aol.com...
> >From: "VE9SRB" srbest@worldnet.att.net
>
> >This would then mean that "fractal"
> >antennas have been designed and used for well over 50 years and we have
now
> >just decided to call them "fractals" rather than symmetrical. This has
> >serious implications for all IP and patent claims. One cannot have it
both
> >ways.
>
> Maybe it means that Chip now holds the patent on all antennas. :-)
>
> 73,
> Ed Hare, W1RFI

Hi Ed:

I have been informed that symmetry is not the issue in declaring the other loops "fractals".

It would be very helpful if Chip simply answered a few questions:

1) How do you define a fractal loop antenna?

2) If a loop antenna is not self-similar why is it a fractal?

3) What is an example of a non-fractal loop?

Quite frankly, I would be interested in the answers and discussion.

Steve

1665. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:48:56 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <x28BOhegpI3tMfZadMYT2rPDurMY@4ax.com>
Source record: 177163

Dwight Stewart <stewartx@sccoast.net> wrote:

> Of course, it doesn't really matter what I think - you're free to do
>what you want. Its just that your announcement seemed odd to me, so I
>decided to ask rather than just walk away with a wrong impression of
>your intent.

What do you mean "the wrong impression of your intent"?

Quite frankly, I have no idea what your intent is, Dwight, or why you
would demean anyone's desire to maintain a connection with their
ancestry or their "motherland" as you so delicately put it.

It's especially strange, considering the international nature of
amateur radio, whose signals cross all political bounderies.

Bob
k5qwg

>
>
>Dwight Stewart (W5NET)
>
>http://www.qsl.net/w5net

1666. Re: Time for rec.radio.amateur.antenna.fractal? (was Re: h a t r e d DID THIS....)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 13:56:02 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <SneM5.1579$dB6.103180@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177164

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102071554.28087.00000213@ng-cu1.aol.com...
>
> Well, let's see exactly what what libel and abuse I am self-responsible
for in
> a small tim window, as of late:
>
> 0) Writing my employer stating without any question that I am mentally
ill?
> Nope.
> 1)Being called a homosexual dying of AIDS? Nope.
> 2) Being called a garbage man in Miami? Nope.
> 3) Being called a fraud; unwilling to answer questions?; Nope
> 4) Being called a pirate who breaks the law and downloads illegal files?
Nope;
> 5)Being called an unemployed fiddle player--bastardized to "horse's-ass"?;
> Nope;
> 6)Being called someone who claims all antennas are fractal? Nope.
> 7) Being called 'fired from my academic position ' for poor treatment of
> students? Nope.
> 8) Being called "dipchit" and worse? Nope.
> 9) Being labelled a troll; troll; troll? Nope.
>
> This is a very small subset of it all. Basically I have posted very, very
> little--and certainly encouraged and provoked no one.
>
> Accept the fact that this NG--and ham radio--has made herculean efforts to
> embarrass itself. I am sure that one may fall back on: 'its only a small
> minority', but the fact is that there is a very serious breach of human
decency
> here, and non one sems to want to stop it.
>
> That I am a focus is certainly not my desire and certainly NOT my fault.
The
> only way to stop it is for word to leak out that legal proceedings are
> happening. NOTHING else will stop it. If you don't believe this, then just
list
> the posters under the relevant topics and you will see that they just feed
on
> themselves, spreading misinformation, abuse, and libel without a word out
of
> me.
>

> Witness the demise of the reputation of ham radio.
>
> Nathan Cohen, Ph.D.
>

Nathan:

Ed's post was pretty much right on the mark. ALL of us are responsible for the content of our posts and the resulting repsonses we invoke. In looking over the posts, there are a few of mine that I am less than proud of.

Consider your two statements above:

1) Basically I have posted very, very little--and certainly encouraged and provoked no one.

2) That I am a focus is certainly not my desire and certainly NOT my fault.

Now go back and count the number of posts you made since August. Now go back and read all the posts you directed at Tom, Yuri, Roy, Richard, Bill, me and others.

Can you really claim no responsibility for any of this?

Steve

1667. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 14:20:02 UTC
From: Scott <yetbbwa@grove.iup.edu>
Message-ID: <3A017812.55BFD3A2@grove.iup.edu>
Source record: 177166

"Ian White, G3SEK" wrote:

>
> It's certainly true that with an upstairs shack and an antenna that is
> supposed to be balanced, you don't need an RF earth. Sometimes an RF
> earth or the mains earth can actually "invite" common-mode RF currents
> where they wouldn't otherwise exist.

Especially if the length to ground is an odd 1/2 multiple? Straight out of the handbook ;)

>

It was my thought that even if you didn't have common mode currents flowing, isn't it still possible that the coax (outter braid) is picking up a fairly strong signal being radiated from the antenna? Couldn't this flow back down the coax (outter braid again) and be re-radiated, in the shack? Would a functioning RF ground stop this? Or doesn't it even happen?

Scott.

1668. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 14:29:09 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A017A35.D2DF6A26@bigfoot.com>
Source record: 177167

Richard Harrison wrote:
> That is good news! I had no idea. Griffith is probably one of the best
> explainers that ever was. It is a pity that this book ever went out of
> print.

Is it worth 9% of my social security check?
--
http://www.mindspring.com/~w6rca

1669. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 15:49:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8ts297$su3$1@neptunium.btinternet.com>
Source record: 177168

Cecil, first you say the current on the centre conductor (of a mismatched terminated cable) is matched by a differential curent on the inside of the braid. Agreed, these two currents are always equal and opposite to each whether the cable is correctly terminated or not.

Then you say it isn't because some flows on the outside merely because it is mismatched with a high impedance.

Which way do you want it ? You cant have it both ways.

Assuming the generator is at the other end of the coax, take the extreme case and suppose the termination is an open circuit. Is there any current on the ouside of the coax ?

Reg.
==========

CAM <cam2338@bigfoot.com> wrote in message news:39FFB54E.E2EE3D89@bigfoot.com...
> Reg Edwards wrote:
> > If the current is appreciable then the common mode impedance
> > cannot be so high as you think it is.
>
> That's the problem - the common mode impedance is much less than
> the load impedance.
>
> The current on the coax center conductor is matched by a differential
> current on the inside of the coax braid. At the coax to balanced line
> junction, the current can flow into the balanced line *OR* down the
> outside of the braid. Assume 200 ohms of choking impedance on the
> outside braid and a 2000+j2000 load. Where will the current go?
> --
> http://www.mindspring.com/~w6rca

1670. Re: Do trees absorb RF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 15:50:27 UTC
From: richardharrison@webtv.net
Message-ID: <7926-3A018D43-22@storefull-118.iap.bryant.webtv.net>
Source record: 177169

Cecil, W6RCA wrote:
"Is it worth 9% of my social security check?"

Griffith is good but value is in the eye of the beholder, they say.

40 years passed while I looked for a cheap copy of Laport`s "Antenna Engineering" to replace the copy I left behind on Tierra del Fuego.

Before paying a high price for a book, I`d check "Half-Price Books", etc.

Best regards, Richard Harrison, KB5WZI

1671. Re: NOTICE: RICHARD CLARK COPYRIGHT INFRINGEMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:16:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A019351.6FCE0A23@eznec.com>
Source record: 177170

Fractenna wrote:

> Richard Clark is in violation of copyright for the MI2 EZNEC file and its
> derivative, so placed and made available on the above site.
>
> I am the copyright holder and said files .
>
> Mr. Clark is publicly requested to cease and desist further publication and
> distribution of these copyright files.
>
> Furthermore, Mr. Clark's public assertion that he has obtained permission to
> publish and distribute these MI2 files is a prevarication and indicative of
> intent of copyright infringement.
>
> If Mr. Clark does not remove said files before 1 January, 2001, then legal
> injunctive measures will be initiated against him and his ISP.
>
> Nathan Cohen, Ph.D.

Richard can rest easy. Let's take a look at the record.

On September 28 I received an email message from Nathan Cohen, Ph.D., an officer of and representing Fractal Antenna Systems, Inc., claiming that I was infringing a copyright held by that company and requesting that I remove a file from my web site. (He posted a copy of that message on this newsgroup on October 22.) I responded that I don't believe I'm infringing anyone's copyright, and refused to remove the file.

On September 29, Fractal Antenna Systems, Inc., represented by its Chief Technology Officer (Nathan Cohen, Ph.D.), posted a notice on this newsgroup in which it refers to the posting of the file as "copyright infringement", and says that downloading the file will be to "break copyright law".

On October 21, "Chip, N1IR", posting from the Fractenna email address but not identifying the posting as being on behalf of Fractal Antenna Systems, Inc., said that the copyright of the file which Fractal Antenna Systems, Inc. had claimed was infringed was transferred to him.

Beginning on that date and continuing at least through October 25, in public postings on at least six newsgroups, one reflector, and one mailing list, "Nathan Cohen, Ph.D." and "Chip N1IR", posting from fractenna@aol.com (presumably a Fractal Antenna Systems, Inc. account) but not identifying the postings as being on behalf of FAS, called me a "pirate" or accused me of "piracy" on more than ten different occasions. He also stated many times without qualification that I am guilty of

"stealing" his property and am violating a copyright he claims to own.

These statements were made without one shred of credible evidence as to their truth. During this time, except for a short response to my response to the original email message of September 28, I was not privately contacted by Fractal Antenna Systems, Inc., Nathan Cohen, or an attorney representing either.

If true, these statements could -- and should be -- proven in court. And both Fractal Antenna Systems, Inc. (FAS) and Nathan Cohen, Ph.D. stated clearly that they intended to do so. FAS said, on September 29 that I am "being formally sent a letter requesting that [I] cease and desist the further distribution of this copyright material and will have until December 15, 2000 to comply." On September 30 and again on October 1, FAS said in postings that "Mr. Lewallen is being formally sent a letter requesting that he cease and desist the further distribution of this copyright material and will have until December 15, 2000 to comply. Failure to do so will lead to suit against Roy Lewallen d/b/a Lewallen consulting/EZNEC."

On October 21, Nathan Cohen posted a message stating that "Mr. Lewallen HAS BEEN SENT [caps mine] a certified letter formally asking him to cease and desist. If he does not remove the material he will be sued d/b/a EZNEC." This message was posted on at least six newsgroups, one reflector, and one mailing list. On another posting of that date, he said that "Shortly, Mr. Lewallen will receive 'ominous mail from massachusetts' as he calls it-- which will formally tell him to cease and desist from copyright violation."

On October 24, "This is NOT some game. Before the first of the month, Roy Lewallen will received [sic] a registered letter demanding that he remove the MI2 file. If he does not , then legal action WILL--repeat WILL be taken. This will be a costly and losing battle for him. . ."

The first of the month has come and gone, and eleven days have passed since the date when Cohen claimed a letter had been sent.

I have not received the letter which Fractal Antenna Systems, Inc. said would be sent, or the registered and certified letters Nathan Cohen has said would be sent.

Nathan Cohen, Ph.D., aka Chip, N1IR, has publicly and frequently, and without qualification, accused me of stealing and piracy, without any evidence whatsoever to establish the truth of these charges. An officer of Fractal Antenna Systems, Inc., speaking on behalf of that company, has also publicly accused me of copyright infringement without evidence. I, and much less all the people to whom these charges were publicly presented, haven't seen even so much as a legal opinion from an attorney representing either of these entities.

I present the above as evidence of the charges I'll make: Nathan Cohen, Ph.D., aka Chip, N1IR, doesn't tell the truth. His threats to sue are pure fabrication. He claims he will send letters which he doesn't send.

He claims that a letter was sent which in fact was not. He claims he will institute lawsuits which he doesn't. And he presents statements of the illegality of my actions as fact which aren't backed by any evidence.

It makes me wonder how much of what else he says is fabricated. And how many of the other "facts" he presents are unsupported.

Roy Lewallen, W7EL

1672. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:20:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <5ADhVBAwQZA6EwHh@ifwtech.demon.co.uk>
Source record: 177198

Scott wrote:
>"Ian White, G3SEK" wrote:
>
>>
>> It's certainly true that with an upstairs shack and an antenna that is
>> supposed to be balanced, you don't need an RF earth. Sometimes an RF
>> earth or the mains earth can actually "invite" common-mode RF currents
>> where they wouldn't otherwise exist.
>
>Especially if the length to ground is an odd 1/2 multiple? Straight out of the
>handbook ;)

Yet people still have a hankering for an "RF ground", a kind of magic
carpet floating somewhere at second-floor level...

>>
>
>It was my thought that even if you didn't have common mode currents flowing,
>isn't it still possible that the coax (outter braid) is picking up a fairly
>strong signal being radiated from the antenna?

This is still a common-mode current, even though it is induced by the EM
field rather than being launched directly on to the outside of the coax
at the feedpoint.

>Couldn't this flow back down the
>coax (outter braid again) and be re-radiated, in the shack? Would a functioning
>RF ground stop this? Or doesn't it even happen?

Depends what you mean by "functioning". Yes, it does happen, and the
lower the RF impedance to ground is at the shack, the more easily those
currents will flow. That's what I was implying by "inviting" common-mode
currents. RFI is notoriously difficult to predict, and if you connect an
RF ground where you don't really need one, there is always a possibility
that it may make matters worse.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1673. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:22:01 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3A0194A9.1A76DA72@wb6hqk.ampr.org>
Source record: 177171

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "---the pattern of an antenna mounted high above the ground is very
> different from that of a free space antenna."
>
> Free space antenna gains are used in point-to-point path calculations
> for terrestrial radio circuits. Real world measurements match
> calculations to the decibel during normal propagation.

In the usual single reflection model typical of point to point UHF and microwave links, both the direct and reflected ray are usually considered to contained by the main lobe of both the transmit and receive antenna. The far field strength of each ray taken separately is equal to the free space antenna gain times the free space propagation loss. Calculation of the received power requires adding the voltage contribution from each ray propagating between the transmit and receive antennas.

Most point to point terrestrial paths are near grazing and the ground reflection coefficient will be very close to -1. A reflection coefficient of -1 means the reflection wave has the same field strength of the incident wave but undergoes a phase shift of 180 degrees.

The 'best' case is when the path length for the reflected wave is a half wavelength longer than the direct wave. The additional 180 degrees of phase shift compensates for the phase reversal at the reflection point and the two voltages add resulting in a received power of 6 dB greater than predicted by the free space formula.

The more typical case for amateur VHF and UHF point to point operation is such that the extra distance traversed by the reflected wave is much less than 1/4 wl and the two waves combine destructively and yield considerably less received power than predicted by the free space formula.

In the common case where the latter phenomenon dominates, the propagation loss will be proportional to 1/R^4 (-40 dB / decade in distance) as opposed to the free space loss proportional to 1/R^2 (-20 dB/ decade in distance). If the antennas are above the nearby clutter, the received power will be proportional to the product of the antenna heights squared and nearly independent of operating wavelength.

>
> Reflection at the path grazing point could affect signal levels.

It almost almost profoundly affects signal levels.

> To
> minimize this effect, the path is often engineered for 0.6 Fresnel zone
> clearance, which would be neutral to path loss.

Unfortunately, hams usually can't even begin to get out of the first
null.

> The ringer is, of
> course, that a certain atmospheric refraction index is needed to produce
> the exact clearance, But the usual practices work very well anyway.

If the fade margin is sufficient to handle the idealized two ray
propagation model in the presence of bad weather, you've pretty well got
it made. Most real systems are a carefully engineered cost effective
compromise.

bart
wb6hqk

1674. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:32:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ts4vqire0@208.206.142.70>
Source record: 177172

Richard Harrison wrote:
>
> Gerrry Wellford wrote:
> "Now I have always believed that a good earth is essential for the
> antenna / earth system."
>
> Dick Carroll wrote:
> "Why? If you use balanced systems with common mode decoupling there is
> no need for separate ground systems for your radio gear...."
>
> Gerry, hang on to that belief. You don`t need an RF ground with a
> balanced antenna system. You still need a safety ground to avoid
> electrical shock,

Which is provided by the AC housewiring, once you have determined it
to be properly installed.

> and a lightning ground, if you have ever heard of a
> lightning stroke where you live.

Here's the snag, and I'm surprised you'd offer that any 8 ft ground rod
will serve to isolate the ham gear from the house's AC grounding system.
Most of the damage I've seen over the years was from lightning either
going from a radio ground to the house wiring system **while enroute to
it's better quality ground**, or from the house's service wiring to the
radio ground, in every case *always* THROUGH the hooked-up equipment,
which suffers severly.
ANY lightning migigation effort that fails to consider the likely
effects of dual grounding systems and their nearly certain negative
effects on whatever gear is between is a failure, when lightning
actually strikes. I've seen the results many times, and that experience
is the root of my own treatment of my ham gear- Hook it to an antenna
and the AC mains *only* when it is being used, never when storms
threaten, and aways unhook when finished operating.

And I live where lightning is common. I've experienced many close
strikes (I live on a hill) but never had one that caused any damage to
my ham gear. One did come into the house on the power line, took out a
TV and a couple other small appliances, but my ham gear was untouched -
it was unplugged and ungrounded.

> The reason for a separate ground return to your common earth system is
> so your radio stuff doesn`t have to share the path to earth with other
> apparatus.

But it WILL NOT work that way, unless you go through a full lightning mitigation treatment process which virtually no ham station ever gets. Anything less is wishful thinking. Lightning will always search for the lowest impedance path to ground, and dual ground systems virtually assure that you will experience equipment damage from a strike, even if both are fairly good grounds. The strike will split and follow BOTH paths to final ground, creating havoc enroute.
The idea that a ground rod will protect your ham station from lightning is nonsense and I'm surprised you don't recognize that fact.

> That other apparatus or the wires connected to it could be
> the source of a huge abrupt current which could cause a proportionately
> huge voltage drop across the ground return impedance shared with your
> radio stuff.

Almost guarantreed. So then, what is the very best you can do to prevent lightning from going through your equipment, in one direction or the other, enrouote to what it sees as the lower impedance ground? Only one thing- UNHOOK it all, from both ground and AC.

> That could raise the voltage on your radio to a dangerous
> level. Your radio stuff deserves its own separate ground return wire.

Feel free. Mine doesn't deserve to be abused like that. I live in lightning country.

> It
> also works the other way. Your radio could be the source of a large
> surge which you would not want to endanger other apparatus or even the
> people near it.
>

Any ham who allows lightning to come into his home because he failed to reduce the liklihood to the maximum extent possible is irresponsible, and should review his situation carefully. Providing dual ground systems is NOT a good idea if you want to reduce the probability of a strike coming into your house- and this is not just my opinion, it's good engineering practice. Neither is allowing your amateur antenna feedline to be routed inside full time, and certainly not to remain hooked to radios 24/7. That's just asking for it. Once inside the house via an antenna cable the strike will search for a low impedence path to ground, and will almost surely find it via your house wiring-causing unnecessary damage and danger to the household, even when your rig is unhooked.

I once knew a ham who thought he was doing a good thing when he unhooked his antenna coax from the transciever when a storm approached. But he laid the connector end on the power supply cabinet (metal) and a light discharge from the antenna burned a spot on the cabinet - and ruined his rig as well as the power supply. He might as well have not bothered to unhook it at all. And Of Course he had his equipment grounded, and plugged into AC. If it had been unhooked and "floating" free it would have not been affected at all.

It doesn't take a full lightning strike to cause serious damage, static discharge from antennas is common, sometimes on windy days even without storms, and can easily damage radio gear.

BTW, this viewpoint was developed over some 40 years of close observation and much time spent in cleaning up lightning damaged radio gear which was necessarily powered up, hooked to antennas and working around the clock each and every day. Much was learned by observation of what was left behind following a strike. While complete mitigation procedures were not possible due to the "installed base" that could not be changed sufficiently without total reconsruction, I waa able to improve equipment survivablilty considerably.
My ham gear has no need to be hooked up and online unless I'm using it, so I protect it the best way possible-keep it out of the path of lightning and don't try to use it when storms are around the area. My body wouldn't benefit from being hooked to a "good ground" any more than my gear would when lightning strikes. The stuff is very dangerous and it's surprising that more radio hobbyists don't come into closer contact with it.

One more point- Lightning doesn't have to strike your antenna nor even the power wiring to cause damage to a rig that is hooked up. An induced voltage pulse from a close strike in your neighborhood can come from the house wiring or a hooked-up antenna to act as a transformer secondary winding, the strike path itself being the primary, for the very brief time of the strike, and raise voltage levels in gear that is hooked to the "secondary" to levels easily damaging to the gear.

Dick

1675. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:36:00 UTC
From: richardharrison@webtv.net
Message-ID: <28461-3A0197F0-29@storefull-112.iap.bryant.webtv.net>
Source record: 177173

Chip, N1IR wrote:
"Even the very first fractal antenna article made a point of stating,
and showing, that log periodic antenna arrays are fractals,---."

My take is that Richard Clark said that log periodics were fractals.
Thank you for confirming that the world of fractals includes log
periodics.

Yesterday, Cecil showed that the elements of an array could be reformed
to each recreate a smaller image of the larger array. This would qualify
as fractal construction.

I hope I am slowly gaining a better understanding of what a fractal
might be.

Thanks for your contribution.

Best regards, Richard Harrison, KB5WZI

1676. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:36:13 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0197FD.4EC34D7D@bigfoot.com>
Source record: 177174

Reg Edwards wrote:
> Then you say it isn't because some flows on the outside
> merely because it is mismatched with a high impedance.

I didn't say that, Reg. RF current obeys Ohm's law. It flows toward the area of least resistance. There are a number of current paths to worry about with an antenna.

> Which way do you want it ? You cant have it both ways.

A balanced antenna does not guarantee balanced currents. The currents obey Ohm's law. Are you saying that common-mode currents are impossible with a balanced antenna fed with an unbalanced T-line?

> Assuming the generator is at the other end of the coax, take
> the extreme case and suppose the termination is an open
> circuit. Is there any current on the ouside of the coax ?

An open circuit doesn't have a path to ground. An antenna does.

For anyone interested in the details, may I suggest a perusal of Chapter 21 in "Reflections" and/or "Baluns: What They Do And How They Do It" in the ARRL Antenna Compendium, vol. I?
--
http://www.mindspring.com/~w6rca

1677. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:40:58 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A01991A.3268@pacbell.net>
Source record: 177177

James Rosenthal wrote:

(snip)

> My question is, why does he waste so much time here? Other than stroking
> his ego.
>
> : The "Fractal mystique" perhaps?
>
> More like an obsession. Even if he sells everyone on the NG an antenna,
> he's spent too much time trying.
> --
> Jim Rosenthal, WA4STJ

Actually, Chip has done a great deal to retard the cause - if there is one - of fractally derived antennas. It's incomprehensible to me why a fellow who owns an antenna company would spend his time fighting with potential customers. He could be very well off if he'd move his company to Silicon Valley, develop some type of of "wireless solution for enhanced connectivity through fractal geometry", borrow huge amounts of money from entrepreneurs, do an IPO, and then sell out before it became obvious the company was never going to make any money. With his wealth, he could even do research and, hopefully, come up with something useful. Anything would get him more money, prestige, and attention than making an infinite number of objectionable little posts to this newsgroup.

Tom Donaly KA6RUH

1678. Re: NOTICE: RICHARD CLARK COPYRIGHT INFRINGEMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 16:41:57 UTC
From: rwclark@seanet.com
Message-ID: <3a198ec2.673565355@news.seanet.com>
Source record: 177180

On Thu, 02 Nov 2000 08:16:17 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

snipped for brevity's sake
>
>I present the above as evidence of the charges I'll make: Nathan Cohen,
>Ph.D., aka Chip, N1IR, doesn't tell the truth. His threats to sue are
>pure fabrication. He claims he will send letters which he doesn't send.
>He claims that a letter was sent which in fact was not. He claims he
>will institute lawsuits which he doesn't. And he presents statements of
>the illegality of my actions as fact which aren't backed by any
>evidence.
>
>It makes me wonder how much of what else he says is fabricated. And how
>many of the other "facts" he presents are unsupported.
>
>Roy Lewallen, W7EL

Hi Roy,

Interesting litany of the absurd (for which there comes no great
surprise).

You forgot one particular milestone: that aggressive campaign to smear
you ENDED when I exposed the fraudulent statements made by the same
source vis-a-vis technologies that were patent pending.
The USPTO is unequivocal about the commission of a felony in falsely
claiming patent pending on technologies that have no claim coverage.

These claims were made by FAS as close to the patent publication as
one day prior. The patent process is one of complete disclosure, and
the review process guarantees that the petitioner cannot claim
ignorance of his coverage. To make such claims with the complete
knowledge that no such coverage existed is clearly a FRAUD
against our membership here.

from:
http://www.uspto.gov/web/offices/pac/doc/general/patpend.htm
>Some persons mark articles sold with the terms "Patent Applied For"
>or "Patent Pending." These phrases have no legal effect, but only
>give information that an application for patent has been filed in the
>Patent and Trademark Office. The protection afforded by a patent
>does not start until the actual grant of the patent. False use of these
>phrases or their equivalent is prohibited.

I believe I too was promised a love letter in the mail for having made this observation of persistent fraudulent statements (another fraudulent proclamation of having technology covered by pending patents was made yesterday).

I too, like Roy, have no actual expectation of ever hearing anything other than the fractstatic on this board. The moral and technical claims made by FAS have been prostituted to ego and debased long ago.

Thanks, Roy.

and lest we all forget:
DO NOT RESPOND TO TROLLS - ESPECIALLY FRAUDS

73's
Richard Clark, KB7QHC

1679. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:18:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8ts7ireqj1@neptunium.btinternet.com>
Source record: 177175

Cec, all I'm saying is that if you have a very high
impedance path there's little or no current flowing through
it to be choked off. So a choke is surplus to requirements
and your worries are unfounded.

What's the ARRL ? ;o)

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
CAM <cam2338@bigfoot.com> wrote in message
news:3A0197FD.4EC34D7D@bigfoot.com...
> Reg Edwards wrote:
> > Then you say it isn't because some flows on the outside
> > merely because it is mismatched with a high impedance.
>
> I didn't say that, Reg. RF current obeys Ohm's law. It
flows
> toward the area of least resistance. There are a number of
> current paths to worry about with an antenna.
>
> > Which way do you want it ? You cant have it both ways.
>
> A balanced antenna does not guarantee balanced currents.
The
> currents obey Ohm's law. Are you saying that common-mode
> currents are impossible with a balanced antenna fed with
> an unbalanced T-line?
>
> > Assuming the generator is at the other end of the coax,
take
> > the extreme case and suppose the termination is an open
> > circuit. Is there any current on the ouside of the coax
?
>
> An open circuit doesn't have a path to ground. An antenna
does.
>
> For anyone interested in the details, may I suggest a
perusal of
> Chapter 21 in "Reflections" and/or "Baluns: What They Do

And How
> They Do It" in the ARRL Antenna Compendium, vol. I?
> --
> http://www.mindspring.com/~w6rca

1680. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:26:30 UTC
From: fractenna@aol.com
Message-ID: <20001102122630.10197.00000396@ng-ch1.aol.com>
Source record: 177176

>Chip, N1IR wrote:
>"Even the very first fractal antenna article made a point of stating,
>and showing, that log periodic antenna arrays are fractals,---."
>
>My take is that Richard Clark said that log periodics were fractals.
>Thank you for confirming that the world of fractals includes log
>periodics.
>
>Yesterday, Cecil showed that the elements of an array could be reformed
>to each recreate a smaller image of the larger array. This would qualify
>as fractal construction.
>
>I hope I am slowly gaining a better understanding of what a fractal
>might be.
>
>Thanks for your contribution.
>
>Best regards, Richard Harrison, KB5WZI
>

Richard Clark makes so many errors I do not pay attention to his--opinions--on issues of science and technology. I also note that he is in copyright violation over a file which I own, and has not placed nor been asked for permission to use. Thus I have serious issues not only with the accuracy of his statements but his ethical basis as well. The issue of copyright violation can,and will be treated with litigation unless he removes the file.

Log periodics have been identified and described as fractal antenna--arrays- for many years, although as far as I am aware, my description and articulation was the first, reported in the Summer issue of Comm Quart in 1995.

In 1996, at the IEEE APS Meeting, Dr. Raj Mittra gave an invited talk at Baltimore on FRACTAL ANTENNAS. This talk was about log periodic arrays.

In other words, it has been accepted as a convention to note that log periodoc arrays are fractal by antenna professionals. Whether radio amateurs accept this is not important; it is important that they be aware of it should they have an interest.

The reason why log peridioc arrays are frequency independent is that they are origin symmetric and self similar about a point. This was shown to be as a description of a closed-form description for the geometric requirements for frequency independent antennas , published in FRACTALS by Hohlfeld and Cohen in 1999.

Cordially,

NC

1681. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:29:28 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8ts8a2gij1@iac5.navix.net>
Source record: 177178

As you have already violated my patents and copyrites in your reply you will be denounced on every newsgroup world wide. Cease and desist this rampant criminal behavior.

Fred Hambrecht PhD^2

"'Doc" <w5lz@oio.net> wrote in message news:3A0114EB.95A4398E@oio.net...
>
>
> Fred,
> Do you hold patents on both the capitol "O", and
> small "o", or just on one of them? If so, which?
> 'Doc

1682. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:30:37 UTC
From: fractenna@aol.com
Message-ID: <20001102123037.10204.00000485@ng-ch1.aol.com>
Source record: 177179

>James Rosenthal wrote:
>
>(snip)
>
>>
>> My question is, why does he waste so much time here? Other than stroking
>> his ego.
>>
>> : The "Fractal mystique" perhaps?
>>
>> More like an obsession. Even if he sells everyone on the NG an antenna,
>> he's spent too much time trying.
>> --
>> Jim Rosenthal, WA4STJ
>
>Actually, Chip has done a great deal to retard the cause - if there
>is one - of fractally derived antennas. It's incomprehensible to me
>why a fellow who owns an antenna company would spend his time
>fighting with potential customers. He could be very well off
>if he'd move his company to Silicon Valley, develop some type of
>of "wireless solution for enhanced connectivity through fractal
>geometry", borrow huge amounts of money from entrepreneurs, do
>an IPO, and then sell out before it became obvious the company
>was never going to make any money. With his wealth, he could
>even do research and, hopefully, come up with something
>useful. Anything would get him more money, prestige, and attention
>than making an infinite number of objectionable little posts
>to this newsgroup.
>
>Tom Donaly KA6RUH
>

I find your speculations offensive, in addition to being very wrong and off in left field. They are unambiguously targeted at me to make me look bad--without a factual basis-- and are thus libelous. I ask you to keep such personal attacks off a public NG.

Thank you.

NC

1683. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:38:16 UTC
From: Steve Casey <steven_casey@hotmail.com>
Message-ID: <3A01A687.B6241A0B@hotmail.com>
Source record: 177197

What if we all sent you a stipend when using that letter? Can we use it then?

73,
KA1YPQ

Fred Hambrecht wrote:

> As you have already violated my patents and copyrites in your reply you will
> be denounced on every newsgroup world wide. Cease and desist this rampant
> criminal behavior.
>
> Fred Hambrecht PhD^2
>
> "'Doc" <w5lz@oio.net> wrote in message news:3A0114EB.95A4398E@oio.net...
> >
> >
> > Fred,
> > Do you hold patents on both the capitol "O", and
> > small "o", or just on one of them? If so, which?
> > 'Doc

1684. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:44:23 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <BBhM5.5022$Ty4.812@newsfeed.slurp.net>
Source record: 177181

snip

Log periodics have been identified and described as fractal antenna--arrays-
for many years, although as far as I am aware, my description and
articulation
was the first, reported in the Summer issue of Comm Quart in 1995.

snip

Dr. Cohen:

HTH are many years of identification and description *followed* by a 'first'
description?

K3BHJ

1685. antenna opinions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 17:58:19 UTC
From: rdalton <rdalton1@swbell.net>
Message-ID: <cYhM5.187$ps6.16576@nnrp2.sbc.net>
Source record: 177182

Almost thru repairing my newly aquired swan250.Would like to take it mobile
but my custom van has a fiberglass roof
and will only beable to mount antenna to the ladder I suppose,just to get a
bodyground.For those not real familiar with
swan250 it's six mtr am/ssb,with about 240 watts out.Thought about a 1/4wave
with rg8 cable.Any ideas?

1686. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:02:40 UTC
From: fractenna@aol.com
Message-ID: <20001102130240.06395.00000310@ng-fi1.aol.com>
Source record: 177183

>snip
>
>Log periodics have been identified and described as fractal antenna--arrays-
>for many years, although as far as I am aware, my description and
>articulation
>was the first, reported in the Summer issue of Comm Quart in 1995.
>
>snip
>
>Dr. Cohen:
>
>HTH are many years of identification and description *followed* by a 'first'
>description?
>
>K3BHJ
>

It is 2000, 2000-1995 is 5, as in 'many'. What solecistic or ambiguous statement do you see in the above that would lead you to totally misunderstand it? I see NOTHING in the above that SAYS or IMPLIES "followed". How can you possibly see this?

I am sorry; there are times that I feel you deliberately want to make clarity into the opaque.

I invite you to reword my above statement, so that it meets your sense of grammar and accuracy of presentation.

Cordially,

NC

1687. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:19:13 UTC
From: richardharrison@webtv.net
Message-ID: <28463-3A01B021-8@storefull-112.iap.bryant.webtv.net>
Source record: 177186

Bart, WB6HQK wrote:
"If the fade margin is sufficient to handle the idealized two ray propagation model in the presence of bad weather, you have pretty well got it made."

That`s an impractical "if". Two components of a wave can cause a 6 db increase in signal strength, or a complete null. It depends on amplitude and phase of the two components.

No fade margin, however large, is big enough to overcome a complete null. Diversity and alternate routing are solutions to the "two ray propagation model". On long paths, there will be propagation outage (fades) unless you have diversity.

I will reiterate my point which was none of the above. Real world measurements match calculations to the decibel during normal propagation. Free space antenna gains are used in antenna system calculations. So, the antennas are proved to be operating as if they were in free space. This is because the antennas are being operated many wavelengths above ground, and the difference between free space operation, and operation very high above ground is insignificant.

My example had a rhombic 180 wavelengths above ground. It was at 3GHz, but operation would be the same for a 3-MHz rhombic 180 wavelengths above ground.

When does a rhombic in free space have its performance altered by the presence of the earth? When the earth is close enough to significantly alter the antenna`s characteristics.
This has nothing to do with how two rays from a distant reflection point interfere at a receiving location any more than the height of the ionosphere affects antenna gain.

Best regards, Richard Harrison, KB5WZI

1688. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:23:25 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <xiiM5.1840$dB6.113007@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177184

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102130240.06395.00000310@ng-fi1.aol.com...
> >snip
> >
> >Log periodics have been identified and described as fractal
antenna--arrays-
> >for many years, although as far as I am aware, my description and
> >articulation
> >was the first, reported in the Summer issue of Comm Quart in 1995.
> >
> >snip
> >
> >Dr. Cohen:
> >
> >HTH are many years of identification and description *followed* by a
'first'
> >description?
> >
> >K3BHJ
> >
>
> It is 2000, 2000-1995 is 5, as in 'many'. What solecistic or ambiguous
> statement do you see in the above that would lead you to totally
misunderstand
> it? I see NOTHING in the above that SAYS or IMPLIES "followed". How can
you
> possibly see this?
>
> I am sorry; there are times that I feel you deliberately want to make
clarity
> into the opaque.
>
> I invite you to reword my above statement, so that it meets your sense of
> grammar and accuracy of presentation.
>
>
>
> Cordially,
>
> NC

Nathan:

Relax a bit. I read your statement the same way he did. It was the
"although" that messed up your intent and meaning.

Rewording as follows would work:

"As far as I am aware, I was the first to describe a log-periodic antenna as being a fractal. This was a number of years ago in an article I published in Comm Quart in 1995."

Everyone on this NG expects to be given the same level of respect that you would like to be given. When you start to approach people with that level of respect, they will give it back in turn. If you treat people with disrespect and arrogance, you will get flamed. Try a new appraoch for a few weeks and see what happens.

Steve

1689. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:32:50 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tsc0j$h06$1@nnrp1.deja.com>
Source record: 177185

>
> I beg your pardon! I was watching him on TV when he said it. His
exact
> words were "......I took the initiative and invented the Internet."
>
> It HAPPENED. I saw it and I'm certain many others did as well
>
> It is quite typical of him -and his minions- to now deny that he said
> it.
>

YOU ARE WRONG! Go to the web site listed below and see the EXACT quote
and the background including the fact that President George Bush Sr.
took credit for inventing the internet.

http://www.nydailynews.com/2000-05-05/News_and_Views/Opinion/a-65600.asp

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1690. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:45:48 UTC
From: richardharrison@webtv.net
Message-ID: <28461-3A01B65C-34@storefull-112.iap.bryant.webtv.net>
Source record: 177191

Dick Carroll said:
"The idea that a ground rod will protect your ham station from lightning is nonsense and I`m surprised you don`t recognize that fact."

Ground rods can be part of a protection system. I`m not so pessimistic as to say "you can`t protect against a direct hit". I worked many years in broadcast stations which operated right through countless direct hits without damage.

I used too many words in my posting. But, two words i did not put together were lightning and rod.

Should have said, use "star connections", not "daisy-chains".

I disconnect my stuff when I see a flash or hear thunder, if I remember.

Best regards, Richard Harrison, KB5WZI

1691. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:47:11 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <%GiM5.118$WN.864689@news.ntplx.net>
Source record: 177187

VE9SRB <srbest@worldnet.att.net> wrote:

>>> Log periodics have been identified and described as fractal
>>> antenna --arrays-- for many years, although as far as I am aware,
>>> my description and articulation was the first, reported in the Summer
>>>issue of Comm Quart in 1995.

> > I invite you to reword my above statement, so that it meets your sense
of
> > grammar and accuracy of presentation.

> Relax a bit. I read your statement the same way he did. It was the
> "although" that messed up your intent and meaning.

> Rewording as follows would work:

> "As far as I am aware, I was the first to describe a log-periodic antenna
as
> being a fractal. This was a number of years ago in an article I published
> in Comm Quart in 1995."

I didn't read anything sinister into the word "although." Although (uh,
oh...) I think your wording flows a bit better, I read both paragraphs as
saying essentially the same thing. Are we reading a problem where none was
intended?

73,
Ed Hare, W1RFI

>
> Everyone on this NG expects to be given the same level of respect that you
> would like to be given. When you start to approach people with that level
> of respect, they will give it back in turn. If you treat people with
> disrespect and arrogance, you will get flamed. Try a new appraoch for a
> few weeks and see what happens.
>
> Steve
>
>

1692. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:52:07 UTC
From: fractenna@aol.com
Message-ID: <20001102135207.10172.00000480@ng-ch1.aol.com>
Source record: 177188

```
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001102130240.06395.00000310@ng-fi1.aol.com...
>> >snip
>> >
>> >Log periodics have been identified and described as fractal
>antenna--arrays-
>> >for many years, although as far as I am aware, my description and
>> >articulation
>> >was the first, reported in the Summer issue of Comm Quart in 1995.
>> >
>> >snip
>> >
>> >Dr. Cohen:
>> >
>> >HTH are many years of identification and description *followed* by a
>'first'
>> >description?
>> >
>> >K3BHJ
>> >
>>
>> It is 2000, 2000-1995 is 5, as in 'many'. What solecistic or ambiguous
>> statement do you see in the above that would lead you to totally
>misunderstand
>> it? I see NOTHING in the above that SAYS or IMPLIES "followed". How can
>you
>> possibly see this?
>>
>> I am sorry; there are times that I feel you deliberately want to make
>clarity
>> into the opaque.
>>
>> I invite you to reword my above statement, so that it meets your sense of
>> grammar and accuracy of presentation.
>>
>>
>>
>> Cordially,
>>
>> NC
>
>Nathan:
>
```

>Relax a bit. I read your statement the same way he did. It was the
>"although" that messed up your intent and meaning.
>
>Rewording as follows would work:
>
>"As far as I am aware, I was the first to describe a log-periodic antenna as
>being a fractal. This was a number of years ago in an article I published
>in Comm Quart in 1995."
>
>Everyone on this NG expects to be given the same level of respect that you
>would like to be given. When you start to approach people with that level
>of respect, they will give it back in turn. If you treat people with
>disrespect and arrogance, you will get flamed. Try a new appraoch for a
>few weeks and see what happens.
>
>Steve

Excuse Me;

Please do not impute me with attitudes that I do not feel, nor in any way represent. My 'approach' has always been consistent: you get what you give.

I am sorry, but I see nothing in my statement that in any way misleads or in any way says other than what was intended. If you are uncomfortable with that, then there is nothing I wish to do change it.How can I? I am a writer and that means that I have a certain style --which I have taken 30 years to nurture. I sincerely do not seek to abandon that which I have worked so hard to produce.

I cannot be responsible for the statements and misinteprations of others.

HOWEVER--

Others are responsible for THEIR statements, and I urge you to SET AN EXAMPLE in which individuals are not misrepresented; denigrated; libeled; and personally attacked. An example in which one does not hinge 'weighty' science issues through ignorance of wording such as: fractal; arbitrary; random.

Then we shall see if others will follow.

Cordially,

NC

1693. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 18:56:44 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tsddnivu1@iac5.navix.net>
Source record: 177189

Besides what makes you a Doc? Do you hold a degree from an accreditade univrsety? If you do not you are in adition to braking my paitent fradauntly clameing to be a doctor. I will be sooing you as well!

"Fred Hambrecht" <Fred@w4jle.com> wrote in message news:8ts8a2gij1@iac5.navix.net...
> As you have already violated my patents and copyrites in your reply you will
> be denounced on every newsgroup world wide. Cease and desist this rampant
> criminal behavior.
>
> Fred Hambrecht PhD^2
>
> "'Doc" <w5lz@oio.net> wrote in message news:3A0114EB.95A4398E@oio.net...
> >
> >
> > Fred,
> > Do you hold patents on both the capitol "O", and
> > small "o", or just on one of them? If so, which?
> > 'Doc
>
>

1694. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 19:11:15 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <n%iM5.1873$dB6.113735@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177190

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:%GiM5.118$WN.864689@news.ntplx.net...
> VE9SRB <srbest@worldnet.att.net> wrote:
>
> I didn't read anything sinister into the word "although." Although (uh,
> oh...) I think your wording flows a bit better, I read both paragraphs as
> saying essentially the same thing. Are we reading a problem where none
was
> intended?
>
> 73,
> Ed Hare, W1RFI

Probably.

I found the sentence to be awkward and did not think that David's interpretation was inappropriate. Chip took offense and responded rather abruptly, as usual. I was simply offering to Chip that if he began to treat people with a bit more respect he might be pleasantly surprised as to how they react. Judging by his response to me, I think the message fell on deaf ears.

Steve

1695. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 19:26:57 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <5ejM5.1887$dB6.114873@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177192

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102135207.10172.00000480@ng-ch1.aol.com...
> >
> Excuse Me;
>
> Please do not impute me with attitudes that I do not feel, nor in any way
> represent. My 'approach' has always been consistent: you get what you
give.

Yes, this is true, even in your case. That was my point. If you change
your approach and start to treat people with respect they might treat you
with respect as well.

>
> I am sorry, but I see nothing in my statement that in any way misleads or
in
> any way says other than what was intended. If you are uncomfortable with
that,
> then there is nothing I wish to do change it.How can I? I am a writer and
that
> means that I have a certain style --which I have taken 30 years to
nurture. I
> sincerely do not seek to abandon that which I have worked so hard to
produce.
>
> I cannot be responsible for the statements and misinteprations of others.
>
> HOWEVER--
>
> Others are responsible for THEIR statements, and I urge you to SET AN
EXAMPLE
> in which individuals are not misrepresented; denigrated; libeled; and
> personally attacked. An example in which one does not hinge 'weighty'
science
> issues through ignorance of wording such as: fractal; arbitrary; random.
>
> Then we shall see if others will follow.
>
> Cordially,
>
> NC

My point exactly ... Would you like a mirror?

1696. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 20:29:34 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <erist8.812.ln@mail.specsol.com>
Source record: 177193

Fractenna <fractenna@aol.com> wrote:

<big snip>

> I cannot be responsible for the statements and misinteprations of others.

Translation: I am always right and everyone else is always wrong. If you question this premise, you are personally attacking me because you are jealous of what a brilliant person I am. I am a poor, downtrodden victim of the jealous unwashed.

<rest of sniveling snipped>

Jim Pennino

1697. Re: antenna opinions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 20:48:25 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A01D319.D58A0237@oio.net>
Source record: 177194

rdalton wrote:
>
> Almost thru repairing my newly aquired swan250.Would like to take it mobile
> but my custom van has a fiberglass roof
> and will only beable to mount antenna to the ladder I suppose,just to get a
> bodyground.For those not real familiar with
> swan250 it's six mtr am/ssb,with about 240 watts out.Thought about a 1/4wave
> with rg8 cable.Any ideas?

Sounds like it ought to work. Grounding may be a problem mounting
to the ladder. You may have to run some 'straps' to body/chassis to
get everything working correctly. Good luck...
'Doc

1698. Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 20:50:47 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <HskM5.17647$xJ4.852497@bgtnsc06-news.ops.worldnet.att.net>
Source record: 177195

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102135207.10172.00000480@ng-ch1.aol.com...
>
>An example in which one does not hinge 'weighty' science
> issues through ignorance of wording such as: fractal; arbitrary; random.
>
> Cordially,
>
> NC

Rather than simply acusing me of 'ignorance' (and you don't provoke anyone), engage me in a technical discussion:

What is your definition of a fractal antenna?

Are all self-similar antennas fractals?

Are all non self-similar antennas not fractals?

Please describe a non self-similar antenna (no loops) that is a fractal? Please give a technical reason why it is a fractal?

Do you believe that all loop antennas are fractals?

Please describe a non-fractal loop antenna, other than a simple circle, triangle or polygon?

What is wrong with calling the antennas I designed arbitrary or random? If I simply arrange wire in any shape of straight lines, why it is wrong to call this arbitrary? I used no math, formulas or self-similar concepts to create the shape.

Why are the arbitrary designs fractal? They are not self-similar, so what specifically makes them fractals? Please don't just tell me that they are. Give me a technical reason.

Answers here would be a good start.

Steve

1699. The Fractal Piper

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 22:25:07 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <f6q30tcitq54e02kllq7hmgahmgbp7398t@4ax.com>
Source record: 177196

On 2 Nov 2000 02:35:55 GMT, Dick Carroll <dixie@townsqr.com> wrote:

> You are nuts.

Yes. And he leads the merry band down his path of insanity, day
after day...

1700. Butternut vertical on 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 22:55:11 UTC
From: Larry Bratcher <lbratche@ipa.net>
Message-ID: <VdmM5.7992$Q92.137871@nntp2.onemain.com>
Source record: 177199

Is anyone using the 6 meter kit on their Butternut vertical? If so, please email me as I cannot get mine to resonate anywhere I put it. According to Bencher, the top bracket with the wire attached goes about 3/4 wave length above the ground (~162") and the other about 1/4 wave length below that (~54"). The instructions state 151" and 58" I believe. However, nothing close to this seems to work. The SWR is 5:1 + regardless. If anyone is successfully using the 6 meter on their Butternut I greatly like to know how it is set up.

Thanks

Larry

1701. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 22:59:01 UTC
From: Gerry Welford <gerard.welford@xtra.co.nz>
Message-ID: <WkmM5.875$Gd0e.22610104@news.xtra.co.nz>
Source record: 177200

Well Well Have I opened another can of worms?
I always thought that the earth was an integral part of the radiating system in that a mirror image of the antenna was reflected in the earth. Hence the reason why stations on swampy land had better radiation or is this a myth too?
I know that the ELECTRICAL earth is for protection and all that, but I thought the earth from your rig was part of the antenna/earth system for the performance of the antenna. If I was confused before, now I am utterly dumfounded.
Thanks anyway for the responses.
73.....Gerry ZL1AWW

1702. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:01:10 UTC
From: Alex Wiecek VE3GOP <alexwiecek@my-deja.com>
Message-ID: <8tsrnh$1o$1@nnrp1.deja.com>
Source record: 177201
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.policy

But I'm not in Rome...

Alex

In article <e0eM5.84240$YG5.64019@tor-nn1.netcom.ca>,
"Walter Fairclough" <wfairclo@netcom.ca> wrote:
> When in Rome do as the Romans do!
>
> Walter
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1703. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:06:53 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A01F38D.6AC0E758@bigfoot.com>
Source record: 177203

Reg Edwards wrote:
> Cec, all I'm saying is that if you have a very high
> impedance path there's little or no current flowing through
> it to be choked off. So a choke is surplus to requirements
> and your worries are unfounded.

Remember a little current can turn into a lot of current
1/4WL away. I always put my choke at the current maximum
point.
--
http://www.mindspring.com/~w6rca

1704. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:10:11 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A01F453.30D4DFB@hiwaay.net>
Source record: 177202

Steve- please don't hold your breath while waiting for an answer. He will not answer, and he will give one of several excuses, if past history is a clue.
1. (most likely) he will say they even a rudimentary search will show the answers, so Why should he do your homework for you?
2. He will claim to have published this in a paper, and he has a policy of not repeating himself.
3. He will make snide comments re your education, or lack thereof. (interesting side note- you frequently give his honorary title, Dr., but I do not recall him ever doing so when you are being referenced. ? why?)
4. To give an answer will prematurely divulge material germane to a pending patent.
5. He will ignore the questions (although this is at least the second posting). He cannot claim he did not see them , because the record will also show that he reads EVERY post here, FAST. Never-the-less, this has an unknown probability, also.

THere are more, according to past record, but he can, and probably will, use one of these.

Bill-WBSG

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001102135207.10172.00000480@ng-ch1.aol.com...
> >
> >An example in which one does not hinge 'weighty' science
> > issues through ignorance of wording such as: fractal; arbitrary; random.
> >
> > Cordially,
> >
> > NC
>
> Rather than simply acusing me of 'ignorance' (and you don't provoke
> anyone), engage me in a technical discussion:
>
> What is your definition of a fractal antenna?
>
> Are all self-similar antennas fractals?
>
> Are all non self-similar antennas not fractals?
>
> Please describe a non self-similar antenna (no loops) that is a fractal?
> Please give a technical reason why it is a fractal?

>
> Do you believe that all loop antennas are fractals?
>
> Please describe a non-fractal loop antenna, other than a simple circle,
> triangle or polygon?
>
> What is wrong with calling the antennas I designed arbitrary or random? If
> I simply arrange wire in any shape of straight lines, why it is wrong to
> call this arbitrary? I used no math, formulas or self-similar concepts to
> create the shape.
>
> Why are the arbitrary designs fractal? They are not self-similar, so what
> specifically makes them fractals? Please don't just tell me that they are.
> Give me a technical reason.
>
> Answers here would be a good start.
>
> Steve

1705. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:16:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A01F5E8.3571E1F9@eznec.com>
Source record: 177204

The "mirror image" is a reasonable concept when dealing with horizontal antennas and moderate to low radiation angles. But for horizontally polarized waves at very high angles, like the ones used for NVIS communication, the reflection is more complex. And for vertically polarized waves, the "mirror" idea is pretty seriously in error. It's the interference between the direct ray and the ground reflection that produces the vertical radiation pattern of an antenna. You'll find that the pattern of a horizontal antenna over perfectly conductive ground (a true "mirror image" effect) looks almost the same as over ordinary dirt, at least at all but high angles. But this isn't at all true for verticals. Because of the nature of the ground reflection, the very low angle radiation from a vertical is highly attenuated unless the reflection occurs from very highly conductive ground. Salt water definitely is in this category, and a swamp probably is. So a vertical on swampy land will likely produce very strong low angle radiation, while one on ordinary ground won't. (The ground wave will also be attenuated less over swampy regions, but this is of interest mostly to AM broadcasters.)

It's an interesting subject. You can see the sky wave effects for yourself in graphical detail with the free EZNEC demo program available from http://eznec.com. If you use MININEC type ground for verticals, losses due to ground system currents are ignored, and the changes you see in the pattern as you change the ground characteristics are due solely to the changing ground reflection. For horizontal antennas lower than about 0.2 wavelength, you should use the High Accuracy ground model; above that height, all three ground models will produce similar results.

Roy Lewallen, W7EL

Gerry Welford wrote:
>
> Well Well Have I opened another can of worms?
> I always thought that the earth was an integral part of the radiating system
> in that a mirror image of the antenna was reflected in the earth. Hence the
> reason why stations on swampy land had better radiation or is this a myth
> too?
> I know that the ELECTRICAL earth is for protection and all that, but I
> thought the earth from your rig was part of the antenna/earth system for the
> performance of the antenna. If I was confused before, now I am utterly
> dumfounded.
> Thanks anyway for the responses.
> 73.............Gerry ZL1AWW

1706. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:39:37 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A01FB39.61175924@bigfoot.com>
Source record: 177205

Fractenna wrote:
> In other words, it has been accepted as a convention to note that log periodoc
> arrays are fractal by antenna professionals.

Note that a log periodic array bears a striking resemblence to a fractal
fern generated using an IFS model.
--
http://www.mindspring.com/~w6rca

1707. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:55:45 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A01FF01.A277A4D3@bigfoot.com>
Source record: 177207

VE9SRB wrote:
> Why are the arbitrary designs fractal?

They can be (not must be) fractals in the same way shorelines and clouds are fractals. Clouds are not random - they obey certain boundary conditions. A simgle wire cannot be random since each point is connected to an adjacent point - that's a boundary condition. My personal opinion is that if no other type of loading is allowed other than simple folding, a fractal will turn out to be the most efficient design for a given volume. The folding method that causes the least undesired interference in the far field is, IMO, likely to result in a fractal.
--
http://www.mindspring.com/~w6rca

1708. Re: Butternut vertical on 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-02 23:56:17 UTC
From: Richard Miller <k1rdm@mediaone.net>
Message-ID: <BanM5.1975$ml4.342689@typhoon.ne.mediaone.net>
Source record: 177206

Larry,

I had to shorten the length of the stub a bit more than they indicated.

I meant to take measurements when I was done. I'm guessing that
the antenna adjustment is sensitive to ground efficiency. Mine did
come in (~<2:1) with some adjustment with a bendwidth of about
1 Mhz.

Regards,

Rick
K1RDM
"Larry Bratcher" <lbratche@ipa.net> wrote in message
news:VdmM5.7992$Q92.137871@nntp2.onemain.com...
> Is anyone using the 6 meter kit on their Butternut vertical? If so,
please
> email me as I cannot get mine to resonate anywhere I put it. According
> to Bencher, the top bracket with the wire attached goes about 3/4 wave
> length above the ground (~162") and the other about 1/4 wave length below
> that (~54"). The instructions state 151" and 58" I believe. However,
> nothing close to this seems to work. The SWR is 5:1 + regardless. If
> anyone is successfully using the 6 meter on their Butternut I greatly like
> to know how it is set up.
>
> Thanks
>
> Larry
>
>
>
>

1709. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8turoq$j6f$1@nnrp1.deja.com>
Source record: 177098

In article <8tt5tj$7t7$0@208.206.142.89>,
Dick Carroll <dixie@townsqr.com> wrote:

You have your quote wrong. I directed you to a newspaper article that
has the exact quote. I suspect you visited it and say CLEARLY that
your quote was incorrect and I suspect that your refusal to admit your
error is politically motivated.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1710. Re: History of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a1fe248.760483657@news.seanet.com>
Source record: 177099

On Fri, 03 Nov 2000 14:57:46 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html

Hi Steve,

This is an excellent resource.

73's
Richard Clark, KB7QHC

1711. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8tusia$jr6$1@nnrp1.deja.com>
Source record: 177100

In article <3A023746.A66090BB@sccoast.net>,
stewartx@sccoast.net wrote:
>
> So, Gore said that he "took the initiative in creating the Internet"
> as opposed to inventing it. That is a really fine line to draw since
> both words have almost the exact same meaning.

Simple fact is that Gore never said he invented the internet. He did,
however, take the lead in his efforts to pass legislation that would
create what is now known as the internet. Arpanet was NOT the
internet. It was a network of a few handfulls of universities and
think-tanks. By NO MEANS was it the internet.

>
> Of course, one has to wonder if the author (Lars Erik Nelson) even
has
> the quote right since so many other things in his article were wrong.
> For example, he said that, "In March 1986, when computers were still
> something found mostly in laboratories, Gore sponsored..."
>
> Of course, by 1986, computers had been available to use in the home
> for almost ten years, and personal computers in the home outnumbered
> laboratory computers by almost twenty to one (heck, in 1986, I had two
> of them in my house).
>

He didn't say they were not in homes, but you MUST agree that in 1986,
the use of home computers was very small compaired to today! I had
several computers and communicated with BBS's...That doesn't mean I wa
s on the internet!

> He went further to say that three years later (1989 - a timeline he
> gave when talking about Minitel), "even computer professionals were
> jeering at the notion of personal computers. They would be a waste of
> money, costly machines for balancing checkbooks or storing recipes."
>
> Of course, we all know that is not the case - by 1989 no computer
> professional was dismissing personal computers as a "waste of money,
> costly machines for balancing checkbooks or storing recipes." By
1989,
> most companies in America were in the process of updating their
> workplace to include personal computers. And many schools even had
> computers available in the classrooms by 1989.

I did have several computers in that time frame and I DO remember that
there were computer professionals that balked at the notion of home

computers.

Schools had computers...mainly Apple II computers. They were usually
the ONLY personal computer many people had contact with.

>
> But, in any case, regardless of what Gore did or said in the 1980's,
> the internet has existed in some form since the mid-sixties, twenty
> years before Gore claimed he "took the initiative in creating" it.
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

The internet as it is commonly knows did NOT exist in the sixties.
Arpanet existed and it was no more the internet than the horse and
buggy was an automobile. Do some research on Arpanet before you spew
this dribble.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1712. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8turll$l62$1@iac5.navix.net>
Source record: 177101

"Things mean exactly..." Hey Nate, your back on this side of the looking glass... ALERT! You have returned to the real world...

"Fractenna" <fractenna@aol.com> wrote in message news:20001102203428.20443.00000039@ng->
>
> I imagine I could, but frankly, I woldn't answer this of ANY antenna
> professional, because to me it indicates they just haven't bothered to do the
> basic research needed.
>
> I would NEVER insult a colleague by asking things that I truly need to look up
> for myself--and I am not offended wheninadvertantly and on the rare occasion,
> they have suggested I do so.
>
> 73
> Chip N1IR

1713. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6825-3A02EF44-21@storefull-115.iap.bryant.webtv.net>
Source record: 177102

Ed Hare, W1RFI wrote:
"Here is the pattern of a half-wave dipole up 180 wavelengths on 20 meters."

I suspect Ed used a computer model to plot the vertical pattern. The results would result from summation of the direct and reflected waves,

Located 180 wavelengths above a reflecting surface, the downward traveling wave has spread so that its strength at the reflection point is at least 65db less than the direct radiation from the wire.

I understand that the pattern will not show downward radiation because the earth blocks further travel and will absorb (my 3GHz if it`s the usual soil) or reflect in the case of an assumed perfect earth, the energy which strikes it.

I don`t understand how a reflection so attenuated by its space travel could make such a hole above the wire in the vertical radiation pattern of the dipole. To create a complete null requires equal and oppositely phased signals.

Best regards, Richard Harrison, KB5WZI

1714. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: z005381b@bc.seflin.org
Message-ID: <8turhh$pv6@nntp.seflin.org>
Source record: 177103

Fractenna (fractenna@aol.com) wrote:
: >: >James Rosenthal wrote:
: >: >(snip)
: Jim,

: I want to remind you that we are about to experiience the anniversary of
: Kristallnacht. If you don't know what that is, you should.

Are you planing on breaking all my glassware?

: You should also be aware that Goebbels arranged it so that the German Jews were
: themselves blamed for Kristallnacht.

So you think the people here that criticize you (and presumably your
antenna) are.........

: I hope you will appreciate that this is the same kind of propaganda I
: see here.

I see comments made (mostly) in relation to your attitude here. Maybe
it's in the eyes of the beholder. Nothing to do with racism or Germany.

I assume you do realize that internet posting is NOT the same as "the
"real" world.

: NC

But more to the point, why -are- you wasting your time here? If you spent
the time promoting your antenna via commerical outlets you might actually
increase your sales. What is really accomplished here that will promote
your antenna?
--
Jim Rosenthal, WA4STJ

1715. Re: Circle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tusl4lkd1@iac5.navix.net>
Source record: 177104

First you have violated my patents and copyrights in your missive. I refuse to explain what I mean in even the simplest terms Be advised that while traveling through the orient in 1853, learning to cloud mens minds I sent my self a letter containing all the engineering notes of my work. Your paltry few years dos nothing except to make me look bad on the NG and to lible my works. You will be added to the lawsuit. You have only untill Jan 1 2098 to cease and desist.

FH W4JLE
"Parts" <telesensor@bigplanet.com> wrote in message
news:8tuhde$h3e$1@iac5.navix.net...
> Sorry O.M. but I patented and copyrighted all the English letters and
> Spanish derivatives 4 years ago and have been lenient with all users until
> now but both you and your Lawyer will be receiving legal notification of
> infringement by post. THANKYOU.
>
> "Fred Hambrecht" <Fred@w4jle.com> wrote in message
> news:8tqqp8son1@iac5.navix.net...
> > I have created a new antenna that is based on a circle, I have written
> > patent pending all over it and copyrighted with a multitude of (C)'s.
> >
> > This brings me to the meat of my concerns, I notice that many of you on
> the
> > newsgroup are using my copyrights by using the letter O in your posts.
> This
> > must cease, desist, stop, etc etc right now. I will be sending all
> violators
> > a letter from my attorney for violation of my copyright! You have been
> > warned DO NOT USE THE LETTER O I hold all the patent pendings and
> copyrights
> > on it and woe be unto anyone who dares to violate my protections. YOU
HAVE
> > BEEN WARNED!
> >
> > There is no need to reply to this post as I am already smarter than
anyone
> > on the newsgroup and plan to address totally different issues from thos
> you
> > may bring up. I will be publishing my data in a pier reviewed magazine,
or
> > at least a wharf reviewed one.
> >
> >
>

>

1716. Re: Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <21384-3A02F524-26@storefull-117.iap.bryant.webtv.net>
Source record: 177105

Cecil, W6RCA wrote:
"---the gain in the highest gain lobe goes up while the take off angle for that lobe goes down."

True, as the height of the dipole increases above 1/2-wavelength, it happens as Cecil says. There is a downside. The main lobe narrows as its gain increases and that reduces the range of useful vertical angles. At the same time a new take off angle appears which is straight up, or 90 degrees. This is mostly good for nothing and robs power from useful angles.

Best regards, Richard Harrison, KB5WZI

1717. Re: Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8tuuis$7oj$1@news.tribune.com>
Source record: 177106

My 5 band quad is at a boom hieght of 35 feet. On 20 meters the tuning changes when I rotate it 90 degrees. I attribute this to the Aluminum siding on the building that the tower is bracketed to. I could not get the tuning right on the bottom two bands, although it does work. The 20 meter element is about 9 feet above the roof. Given a choice I would make it higher.

KA9CAR

Thomas Beltran <tbeltran@earthlink.net> wrote in message news:uzsM5.12546$rl.1053689@newsread2.prod.itd.earthlink.net...
> I'm considering putting up a tower and either a mono-band 20 meter yagi, or
> a quad. My question concerns the decision about how tall a tower to buy.
> Would there be much difference between say a 35 foot tower and perhaps a 54
> foot tower in terms of ability to hear signals better and to be heard? The
> only thing I've seen in print concerning this question was that a yagi
> should be approximately one wavelength off the ground to avoid interaction
> with the ground? Does that sound right? Tom
>
>
>

1718. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A030460.7968B408@bigfoot.com>
Source record: 177107

RanHefner wrote:
> Simple fact is that Gore never said he invented the internet.

Of course not, he just said he "took the initiative in creating the internet". Engineers invent - Gods create. Gore also didn't engage in illegal fund raising activities. And Bill Clinton never inhaled and never had sex with that woman.
--
http://www.mindspring.com/~w6rca

1719. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ERDM5.11247$GI4.6966@newsfeed.slurp.net>
Source record: 177108

Hi, Gary:

Didn't work enough ratt to see ttul, so, yes, I did have to ask.

Thanx for the explanation.

I've seen the 'yctulhul' acronym -- would you have the words to go with that one, pls?

TIA and 73,

Dave, K3BHJ

1720. Re: EZNEC: Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <3A030CE6.1F22989E@earthlink.net>
Source record: 177109

Message filters are so wonderful. Problem is, it takes so many to cope
with the fractenna stuff.

Phl W7OX

1721. Re: Use of diode in antenna switch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A030EDF.60A2FE12@bellatlantic.net>
Source record: 177110

I've used 1N914's to switch between two crystals in a
transverter (22 & 24 Mhz crystals) with good results.
My guess is they will work fine for your swl purposes. But
I heartily recommend reading up on the subject and making
your own decision. The learning experience is worth more
than just getting the thing to work.

Swler wrote:

> I want to construct an antenna switch box. To prevent back signal flow I
> was thinking about using diodes.
> Will a diode cause any signal loss?
> Any suggestions or type of diode to use?
> Thanks.

1722. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <JvCdOFA1hmA6EwTb@ifwtech.demon.co.uk>
Source record: 177111

Reg Edwards wrote:
>CAM <cam2338@bigfoot.com> wrote in message
>news:3A01F38D.6AC0E758@bigfoot.com...
>> Reg Edwards wrote:
>> > Cec, all I'm saying is that if you have a very high
>> > impedance path there's little or no current flowing
>through
>> > it to be choked off. So a choke is surplus to
>requirements
>> > and your worries are unfounded.
>>
>> Remember a little current can turn into a lot of current
>> 1/4WL away. I always put my choke at the current maximum
>> point.
>> --
>================================
>
>At last you've got it ! The choke is not needed at the high
>impedance point.
>
>Unfortunately, when it is placed at a current maximum the
>current maximum just shifts itself 1/4-wavelength along the
>line.
>When the common mode stuff is picked up by radiation from
>the antenna there's no way of getting rid of it. It can only
>be relocated somewhere else and swept under the carpet where
>it won't be noticed.
>
>
If you use a choke to force a minimum in the common-mode current at the place where it "wanted" to be maximum, the new current distribution will generally be less favorable for radiation, and the new current maximum will be smaller than it was.

Taking the process one step further, two chokes spaced about a quarter-wavelength apart can be quite effective in getting rid of common-mode currents in that part of the line. As Reg says, it will pop up somewhere else instead (if the rest of the line is long enough). After fitting the first choke at the "natural" current maximum, the rest of the process can be rather like squeezing a long balloon - as confirmed by both modeling and practical experience.

>I would rather have amps in the shack than volts - they are
>less painful.

That's true, but it can often be difficult to predict which you're going to get. A clip-on RF current meter is a very valuable tool to confirm (even in an uncalibrated way) whether things are getting better or worse.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1723. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A0312D6.DE4E5760@uci.edu>
Source record: 177112

Jerry France wrote:
>
> Why in the world would all of you clog up an antenna news group with
> this crap? Please take it elsewhere. Thank you.
> Jerry France
> K7LY

Good point. What we need to know is what are the candidates views on antenna restrictions, and on the spectrum protection act. :-)

ac6xg

1724. Anyone have any experience with Alpha Delta OutPosts...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Martin Mendelson <martin275@home.com>
Message-ID: <6CEM5.78210$hD4.17893003@news1.rdc1.mi.home.com>
Source record: 177113

I have some interest in using an Alpha Delta Outpost with an Outbacker that I am very happy with for mobile use. Does anyone or has anyone used this device and what did/do you think of it? I currently am using a Cushcraft R7000 and am not happy with the domestic perfomance. DX is fine. Could be the takeoff angle is blowing me out of the water here in the states. I would like to use a tower and beam but like a vast majority of amateurs I have to accept compromises. The Outbacker has performed well on my vehicle. I can consistently work VK's while mobile so I know the Outbacker is capable with a proper grounding system aka. Ford Expedition.

Please answer here or direct via n8mg@arrl.net
Thanx, Marty

1725. Re: Hf verticals, roof or ground mount?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a03160e_2@news.cybertours.com>
Source record: 177114

"Alan P. Biddle" <APBIDDLE@ATEEANDTEA.NOT> wrote in message
news:q4j50to14bve45979akb43h09tuujtkegs@4ax.com...
> Hi,
>
> I have a situation where I can mount a 40-10 meter vertical either on
> the roof, with radials, or on normal, i.e. non-desert, yard with a
> good set of buried radials. Any thoughts on the tradeoffs involved?
>
> I realize there are other types of antennas to use, so we don't need
> to get into dipoles, loops, etc. :)
> --
> Alan
> WA4SCA

Hi Alan,

Well there are trade offs to both.. however it will depende much on your surroundings.. If you have a fairly clear flat shot.. few trees or manmade structures in the are out to a couple wavelengths at the lowest Freq. you should do very well with the ground mounted vertical.. and a good radial system. I recomend at least 32 at the lowest frequency of operation. no need to make them exactly resonant either.. (32 is a compromise but what you'll gain after that point is minimal for the effort and cost involved.)

If on the other hand you are in a typical suburnban subdivision i'd opt for the roof mounting mode..

Hope this Helps 73
Dave KC1DI /Psk /Qrp

1726. Re: What Exactly did "Hatred" Do???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Rttyman <jlockett@onemain.com>
Message-ID: <bFEM5.15579$Q92.264869@nntp2.onemain.com>
Source record: 177115

NOw thats a hellva good idea!! We ALL should do this...

> I am going to change my filters this morning so that any
> correspondence from your email address is automatically
> forwarded to BU I have NEVER PREVIOUSLY contacted your
> employer but if that is the way you want it, so be it.
>
>
>

1727. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <zIEM5.16136$UL.970064@bgtnsc07-news.ops.worldnet.att.net>
Source record: 177116

"Fractenna" <fractenna@aol.com> wrote in message
news:20001103025814.09477.00000286@ng-fy1.aol.com...
> Jim,
>
> I want to remind you that we are about to experiience the anniversary of
> Kristallnacht. If you don't know what that is, you should.
>
> You should also be aware that Goebbels arranged it so that the German Jews
were
> themselves blamed for Kristallnacht.
>
> I hope you will appreciate that this is the same kind of propaganda I see
here.
>
>
> NC

Are you serious in comparing the discussions on this newsgroup to what happened to the Jewish population in Germany during the late 1930's and WWII? What happened in Germany was a horrible time in human history and I find the comparison distasteful.

Steve

1728. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tv5e7$p29$1@iac5.navix.net>
Source record: 177117

As I understand it, this was the night Jews burned down their own properties in order to collect the insurance proceeds. No buildings were burned that were insured by Jewish companies. I believe the fine levied against the perpetrators was 1 billion marks, of which 600 million marks was collected as forfeiture from the insurance industry and deposited in the coffers of the German government.

"Fractenna" <fractenna@aol.com> wrote in message ,
>
> I want to remind you that we are about to experiience the anniversary of
> Kristallnacht. If you don't know what that is, you should.
>
> You should also be aware that Goebbels arranged it so that the German Jews
were
> themselves blamed for Kristallnacht.
>
> I hope you will appreciate that this is the same kind of propaganda I see
here.
>
>
> NC

1729. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <4%EM5.127$WN.935442@news.ntplx.net>
Source record: 177118

Richard Harrison <richardharrison@webtv.net> wrote in message
news:6825-3A02EF44-21@storefull-

> I suspect Ed used a computer model to plot the vertical pattern. The
> results would result from summation of the direct and reflected waves,

Yes, it was EZNEC (DOS version).

> Located 180 wavelengths above a reflecting surface, the downward
> traveling wave has spread so that its strength at the reflection point
> is at least 65db less than the direct radiation from the wire.

> I understand that the pattern will not show downward radiation because
> the earth blocks further travel and will absorb (my 3GHz if it`s the
> usual soil) or reflect in the case of an assumed perfect earth, the
> energy which strikes it.

> I don`t understand how a reflection so attenuated by its space travel
> could make such a hole above the wire in the vertical radiation pattern
> of the dipole. To create a complete null requires equal and oppositely
> phased signals.

I don't know at what distance NEC calculates the far field pattern, but in
the far field, the direct ray and the reflected ray have travelled
approximately the same distance so they could well be at an equal and
opposite polarity at a point very far away from the antenna.

73,
Ed Hare, W1RFI

1730. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:15:47 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <TsnM5.17745$xJ4.861075@bgtnsc06-news.ops.worldnet.att.net>
Source record: 177208

"CAM" <cam2338@bigfoot.com> wrote in message
news:3A01FF01.A277A4D3@bigfoot.com...
> VE9SRB wrote:
> > Why are the arbitrary designs fractal?
>
> They can be (not must be) fractals in the same way shorelines and
> clouds are fractals. Clouds are not random - they obey certain
> boundary conditions. A simgle wire cannot be random since each
> point is connected to an adjacent point - that's a boundary
> condition.

Hi Cecil:

Not nit pick but this did not answer the question.

My personal opinion is that if no other type of loading
> is allowed other than simple folding, a fractal will turn out to
> be the most efficient design for a given volume. The folding
> method that causes the least undesired interference in the far
> field is, IMO, likely to result in a fractal.
> --
> http://www.mindspring.com/~w6rca

Why? Are you saying all bent wire designs are fractals?

1731. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:25:07 UTC
From: k1bqt@aol.com
Message-ID: <20001102192507.19184.00000178@ng-fc1.aol.com>
Source record: 177209

>When you start to approach people with that level of respect, they will give it back in turn.<

Chip's been receiving this oft-repeated sage advice for a long time. Historically, the NG has responded to his "unique personal style" with all manor of concern ranging from respectful coaching to ferocious flaming. To no avail!

In my view, the outcome is predestined to be uninfluenced by us. Like chess master Gary Kasparov, I'm betting Chip will snort, posture, and bully his way until the very end--when, as some have claim for Kasparov, aliens ultimately arrived to steal his brain.

Only Chip can alter this course. If he does not, remedy will likely come in response to a 911 call initiated by a concerned friend or family member rather than as a ruling in Civil Court against a fellow ham.

Rick K1BQT

1732. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:30:46 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A020736.EDD92C83@bigfoot.com>
Source record: 177211

VE9SRB wrote:
>
> "CAM" <cam2338@bigfoot.com> wrote in message
> > My personal opinion is that if no other type of loading
> > is allowed other than simple folding, a fractal will turn out to
> > be the most efficient design for a given volume. The folding
> > method that causes the least undesired interference in the far
> > field is, IMO, likely to result in a fractal.
>
> Why? Are you saying all bent wire designs are fractals?

Nope, just that the most efficient ones will turn out to
be fractals. If you had a program that put a certain length
of wire in a certain volume and iterated it until maximum
radiation efficiency was reached, I think the end result
would be a fractal.
--
http://www.mindspring.com/~w6rca

1733. FM on an AM set??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:40:08 UTC
From: ~EDDY~ <weeeddy@NOSPAMhotmail.com>
Message-ID: <8tt1h6$i7v$1@newsg2.svr.pol.co.uk>
Source record: 177210

Is there any way to to receive an FM signal on an AM set, is there any thing
that could be put inline to change the FM signal in to an AM one??#
If ithis is a thick question I'm sorry...

Also what is the difference in a CW1 signak and a CW2 as I have a receiver
which can well receive both of them..

Many thanks

~EDDY~

1734. typo Re: FM on an AM set??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 00:41:06 UTC
From: ~EDDY~ <weeeddy@NOSPAMhotmail.com>
Message-ID: <8tt1j0$i9h$1@newsg2.svr.pol.co.uk>
Source record: 177212

~EDDY~ <weeeddy@NOSPAMhotmail.com> wrote in message
news:8tt1h6$i7v$1@newsg2.svr.pol.co.uk...
> Is there any way to to receive an FM signal on an AM set, is there any
thing
> that could be put inline to change the FM signal in to an AM one??
> If this is a thick question I'm sorry...
>
> Also what is the difference in a CW1 signal and a CW2 as I have a receiver
> which can well receive both of them..
>
> Many thanks
>
> ~EDDY~
>
>
>

1735. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 01:31:43 UTC
From: fractenna@aol.com
Message-ID: <20001102203143.20443.00000038@ng-fm1.aol.com>
Source record: 177213

>Fractenna wrote:
>> In other words, it has been accepted as a convention to note that log
>periodoc
>> arrays are fractal by antenna professionals.
>
>Note that a log periodic array bears a striking resemblence to a fractal
>fern generated using an IFS model.
>--

Some actually fall into that approach EXACTLY:-)

73
Chip

1736. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 01:34:28 UTC
From: fractenna@aol.com
Message-ID: <20001102203428.20443.00000039@ng-fm1.aol.com>
Source record: 177214

```
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001102135207.10172.00000480@ng-ch1.aol.com...
>>
>>An example in which one does not hinge 'weighty' science
>> issues through ignorance of wording such as: fractal; arbitrary; random.
>>
>> Cordially,
>>
>> NC
>
>Rather than simply acusing me of 'ignorance' (and you don't provoke
>anyone), engage me in a technical discussion:
>
>What is your definition of a fractal antenna?
>
>Are all self-similar antennas fractals?
>
>Are all non self-similar antennas not fractals?
>
>Please describe a non self-similar antenna (no loops) that is a fractal?
>Please give a technical reason why it is a fractal?
>
>Do you believe that all loop antennas are fractals?
>
>Please describe a non-fractal loop antenna, other than a simple circle,
>triangle or polygon?
>
>What is wrong with calling the antennas I designed arbitrary or random? If
>I simply arrange wire in any shape of straight lines, why it is wrong to
>call this arbitrary? I used no math, formulas or self-similar concepts to
>create the shape.
>
>Why are the arbitrary designs fractal? They are not self-similar, so what
>specifically makes them fractals? Please don't just tell me that they are.
>Give me a technical reason.
>
>Answers here would be a good start.
>
>Steve
>
>
>
>
```

>

I imagine I could, but frankly, I woldn't answer this of ANY antenna professional, because to me it indicates they just haven't bothered to do the basic research needed.

I would NEVER insult a colleague by asking things that I truly need to look up for myself--and I am not offended wheninadvertantly and on the rare occasion, they have suggested I do so.

73
Chip N1IR

1737. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 01:37:39 UTC
From: fractenna@aol.com
Message-ID: <20001102203739.20443.00000040@ng-fm1.aol.com>
Source record: 177215

>
>>When you start to approach people with that level of respect, they will give
>it back in turn.<
>
>Chip's been receiving this oft-repeated sage advice for a long time.
>Historically, the NG has responded to his "unique personal style" with all
>manor of concern ranging from respectful coaching to ferocious flaming. To
>no
>avail!
>
>In my view, the outcome is predestined to be uninfluenced by us. Like chess
>master Gary Kasparov, I'm betting Chip will snort, posture, and bully his way
>until the very end--when, as some have claim for Kasparov, aliens ultimately
>arrived to steal his brain.
>
>Only Chip can alter this course. If he does not, remedy will likely come in
>response to a 911 call initiated by a concerned friend or family member
>rather
>than as a ruling in Civil Court against a fellow ham.
>
>Rick K1BQT
>

Why must the positioning on this NG be to:

1) describe someone as mentally ill;
2) try to get them fired;
3) pose the 'solution' as insanity, death, or a reckless act??

These things are SO UNLIKE what I am, that it becomes unfathomable for me to imagine individuals who cannot support even a modest level of human decency.

NC

1738. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 01:48:08 UTC
From: z005381b@bc.seflin.org
Message-ID: <8tt5go$6n6@nntp.seflin.org>
Source record: 177217

Fractenna (fractenna@aol.com) wrote:
: >James Rosenthal wrote:
: >(snip)
: >> My question is, why does he waste so much time here? Other than stroking
: >> his ego.

: >> : The "Fractal mystique" perhaps?

: >> More like an obsession. Even if he sells everyone on the NG an antenna,
: >> he's spent too much time trying.
: >
: >Actually, Chip has done a great deal to retard the cause - if there
: >is one - of fractally derived antennas. It's incomprehensible to me
: >why a fellow who owns an antenna company would spend his time
: >fighting with potential customers.

Is anyone of the noncombatants on the NG actually using one of his antennas?

; He could be very well off
: >if he'd move his company to Silicon Valley, develop some type of
: >of "wireless solution for enhanced connectivity through fractal
: >geometry", borrow huge amounts of money from entrepreneurs, do
: >an IPO, and then sell out before it became obvious the company
: >was never going to make any money. With his wealth, he could
: >even do research and, hopefully, come up with something
: >useful. Anything would get him more money, prestige, and attention
: >than making an infinite number of objectionable little posts
: >to this newsgroup.
: >
: >Tom Donaly KA6RUH

: I find your speculations offensive, in addition to being very wrong and off in
: left field.

So are aren't starting a company in Calif?

; They are unambiguously targeted at me to make me look bad--without...

After trying to wade through all this fractal stuff to get to the
amateur.antenna part of the NG, it would appear that it is really not that
necessary to make you appear "bad".

: Thank you. NC
--
Jim Rosenthal, WA4STJ

1739. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 01:54:59 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tt5tj$7t7$0@208.206.142.89>
Source record: 177216

RanHefner wrote:
>
> >
> > I beg your pardon! I was watching him on TV when he said it. His
> exact
> > words were ".....I took the initiative and invented the Internet."
> >
> > It HAPPENED. I saw it and I'm certain many others did as well
> >
> > It is quite typical of him -and his minions- to now deny that he said
> > it.
> >
>
> YOU ARE WRONG!

Oh....That guy I saw on TV saying "...I took the initiative and
invented the Internet" wasn't Al Gore?? Sure did look like him.
Perchance does he have a twin?

Go to the web site listed below and see the EXACT quote
> and the background including the fact that President George Bush Sr.
> took credit for inventing the internet.
>

Ah..just like Old Times. If you can't weasel out of what you did, just
blame it all on the opposition.

1740. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:03:05 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tt6cp$7t7$1@208.206.142.89>
Source record: 177218

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001102135207.10172.00000480@ng-ch1.aol.com...
> >
> >An example in which one does not hinge 'weighty' science
> > issues through ignorance of wording such as: fractal; arbitrary; random.
> >
> > Cordially,
> >
> > NC
>
> Rather than simply acusing me of 'ignorance' (and you don't provoke
> anyone), engage me in a technical discussion:
>
> What is your definition of a fractal antenna?
>
> Are all self-similar antennas fractals?
>
> Are all non self-similar antennas not fractals?
>
> Please describe a non self-similar antenna (no loops) that is a fractal?
> Please give a technical reason why it is a fractal?
>
> Do you believe that all loop antennas are fractals?
>
> Please describe a non-fractal loop antenna, other than a simple circle,
> triangle or polygon?
>
> What is wrong with calling the antennas I designed arbitrary or random? If
> I simply arrange wire in any shape of straight lines, why it is wrong to
> call this arbitrary? I used no math, formulas or self-similar concepts to
> create the shape.
>
> Why are the arbitrary designs fractal? They are not self-similar, so what
> specifically makes them fractals? Please don't just tell me that they are.
> Give me a technical reason.
>
> Answers here would be a good start.
>
> Steve

Only one problem- he can't give them because he doesn't have them!

1741. Use of diode in antenna switch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:07:32 UTC
From: Swler <swler73s@yahoo.com>
Message-ID: <3A021DE4.2513A06D@yahoo.com>
Source record: 177070

I want to construct an antenna switch box. To prevent back signal flow I
was thinking about using diodes.
Will a diode cause any signal loss?
Any suggestions or type of diode to use?
Thanks.

1742. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:07:35 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <t047g0nccprafc@corp.supernews.com>
Source record: 177069

>
> I imagine I could, but frankly, I woldn't answer this of ANY antenna
> professional, because to me it indicates they just haven't bothered to
do the
> basic research needed.

Excuse #1.

1743. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:13:19 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8tt6vv$7t7$2@208.206.142.89>
Source record: 177071

Gerry Welford wrote:
>
> Well Well Have I opened another can of worms?
> I always thought that the earth was an integral part of the radiating system
> in that a mirror image of the antenna was reflected in the earth.

Only for the types of antennas that require this for completion of the
signal return.(as in ground mounted verticals) And then, you'd better
improve on the conductivity of the earth in question with a metallic
ground plane if you desire decent efficiency.
If earth ground is so necessary to radio transmitters, what do
aircraft do at altitude?? To say nothing of sattelites in space.....

Hence the
> reason why stations on swampy land had better radiation or is this a myth
> too?

Not at all...the action of the earth upon the launched wave is a
separate matter entirely from any necessity of grounding your
transmitter to a rod stuck in the earth.

> I know that the ELECTRICAL earth is for protection and all that, but I
> thought the earth from your rig was part of the antenna/earth system for the
> performance of the antenna. If I was confused before, now I am utterly
> dumfounded.

Read.

1744. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:13:29 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8tt70d$1jq$1@iac5.navix.net>
Source record: 177072

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102123037.10204.00000485@ng-ch1.aol.com...
It is not libel for one to state there opinion, no matter how offensive you may find it. It is my opinion your nuts! Why else would you consistantly make outrageous statements, cop a condecending attitude, and generally piss people off? Steve gave you the best possible advise in an earlier message that you chose to ignore. Your constant statements that you fear for your life have to be either parinoid delusions, or momumental self loathing. I would guess the later. It is the only explaination that makes sense, feeling in your self loathing that people are going to reject you, prompts you to reject others first. As badly as you piss me off, I truly feel sorry for you! Please, Please see a mental health specialist.

>
>
> I find your speculations offensive, in addition to being very wrong and
off in
> left field. They are unambiguously targeted at me to make me look
bad--without
> a factual basis-- and are thus libelous. I ask you to keep such personal
> attacks off a public NG.
>
> Thank you.
>
> NC

1745. What Exactly did "Hatred" Do???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:45:10 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a02241e.174144433@nntp.mindspring.com>
Source record: 177073

What organization was God Emperor Cohen separated from on the first of the month? Did Sir Trollsalot get separated from Fractenna? Was a proctologist involved. Or was this all more Fractsmokescreen.

In my NSHO we are intended to be deceived into thinking Sir Trollsalot had been separated from BU so he could post during the work day without being busted.

In closing I must thank Nathan, Chip or whoever for a lot of laughs last weekend. We were conducting a 75M mobile antennas shootout and Sir Trollsalot's name came up much jocularity was enjoyed at his expense. Nathan your village called they want their idiot back.

1746. Re: typo Re: FM on an AM set??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 02:59:04 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A0229F8.99B58DAC@tir.com>
Source record: 177074

Dear -EDDY-
Many AM receivers are able to demodulate, after a fashion, FM
signals. So called "slope detection" is used. The idea is to place
the FM signal's center frequency on the slope (edge) of the AM
receiver's passband. If the edges of the passband are too steep or
the FM signal's deviation too wide, there will be a lot of
distortion. Also, the FM signal must be strong for this to work.
Used this scheme to identify FM broadcast stations I used as test
signals for a study of VHF propagation in the "hills" of West Virginia
- the signal strength "meter" did not have an FM detector.
Regards, Mac

~EDDY~ wrote:
>
> ~EDDY~ <weeeddy@NOSPAMhotmail.com> wrote in message
> news:8tt1h6$i7v$1@newsg2.svr.pol.co.uk...
> > Is there any way to to receive an FM signal on an AM set, is there any
> thing
> > that could be put inline to change the FM signal in to an AM one??
> > If this is a thick question I'm sorry...
> >
>

--
J. Mc Laughlin n8tt@tir.com Michigan ~

1747. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:04:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8tt9po$c6e$1@neptunium.btinternet.com>
Source record: 177075

CAM <cam2338@bigfoot.com> wrote in message
news:3A01F38D.6AC0E758@bigfoot.com...
> Reg Edwards wrote:
> > Cec, all I'm saying is that if you have a very high
> > impedance path there's little or no current flowing
through
> > it to be choked off. So a choke is surplus to
requirements
> > and your worries are unfounded.
>
> Remember a little current can turn into a lot of current
> 1/4WL away. I always put my choke at the current maximum
> point.
> --
================================

At last you've got it ! The choke is not needed at the high impedance point.

Unfortunately, when it is placed at a current maximum the current maximum just shifts itself 1/4-wavelength along the line.

When the common mode stuff is picked up by radiation from the antenna there's no way of getting rid of it. It can only be relocated somewhere else and swept under the carpet where it won't be noticed.

I would rather have amps in the shack than volts - they are less painful.

Reg.

1748. Re: Canadian Amateurs please read...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:11:22 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A022CB9.76AB2A5D@sccoast.net>
Source record: 177076
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.policy

Bob Miller wrote:
>
> Dwight Stewart wrote:
>
> Quite frankly, I have no idea what
> your intent is, Dwight, or why you
> would demean anyone's desire to
> maintain a connection with their
> ancestry or their "motherland"
> as you so delicately put it.

Well, my friend, if you think asking a question is an attempt to
"demean" something, then you truly have a twisted sense of the word.
Look, I have no problem with anyone maintaining a connection with their
ancestry or their motherland. However, the message talked about
celebrating the anniversary of an organization, not their homeland or
their ancestry. So, I just wondered out loud if the goal was to
maintain a connection with their motherland, or to maintain a connection
to this organization.

To get back to the specific issue raised (the special permit), if the
goal is to maintain a connection to this organization (a business with
no legal, or non-profit, status in Canada), then I can certainly
understand why no special permit was issued. Of course, that seems so
obvious in light of the opening message, I didn't think I had to spell
it out for people. But, obviously some people are not able to see the obvious.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1749. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:46:19 UTC
From: sideband <sideband@cac.net>
Message-ID: <s1d40tgc6k2uub9eji20d2stv2rqqa18ek@4ax.com>
Source record: 177077

Good luck, Steve...

He wouldn't answer my earlier, simpler, questions... Do you honestly
think he's going to answer your more "real" questions? ::grin::

Hey, if you get the answers, maybe you could translate them for the
masses and repost, so that we can all learn some more about this
without having to wade thru the vitriol of a person who obviously has
his own hidden agenda?

TIA

-SSB

On or about Thu, 02 Nov 2000 20:50:47 GMT, "VE9SRB"
<srbest@worldnet.att.net>, using the forum rec.radio.amateur.antenna
did say:

:
:"Fractenna" <fractenna@aol.com> wrote in message
:news:20001102135207.10172.00000480@ng-ch1.aol.com...
:>
:>An example in which one does not hinge 'weighty' science
:> issues through ignorance of wording such as: fractal; arbitrary; random.
:>
:> Cordially,
:>
:> NC
:
:Rather than simply acusing me of 'ignorance' (and you don't provoke
:anyone), engage me in a technical discussion:
:
:What is your definition of a fractal antenna?
:
:Are all self-similar antennas fractals?
:
:Are all non self-similar antennas not fractals?
:
:Please describe a non self-similar antenna (no loops) that is a fractal?
:Please give a technical reason why it is a fractal?
:
:Do you believe that all loop antennas are fractals?
:
:Please describe a non-fractal loop antenna, other than a simple circle,
:triangle or polygon?
:

:What is wrong with calling the antennas I designed arbitrary or random? If
:I simply arrange wire in any shape of straight lines, why it is wrong to
:call this arbitrary? I used no math, formulas or self-similar concepts to
:create the shape.
:
:Why are the arbitrary designs fractal? They are not self-similar, so what
:specifically makes them fractals? Please don't just tell me that they are.
:Give me a technical reason.
:
:Answers here would be a good start.
:
:Steve
:
:
:
:
:

1750. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:52:58 UTC
From: sideband <sideband@cac.net>
Message-ID: <ogd40ts2g1h1vfigjm980ahodq3fa6j52l@4ax.com>
Source record: 177078

Of course not, Chip... you won't answer those questions for someone
who's not in the business, or a "colleague", lending weight to the
thought and rumor that you really don't know what you are talking
about, and are just spouting vile blather in order to get your jollies
by stirring up a newsgroup.

Just my two cents.

-SSB

(Go ahead and sue me. You can't get blood from a turnip.)

On or about 03 Nov 2000 01:34:28 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
<gigantic snip>
:
:I imagine I could, but frankly, I woldn't answer this of ANY antenna
:professional, because to me it indicates they just haven't bothered to do the
:basic research needed.
:
:I would NEVER insult a colleague by asking things that I truly need to look up
:for myself--and I am not offended wheninadvertantly and on the rare occasion,
:they have suggested I do so.
:
:73
:Chip N1IR

1751. Re: Fractal or not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:54:31 UTC
From: sideband <sideband@cac.net>
Message-ID: <6nd40t8ff8nf2oapg3c6unlkaoemu0rqb5@4ax.com>
Source record: 177079

```
On or about 03 Nov 2000 01:37:39 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
<snip>
:These things are SO UNLIKE what I am, that it becomes unfathomable for me to
:imagine individuals who cannot support even a modest level of human decency.
:
:NC

PROVE IT.

-SSB
```

1752. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 03:56:36 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A023746.A66090BB@sccoast.net>
Source record: 177080

RanHefner wrote:
>
> >
> > I beg your pardon! I was watching
> > him on TV when he said it. His exact
> > words were "......I took the
> > initiative and invented the Internet."
>
> YOU ARE WRONG! Go to the web site listed
> below and see the EXACT quote and the
> background including the fact that President
> George Bush Sr. took credit for inventing
> the internet.

So, Gore said that he "took the initiative in creating the Internet" as opposed to inventing it. That is a really fine line to draw since both words have almost the exact same meaning.

Of course, one has to wonder if the author (Lars Erik Nelson) even has the quote right since so many other things in his article were wrong. For example, he said that, "In March 1986, when computers were still something found mostly in laboratories, Gore sponsored..."

Of course, by 1986, computers had been available to use in the home for almost ten years, and personal computers in the home outnumbered laboratory computers by almost twenty to one (heck, in 1986, I had two of them in my house).

He went further to say that three years later (1989 - a timeline he gave when talking about Minitel), "even computer professionals were jeering at the notion of personal computers. They would be a waste of money, costly machines for balancing checkbooks or storing recipes."

Of course, we all know that is not the case - by 1989 no computer professional was dismissing personal computers as a "waste of money, costly machines for balancing checkbooks or storing recipes." By 1989, most companies in America were in the process of updating their workplace to include personal computers. And many schools even had computers available in the classrooms by 1989.

But, in any case, regardless of what Gore did or said in the 1980's, the internet has existed in some form since the mid-sixties, twenty years before Gore claimed he "took the initiative in creating" it.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1753. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:06:48 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <gDQCOhdF+dXF=4aSL2LgYZhVwocm@4ax.com>
Source record: 177081

On Thu, 02 Nov 2000 20:50:47 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001102135207.10172.00000480@ng-ch1.aol.com...
>>
>>An example in which one does not hinge 'weighty' science
>> issues through ignorance of wording such as: fractal; arbitrary; random.
>>
>> Cordially,
>>
>> NC
>
>Rather than simply acusing me of 'ignorance' (and you don't provoke
>anyone), engage me in a technical discussion:
>
>What is your definition of a fractal antenna?
>
>Are all self-similar antennas fractals?
>
>Are all non self-similar antennas not fractals?
>
>Please describe a non self-similar antenna (no loops) that is a fractal?
>Please give a technical reason why it is a fractal?
>
>Do you believe that all loop antennas are fractals?
>
>Please describe a non-fractal loop antenna, other than a simple circle,
>triangle or polygon?
>
>What is wrong with calling the antennas I designed arbitrary or random? If
>I simply arrange wire in any shape of straight lines, why it is wrong to
>call this arbitrary? I used no math, formulas or self-similar concepts to
>create the shape.
>
>Why are the arbitrary designs fractal? They are not self-similar, so what
>specifically makes them fractals? Please don't just tell me that they are.
>Give me a technical reason.
>
>Answers here would be a good start.
>
>Steve
>

Hi Steve,

No luck hmm?

The subject: a technical question in a technical forum
response: no answer for the forum because you are a professional (as
if we had any doubt).

The reductio ad absurdum would be that the forum will never get these
answers until you professionals quit this forum - but this also means
the HMFIC of FAS being a professional (ah yes, here the doubts arise)
leaves too. Still no answer for the forum.

The logic thus begs the question: why raise the topic of fractals if
you won't talk about it?

Makes for perfect opportunity to advertise specifications, offer
testimonials and beg off answers because of wicked merchants
eavesdropping to steal the latest trade secret. :->

And what became of
>RESULTS: POSTED ON this NG by 1 Nov 2000. In the event of no-winners, the
>closest value and design will be announced on this NG at that time.
or was the pairing of the following date too strained?
>Nathan Cohen has his position terminated on 1 Nov.

Steve, your six winners seemed to have upset the order of the
universe. The Forbidden City has fallen to the Barbarians.

73's
Richard Clark, KB7QHC

1754. Re: Use of diode in antenna switch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:18:48 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <3jkCOmnti6tNqulcdsj2m0mI3W9A@4ax.com>
Source record: 177082

On Thu, 02 Nov 2000 21:07:32 -0500, Swler <swler73s@yahoo.com> wrote:

>I want to construct an antenna switch box. To prevent back signal flow I
>was thinking about using diodes.
>Will a diode cause any signal loss?
>Any suggestions or type of diode to use?
>Thanks.

Hi OM,

If you are speaking of diode logic for relay control, use any diode capable of a forward current at least twice the current demand of the relay.

On the other hand, it looks like you are talking about signal steering diodes. This is considerably more complex than text can adequately reveal. The situation here is that the diode needs to be biased on or off to serve the purpose I suspect you wish to achieve.

That is, serve as a switch. Here the principle determiner of diode selection is the current flowing through it. This is a function of both signal current and control current. At a minimum this means the diode must support double what your source provides.

Look into high power VFETs. Siliconix is a good house.

73's
Richard Clark, KB7QHC

1755. Re: FM on an AM set??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:28:36 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <7DwCOnT9Ktqa47MMJ3khnu4IIyvA@4ax.com>
Source record: 177083

On Fri, 3 Nov 2000 00:40:08 -0000, "~EDDY~"
<weeeddy@NOSPAMhotmail.com> wrote:

>Is there any way to to receive an FM signal on an AM set, is there any thing
>that could be put inline to change the FM signal in to an AM one??#
>If ithis is a thick question I'm sorry...
>
>Also what is the difference in a CW1 signak and a CW2 as I have a receiver
>which can well receive both of them..
>
>Many thanks
>
>~EDDY~
>
>

Hi EDDY,

The answer to your first question is yes.

AM receivers tuned off frequency of the FM signal will pick up a very
weak, but readable signal. This particular characteristic is called
slope demodulation. This is the only simple way to answer yes.

73's
Richard Clark, KB7QHC

1756. Re: Earthing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:32:26 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A023FA3.85F083B0@sccoast.net>
Source record: 177085

Gerry Welford wrote:
>
> If I was confused before, now I am utterly
> dumfounded.

Gerry, what does the owner's manual for your radio say about grounding? For example, my Yaesu's manual says the following...

The provision of an effective grounding system is important in any successful communications station. A good ground system can contribute to station efficiency in a number of ways:

- It can minimize the possibility of electrical shock to the operator.
- It can minimize RF currents flowing on the shield of the coaxial cable and the chassis of the transceiver which may cause interference to nearby home entertainment devices or laboratory test equipment.
- It can minimize the possibility of erratic transceiver operation caused by RF feedback or improper current flow through logic devices.
- It can minimize the effects of an unexpected lightning strike on the antenna structure.

The manual then goes on to explain some of the common ways to obtain an effective grounding system (ground rods, cable installation, etc).

Now, we can talk about the technical aspects of grounding systems all day long, but in the end it comes down to one thing - it can't hurt and it might even help. So, because of that, I always recommend a ground system for every installation unless there is a very good reason not to have one.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

1757. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:33:37 UTC
From: raiar@slacc.com.nospam
Message-ID: <3a023fd7.483771858@news.galilei.com>
Source record: 177084

"David J. Windisch" <davidw@copper.net> verbositized:

>Yeh, been there, seen and used those. You can make small loops and other
>things more easily with materials which are a bit closer to self-supporting.
>
>What's 'TTUL'?

On an amateur radio newsgroup you have to ask?

Talk To U Later

Something I picked up running teletype.

TTUL
Gary

1758. Re: MFJ-259b @ $199.95 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:39:16 UTC
From: jbhall1282@my-deja.com
Message-ID: <8ttfhk$fs6$1@nnrp1.deja.com>
Source record: 177088

Den <dspiess@my-deja.com> wrote:
> I believe that MFJ now has a 269 out and the 259 can be found for
right
> around the $200 price. Check it out.

I believe Den is right. Last week at Hamfest Iowa WB0W was selling the
259B for $204. I just checked their web site, http://www.wb0w.com/ and
they have it listed there for $199.95.
73
Jerry
W0PWE

Sent via Deja.com http://www.deja.com/
Before you buy.

1759. Re: Use of diode in antenna switch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:40:40 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A0241C8.D72102CF@oio.net>
Source record: 177086

Swler wrote:
>
> I want to construct an antenna switch box. To prevent back signal flow I
> was thinking about using diodes.
> Will a diode cause any signal loss?
> Any suggestions or type of diode to use?
> Thanks.

Swler,
From your user name, I would think that your talking
about switching a receive antenna. If so, I don't think
I'd try it. Just use a switch that grounds unused taps.
'Doc

1760. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:49:44 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ltrM5.2443$dB6.144760@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177087

"CAM" <cam2338@bigfoot.com> wrote in message
news:3A020736.EDD92C83@bigfoot.com...
> VE9SRB wrote:
> >
> > "CAM" <cam2338@bigfoot.com> wrote in message
> > > My personal opinion is that if no other type of loading
> > > is allowed other than simple folding, a fractal will turn out to
> > > be the most efficient design for a given volume. The folding
> > > method that causes the least undesired interference in the far
> > > field is, IMO, likely to result in a fractal.
> >
> > Why? Are you saying all bent wire designs are fractals?
>
> Nope, just that the most efficient ones will turn out to
> be fractals. If you had a program that put a certain length
> of wire in a certain volume and iterated it until maximum
> radiation efficiency was reached, I think the end result
> would be a fractal.
> --
> http://www.mindspring.com/~w6rca

Hi Cam:

What geometry of 1/2 WL of wire bent into a fractal shape is more efficient
than a 1/2
WL dipole?

Steve

1761. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 04:50:14 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <aurM5.2445$dB6.145097@bgtnsc05-news.ops.worldnet.att.net>
Source record: 177089

"Fractenna" <fractenna@aol.com> wrote in message
news:20001102203428.20443.00000039@ng-fm1.aol.com...
> >
> >Answers here would be a good start.
> >
> >Steve
> >
>
> I imagine I could, but frankly, I woldn't answer this of ANY antenna
> professional, because to me it indicates they just haven't bothered to do
the
> basic research needed.
>
> I would NEVER insult a colleague by asking things that I truly need to
look up
> for myself--and I am not offended wheninadvertantly and on the rare
occasion,
> they have suggested I do so.
>
> 73
> Chip N1IR

Chip, you remain true to form. Although I am disappointed, this is exactly
the response I expected.

What I don't understand is the following: You frequently post to this NG
very broad generalizations regarding the 'benefits' of fractal antennas, the
$1000 fractal challenge, announcements of your fractal patent allowances,
numerous statements of your superior knowledge base and skill, etc. You
seem to have all kinds of time for these posts and the copyright
infringement claims. Yet, when someone asks you very direct technical
questions on fractal antennas and fractal geometry you avoid the discussion
at any cost, declaring that the person should go look up the information for
themselves. In doing this, you lose all credibility. If you are not
willing to really discuss any of this in detail, you have no business
bringing up the topic of fractal antennas on this newsgroup.

What I find most appalling is the following:

1) You take Kraus's Small Loop Approximation out of its intended context
and then declare it to be "INCORRECT". At best, your claim is based on a
lack of technical knowledge and understanding; blind arrogance; or at worst,
pure fraud. (I don't believe you are fraudulant) You can declare Kraus to
be "INCORRECT", yet you refuse to
discuss your own technical claims regarding fractal geometry.

2) In discussing my designs, you claim that I "have made a scientifically untenable statement"; that I have made statements that are "both profoundly ignorant in the use of proper wording, and the results, don't support anything"; that in this subject I am "at best, a beginner at this time"; that I am spreading "misinformation and propaganda"; and that you are someone who "obviously has a greater knowledge base". If you are inclined to make statements like this, its appalling that you refuse to answer my questions and support your claims.

Steve, VE9SRB

1762. Re: antenna opinions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 05:11:29 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A024901.625@wt.net>
Source record: 177090

rdalton wrote:
>
> Almost thru repairing my newly aquired swan250.Would like to take it mobile
> but my custom van has a fiberglass roof
> and will only beable to mount antenna to the ladder I suppose,just to get a
> bodyground.For those not real familiar with
> swan250 it's six mtr am/ssb,with about 240 watts out.Thought about a 1/4wave
> with rg8 cable.Any ideas?

Probably about as good as anything I guess. Try to get over metal as
much as you can. Also as high as you can get it. If clamped to the
ladder, make sure the ladder is grounded real well. MK
--
http://web.wt.net/~nm5k

1763. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 05:22:00 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A024B78.62DCD8D1@netscape.net>
Source record: 177091

Fractenna wrote:
>
> I find your speculations offensive, in addition to being very wrong and off in
> left field. They are unambiguously targeted at me to make me look bad--without
> a factual basis-- and are thus libelous. I ask you to keep such personal
> attacks off a public NG.

There is absolutely nothing anyone else could do or say anywhere
anytime that would make you look anywhere near as bad as you make
yourself look.

--
Jim Fuller

1764. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 05:48:58 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8ttjnt$m3g$1@slb6.atl.mindspring.net>
Source record: 177092

Reg, you seem to be under the impression that we are electing the next Head of Global Socialism. Most of us in the US are not supporters of socialism and in particular on a global scale. The effect of a US President on this country can be substantial and that is what most Americans are concerned with. If we had wanted a socialist society and all that comes with it, our ancestors would have stayed in their country of origin. BTW, if you remember, the majority of the founders of this country were English.
--
CW
KC7NOD

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:8tl6fs$e0$1@uranium.btinternet.com...
> Who on this Earth cares about who the next US president
> might be ?
>
> The result won't have slightest effect on who on this Earth
> suffers from economic sanctions and who is on the receiving
> end of Cruise Missiles and anti-personel mines. The
> Multinationals, the Pentagon, the CIA and the USA branch of
> the Maffia between them control those aspects of the World's
> economy. Bush or no Bush !
>
> Which observant, un-brainwashed World citizens would wish to
> disagree ?
> ----
> Reg
>
> Rich Griffiths <richg@one.net> wrote in message
> news:39fc3440$1_2@news2.one.net...
> > George Bush conspired with Gov. Pataki to keep John
> McCain, Steve Forbes,
> > and his other competitors off the ballot in the Republican
> primary in New
> > York State. They nearly succeeded until a federal judge
> embarrassed them
> > into giving up this crassly antidemocratic effort.
> >
> > If Bush had his way, you would have no vote. His would be
> the only name on
> > the ballot.
> >
> > And you think he's for personal freedoms?
> >

> > ... Rich
> >
> >
> > <reklaw.m@juno.COM> wrote in message
> > news:20001027.034112.-4161501.1.reklaw.m@juno.com...
> > > Maxine,
> > > Thank you for the information.
> > > I don't like either Algor or Bush and was going to
> "throw my vote away"
> > > and vote for
> > > Pat Buchanon. Now that you have shown how Bush is not a
> Lawyer and he is
> > > for
> > > personal freedoms, right to life and pro-gun laws, I
> have changed my
> > > mind.
> > > I will not throw my vote away. I hope you show others
> the error of their
> > > ways.
> > >
> > > GO GEORGE BUSH !!
> > >
> > > Thanks again,
> > > Mike
> >
> >
>
>

1765. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 06:03:24 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A02552B.ABF78283@bigfoot.com>
Source record: 177094

Reg Edwards wrote:
> Unfortunately, when it is placed at a current maximum the
> current maximum just shifts itself 1/4-wavelength along the
> line.

Not in my system it doesn't. I vary the length of the ladder-
line until the current maximum point is located at the choke.

> When the common mode stuff is picked up by radiation from
> the antenna there's no way of getting rid of it.

I've been talking primarily about conducted common-mode
currents. Good engineering practice can usually solve the
inducted common-mode problem.
--
http://www.mindspring.com/~w6rca

1766. Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 06:04:10 UTC
From: Thomas Beltran <tbeltran@earthlink.net>
Message-ID: <uzsM5.12546$rl.1053689@newsread2.prod.itd.earthlink.net>
Source record: 177093

I'm considering putting up a tower and either a mono-band 20 meter yagi, or a quad. My question concerns the decision about how tall a tower to buy. Would there be much difference between say a 35 foot tower and perhaps a 54 foot tower in terms of ability to hear signals better and to be heard? The only thing I've seen in print concerning this question was that a yagi should be approximately one wavelength off the ground to avoid interaction with the ground? Does that sound right? Tom

1767. Re: Technical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 06:14:34 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0257CA.5D751E7@bigfoot.com>
Source record: 177095

VE9SRB wrote:
> What geometry of 1/2 WL of wire bent into a fractal shape is more efficient
> than a 1/2 WL dipole?

We're talking about folded, limited-space antennas that occupy a small
volume/area, not full sized antennas. A 1/2WL long dipole is not folded.

For example: If the volume allowed for the 1/2WL dipole is
1/8WLx1/8WLx1/8WL, the most efficient folding into that volume
will probably be a fractal. Attic antennas would be good examples
of limited space antennas. And of course, folding does not compete
very well with discrete components.
--
http://www.mindspring.com/~w6rca

1768. Re: Tuner to open-wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 07:27:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0268CA.20584011@eznec.com>
Source record: 177096

Reg Edwards wrote:
>
> At last you've got it ! The choke is not needed at the high
> impedance point.
>
> Unfortunately, when it is placed at a current maximum the
> current maximum just shifts itself 1/4-wavelength along the
> line.
>
> When the common mode stuff is picked up by radiation from
> the antenna there's no way of getting rid of it. It can only
> be relocated somewhere else and swept under the carpet where
> it won't be noticed.
>
> I would rather have amps in the shack than volts - they are
> less painful.
> ----
> Reg.

I've seen the phenomenon you describe -- of the feedline current distribution changing in response to a balun -- in modeling of a ground plane antenna. Putting a second balun about a quarter wavelength from the first reduces the current a great deal in this model. I haven't confirmed it by measuring a real antenna, but would be surprised if the program wasn't quite accurate in this situation.

Roy Lewallen, W7EL

1769. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-03 07:58:14 UTC
From: fractenna@aol.com
Message-ID: <20001103025814.09477.00000286@ng-fy1.aol.com>
Source record: 177097

>Fractenna (fractenna@aol.com) wrote:
>: >James Rosenthal wrote:
>: >(snip)
>: >> My question is, why does he waste so much time here? Other than stroking
>: >> his ego.
>
>: >> : The "Fractal mystique" perhaps?
>
>: >> More like an obsession. Even if he sells everyone on the NG an antenna,
>: >> he's spent too much time trying.
>: >
>: >Actually, Chip has done a great deal to retard the cause - if there
>: >is one - of fractally derived antennas. It's incomprehensible to me
>: >why a fellow who owns an antenna company would spend his time
>: >fighting with potential customers.
>
>Is anyone of the noncombatants on the NG actually using one of his antennas?
>
>; He could be very well off
>: >if he'd move his company to Silicon Valley, develop some type of
>: >of "wireless solution for enhanced connectivity through fractal
>: >geometry", borrow huge amounts of money from entrepreneurs, do
>: >an IPO, and then sell out before it became obvious the company
>: >was never going to make any money. With his wealth, he could
>: >even do research and, hopefully, come up with something
>: >useful. Anything would get him more money, prestige, and attention
>: >than making an infinite number of objectionable little posts
>: >to this newsgroup.
>: >
>: >Tom Donaly KA6RUH
>
>: I find your speculations offensive, in addition to being very wrong and off
>in
>: left field.
>
>So are aren't starting a company in Calif?
>
>; They are unambiguously targeted at me to make me look bad--without...
>
>After trying to wade through all this fractal stuff to get to the
>amateur.antenna part of the NG, it would appear that it is really not that
>necessary to make you appear "bad".
>
>: Thank you. NC

>--
>Jim Rosenthal, WA4STJ
>
Jim,

I want to remind you that we are about to experiience the anniversary of Kristallnacht. If you don't know what that is, you should.

You should also be aware that Goebbels arranged it so that the German Jews were themselves blamed for Kristallnacht.

I hope you will appreciate that this is the same kind of propaganda I see here.

NC

1770. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <o2QHOlh5HBIAWQ6UVa27x7aaJvI=@4ax.com>
Source record: 176969

On Mon, 06 Nov 2000 16:39:28 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Richard Clark wrote:
>> Hi Cecil,
>>
>> We're talking about two different things.
>>
>> You are talking about the immediate year, I am talking about
>> obligations made and gone unpaid over the stretch of years.
>>
>> If years ago you suffered the government to cover your losses (see the
>> debacle we called the Savings and Loan bailout), and then this year
>> say you want your excess taxes back, then that is redistribution of
>> wealth such that your erase prior debts for yourself and leave them to
>> everyone else to pay.
>>
>> The Bushes (Bushii?) were highly leveraged in this Savings and Loan
>> fiasco. Uncle Sugar covered their losses, and now the Bushes want
>> their debt removed from the books (it was already paid by us suckers,
>> so why can't they have their excess taxes back?).
>>
>> What's wrong with this if they paid the most and they should get back
>> the most? They got the greater return by pushing us into debt, and
>> now they want out of the payback. They made money in the first place
>> (using our funds AND taking the tax dodge for the loss) and now they
>> don't want to pay down the principle. That is redistribution of
>> wealth.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>The people you should be pointing your finger at are those who defaulted
>on their loans from the S&L's because they paid too much for the
>property they bought. The money went to the folks who sold property at
>over-inflated prices. The government simply covered the deposits that
>our grandmothers had in their savings accounts so they wouldn't be out
>on the street. How you can blame that on George Bush is beyond
>comprehension.
>
>ac6xg

Hi Jim,

You need only review the operations and controlling interests of the Bush boys in their Savings and Loan period during that time in Texas.

The Bush name is all over some of those "failings" that we pulled out to secure Grandmother's investment. The Boys made money playing with that money, loaning it out to their friends, lost it, took the tax break and then pleaded for a government bailout so they would not have to cover the losses of their poor judgement.

That paper trail has been around for years and was even discussed during that time (but was overwhelmed with Iran-Contra shenanigans in the headlines).

This is why Jeb is not running and W. is. Jeb's fingerprints are all over the mess, but blood is thicker than water and W. will take care of family in due time. So will you with your tax dollars going to them to rescue their "losses" - again.

73's
Richard Clark, KB7QHC

1771. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A076948.239DE469@uci.edu>
Source record: 176970

Sounds like sour grapes, Richard. The Bushes had nothing to do with any
of the S&L failures out here. The people who didn't pay back their
loans are at fault however you look at it. Why do you want to hold them
harmless?

ac6xg

Richard Clark wrote:
>
> On Mon, 06 Nov 2000 16:39:28 -0800, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
> >
> >
> >Richard Clark wrote:
> >> Hi Cecil,
> >>
> >> We're talking about two different things.
> >>
> >> You are talking about the immediate year, I am talking about
> >> obligations made and gone unpaid over the stretch of years.
> >>
> >> If years ago you suffered the government to cover your losses (see the
> >> debacle we called the Savings and Loan bailout), and then this year
> >> say you want your excess taxes back, then that is redistribution of
> >> wealth such that your erase prior debts for yourself and leave them to
> >> everyone else to pay.
> >>
> >> The Bushes (Bushii?) were highly leveraged in this Savings and Loan
> >> fiasco. Uncle Sugar covered their losses, and now the Bushes want
> >> their debt removed from the books (it was already paid by us suckers,
> >> so why can't they have their excess taxes back?).
> >>
> >> What's wrong with this if they paid the most and they should get back
> >> the most? They got the greater return by pushing us into debt, and
> >> now they want out of the payback. They made money in the first place
> >> (using our funds AND taking the tax dodge for the loss) and now they
> >> don't want to pay down the principle. That is redistribution of
> >> wealth.
> >>
> >> 73's
> >> Richard Clark, KB7QHC
> >
> >The people you should be pointing your finger at are those who defaulted
> >on their loans from the S&L's because they paid too much for the

> >property they bought. The money went to the folks who sold property at
> >over-inflated prices. The government simply covered the deposits that
> >our grandmothers had in their savings accounts so they wouldn't be out
> >on the street. How you can blame that on George Bush is beyond
> >comprehension.
> >
> >ac6xg
>
> Hi Jim,
>
> You need only review the operations and controlling interests of the
> Bush boys in their Savings and Loan period during that time in Texas.
>
> The Bush name is all over some of those "failings" that we pulled out
> to secure Grandmother's investment. The Boys made money playing with
> that money, loaning it out to their friends, lost it, took the tax
> break and then pleaded for a government bailout so they would not have
> to cover the losses of their poor judgement.
>
> That paper trail has been around for years and was even discussed
> during that time (but was overwhelmed with Iran-Contra shenanigans in
> the headlines).
>
> This is why Jeb is not running and W. is. Jeb's fingerprints are all
> over the mess, but blood is thicker than water and W. will take care
> of family in due time. So will you with your tax dollars going to
> them to rescue their "losses" - again.
>
> 73's
> Richard Clark, KB7QHC

1772. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <3a076b69@news.planetc.com>
Source record: 176971

Please do not view my comments as flaming -- get the Rohn engineering data, follow it to the letter, if you have questions, contact Rohn. Do not rely on the experiences of folks on the newsgroup, some of whom may tell you "Dig a hole until it looks big enough and fill it with concrete." When the whole thing crashes down, taking a big piece of your roof, your wife's car, and your neighbor's brand new SUV, the insurance company will deny your claim based on Rohn's figures, not on what Good Ol' Boy Engineering told you.

You can work the world on any old piece of wire fed with any old piece of cable. You can work DX with a one-transistor rig. It's fine to experiment with wires and flea power but when it comes to a tower, everything must be strictly professional or someone will get killed.

--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

B Nehl <k0emt@dbbear.com> wrote in message
news:1a2e0t0fambivicl62qd4ufn6m8mgrp39i@4ax.com...
> >This life and death subject has no room for antidotal experiences.
> >Please obtain the necessary specifications and requirements directly
> >from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
> >the allowable antenna area for a 30ft self-supporting 25G tower
> >exposed to ice and 90mph winds is ZERO.
>
> I agree that the Rohn specs & requirements should be followed.
> I have been to the Rohn website (www.rohn.net) and have sent an email
> to them detailing my plans and seeking their recommended base size.
>
> However, I am still interested in knowing what others have done.
> Problems, etc that others have run into. The group I run with tends
> to "over-engineer." Can a base ever be "too-big?"
>
> 73,
>
> Bryan - k0emt

1773. Re: 160M Dipole Hoist/Anchor Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A077C6B.5B9EDFD9@oio.net>
Source record: 176972

Andrew,
Using wire, or any other conductor, as supports may lead to
a problem, but it may not. (thats a 'help', isn't it?) If you
keep the support cable/wire's length away from multiples of a
1/4 wave on the band(s) you use, you should have no big problems
with it. Go ahead and use it, see what happens.
Changing conductor size between feed line and antenna makes
very little difference in this case, don't worry about it. there
will be an impedance mismatch between antenna and feed line, but
that's something else that just doesn't matter in this case, and
the antenna/feed line will handle any power you can put into it.
If there's a problem because of power, it will be at the tuner
you use for matching, in the station. If the tuner is rated for
twice the power your transmitting, you should have no problem
with the system. (Most amateur tuners are rated in 'PEP', so
use a tuner that is at least twice the maximum power of what
your going to feed it).
It doesn't matter how it goes in the morning... let us know
what happens!!
'Doc

1774. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A077D3D.4C7D6C26@eznec.com>
Source record: 176973

NEC calculates the far field pattern at an infinite distance.

Roy Lewallen, W7EL

"Ed Hare, W1RFI" wrote:
> . . .
> I don't know at what distance NEC calculates the far field pattern, but in
> the far field, the direct ray and the reflected ray have travelled
> approximately the same distance so they could well be at an equal and
> opposite polarity at a point very far away from the antenna.
>
> 73,
> Ed Hare, W1RFI

1775. Re: Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8u80s9$al5$1@bob.news.rcn.net>
Source record: 176974

It depends upon what you want to do. For US
only QSO's, perhaps 35 ft would be OK, giving you
a radiation anlge of 28 deg or so. For any reasonable DX,
you will want a radiation angle of 15 deg or lower, which means
1 wavelength above ground, 70 ft or higher.

As you go higher in freq., the angle drops for the same path length,
giving about the same requirement for 10M in terms of absolute height above
as for 20M. With a yagi or other end fire array like a log periodic, one
must multiply
the array factor against the ground reflection factor, giving you
the total pattern. At heights over 1/2 wave above ground, the array factor
for any endfire antenna with reasonable gain will surpress higher
radiation angles, less useful for for DX. Stacking is even better, that's
why we do it.

Bottom line, "It's the angle of radiation for a desired path" that
determines the ideal height.
This will vary, dependent upon time of day, solar flux, time of year, K
index, ect....
But...the good news is that on the average, I would say that 70 ft is about
the best compromise,
unless you are in the middle of the US and then I'd say at least 90 ft., for
DX that is....

1776. WTB:ATV Filter for 900MHZ and 1253MHZ

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Ed Mellnik <ema@teleport.com>
Message-ID: <21DN5.14022$3S.444531@nntp3.onemain.com>
Source record: 177019

Our ATV club needs to find a ten to twelve pole filter that will give us a
12 mhz window for FM TV on 910 MHZ and on 1253MHZ.
ANyone with those please email. Thanks
ED

1777. - Visit today - www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Charles Johnston <charles@ab7sl.com>
Message-ID: <8u6ve0rdg1@nnrp2.phx.gblx.net>
Source record: 177020
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.cb

Lots to see and do.....here are a few features

1. Live DX cluster telnet links - Try them out! - on The DX Page
2. Online DX Logbook - on The DX Page
3. Many station and equipment photos
4. Several photos of Prescott,Arizona USA
5. Post a public link to your site on the Free-For-All Links Page

Plus lots more....including Guestbook,Station Description,3D Art Gallery and
Music Page with free downloads....
--

Charles Johnston - AB7SL
charles@ab7sl.com

AB7SL - Ham Radio Pages
Live DX Cluster telnet links
View Online DX Logbook
http://www.ab7sl.com

1778. disk antenna for 2.4 Ghz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Paul-Andr&#65533; SCHMID <paschmid@bluewin.ch>
Message-ID: <8u6vhp$4jc$1@bw107zhb.bluewin.ch>
Source record: 177021

Disk antenna for 2.4 Ghz

I seek all information about this antenna. Thanks for agreeing to answer me directly on my E-mail. In advance thank you.

73

HB9 RXV Paul

1779. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8u6vjt$8rk$1@iac5.navix.net>
Source record: 177022

What I find really scary is that you really believe all the crap you put
out.

A liberal says "Save the rainforest it may contain cancer drugs" and at the
same time aborts children that may contain the doctor who cures cancer...

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8u6si9$kn1$1@nnrp1.deja.com...
> In article <8u6m1e$b4k$0@208.207.71.163>,
> Dick Carroll <dixie@townsqr.com> wrote:
> > Well, "Quibbling" would pretty well cover what you're doing, and for
> > sure what Al and company are doing. Its all they have left to use as a
> > weapon on the gullible. The fact still remains that what I saw on TV
> was
> > "Invent"ot create. Would Al and his media pals reshoot it for the
> > benefit of you and the other gullible to recreate it differently than
> > the original? Do I doubt it? not at all, given all the outright lies
> > seen put forth by the media in this campaign. Again, its not obscure
> at
> > all that the media is over 90% leftist liberals, as you clearly are
> too.
>
>
> You did NOT see it on TV because it never happened. Provide ONE piece
> of documentation backing-up your statement. Your INABILITY to do so
> says much about your credibility.
>
> > There's a huge difference between "driving under the influence" and
> > "driving while intoxicated". And 24 years ago it was even more
> > different. Many states had laws prohibiting ANY alcohol content while
> > driving. Today they have mostly evolved toward lower blood alcohol
> > content for DWI.Accordingly some have no DUI prohibitions, depending
> on
> > the lowered DWI laws to cover all cases.
> >
>
> TALK ABOUT QUIBBLING! He exceeded the legal limit for alcohol in the
> blood stream for Maine. It is OUI in Maine, but it is the same as DWI
> in other states. He was DRUNK DRIVING! And He lied about it to a
> reporter!
>
> >
> > Well We see that you do a fine job of parrotting the Party Line. When
> > is Al ready to take responoibility for his ADULT insdescretions which
> > which by far more greatly impact the nation in its entirety? When is

> he
> > ready to admit taking vast amounts of illegal campaign contributions
> > from many of the enemies of our -and their own peoples- freedoms?
> > Bush has repeatedly taken his responsibilities, and has performed very
> > well as a two term Governor, being re-elected in a state where
> Governors
> > historically DON"T get re-elected.
> >
>
> What illegal contributions did AL GORE take? Document them! You must
> because you have PROVEN your inablity to witness accurate information
> as with the internet quote.
>
> >
> > "There ought to be limits on freedom."
> >
> > Every law IS a limit on freedom, you ninny.
> >
>
> You have taken it out of context. GW said these words in response to
> someone excercising his 1st amendment rights. GW is against the 1st
> amendment of the Constitution.
>
> > > G.W. Bush...Not a crackhead anymore!
> >
> > Well, according to many reliable reports, that's one thing you can't
> > say about the present occupant of 1600 Pennsylvania Ave. Maybe that's
> > why they aren't playing this "card" openly and depend on the clueless
> > like you to do it.
> >
>
> If there are "many reliable reports" quote ONE! Please post the link
> to any news organization's story making these "alligations". You can't!
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1780. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0700B4.9DEBE290@bigfoot.com>
Source record: 177023

B Nehl wrote:
>
> This seemed like the best newsgroup for this.
> I am interested in others experience in putting up a
> Self Supporting Rohn 25G tower.
>
> How high did you go?
> How much antenna load do you have on it?
> Are you using a rotor?
> Problems?
> How large a base did you pour?

This life and death subject has no room for antidotal experiences.
Please obtain the necessary specifications and requirements directly
from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
the allowable antenna area for a 30ft self-supporting 25G tower
exposed to ice and 90mph winds is ZERO.
--
http://www.mindspring.com/~w6rca

1781. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8u700v$92a$1@iac5.navix.net>
Source record: 177024

You spout unsubstantiated facts, and yet demand others post references to things we have all been witness to. Is the press more adapt at understanding the English language than many of the observers on this newsgroup? I think not.

You would have made a good Maoist with your ability to follow the party line to the letter without question. You may be right on some of your issues, but!, your inability to even concede the known facts dos much to harm any credibility you may have had at any point in your life.

After tomorrow, I suspect you will be singing the theme from M*A*S*H.

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8u6smmkom1@nnrp1.deja.com...
> YOu spew this dribble, but you refuse to list your source for this
> information. Until you can link it to a credible news
> organization...Heck use FOX news if you like, they are far enough to
> the right to suite your desires!
>
> In article <8u6qs2rgd0@208.207.71.157>,
> Dick Carroll <dixie@townsqr.com> wrote:
> > RanHefner wrote:
> > >
> > > In article <3A05E5B3.F64EF326@bigfoot.com>,
> > > CAM <cam2338@bigfoot.com> wrote:
> > > >
> > > > Can you tell us the big difference between "invent" and "create"?
> > > > Can you tell us how a man who hasn't had a drink in 14 years can
> > > > possibly be called a "drunken jerk". I don't like either one but
> > > > fair is fair.
> > >
> > > I was not quibbling over "invent" and "create" (but I do like
> > > accuracy), I was making the observation that he did not say "and
> > > invented" but rather he said "in creating". There is a big
> > > difference.
> >
> > OK Dude, here's enough tokeep you busy till well paste election day.
> >
> > AL GORE BY THE NUMBERS
> >
> > While Al Gore has a habit of exaggerating his record, these numbers
> tell
> > us
> > the real truth about his record on education, healthcare and taxes:
> >

> > AL GORE'S EDUCATION PLANS...
> >
> > $10,000... tax deduction that Al Gore says will be received by "all
> > students who want to go to college". $800... tax deduction is the
> > reality.
> >
> > 0... students working their way through college getting a tax credit
> > because they do not pay enough in income taxes.
> >
> > 30,000,000... low-income households get no benefit on Gore's
> education
> > plan.
> >
> > 0... families making over $20,000 get a benefit.
> >
> > 5,000,000... upper income families are ineligible.
> >
> > 0... deductions or credits for room, board, books, supplies, and
> travel.
> >
> > 1... education plan that is almost identical to the one that failed in
> > the Clinton White House.
> >
> > AL GORE'S PROGRAM ON HEALTHCARE:
> >
> > $600... access fee per year to obtain prescription drug coverage under
> > the
> > Gore plan.
> > 412... new regulatory mandates created by the Gore Medicare plan.
> >
> > 182... new regulations dealing with prescription drugs alone.
> >
> > 64.5 ... the age you are when you have your one and only opportunity
> to
> > buy into a government HMO.
> >
> > 8... year wait for Gore's plan to be implemented.
> >
> > 2... times the price of Bush's plan to create more government
> > bureaucrats
> >
> > THE VICE PRESIDENT ON TAXES:
> >
> > 88... separate tax increases along with 42 new user fees Gore proposed
> > in
> > the 2001 budget.
> >
> > 11%... how much the tax burden has increased over the last 8 years.
> >
> > $500... per child tax credit was never included in previous

> Clinton/Gore
> > budgets.
> >
> > 50,000,000... taxpayers will not get tax relief under Gore's plan.
> >
> > $1,400... couples will pay in taxes because Gore opposed the Marriage
> > Penalty tax cut.
> >
> > 4.3 cents... tax increase on a gallon of gas because of Gore's
> > tie-breaking vote.
> >
> > $4.00 per gallon...The price of gasoline under Gore's plan as laid out
> > in his book on "preserving the environment".
> >
> > ----------
> >
> > Subject:
> > What Tennesseans Think Of Al Gore
> > Date:
> > Sun, 8 Oct 2000 11:43:00 EDT
> > From:
> > xxxxxxxxxxxxxx@aol.com
> >
> > SUBJECT: WHAT TENNESEENS THINK ABOUT AL GORE
> >
> > Dear friends,
> >
> > When I ask my friends and neighbors here in Rhea County,
> > Tennessee whether they plan to support Al Gore, they
> > invariably look at their feet, clear their throats and
> > mumble a reply. Sometimes they say, "No, I don't think
> > so." Other times, with great discomfort, they say,
> > "Yeah, probably."
> >
> > Regardless of the response, I was bewildered at the
> > sense of embarrassment that the mention of Al Gore's
> > name brings.
> >
> > You see, Al Gore represented our district in the House
> > of Representatives since the tender age of 28. He was
> > one of Tennessee's senators for 8 years until becoming
> > vice president. It is hard to find people who haven't
> > voted for him at one time or another.
> >
> > Why are locals now so embarrassed when this man, whom
> > they supported for so long, makes it big on the
> > political scene? You think they'd be as proud as punch.
> >
> > Here in east Tennessee being honest, honorable and true
> > to your word is vastly more important than how much

> > money you make or how powerful you are.
> >
> > People here know, better than anyone else in America,
> > that Al Gore has reversed most of his fundamental
> > convictions. When confronted, he has blatantly lied.
> >
> > He is not viewed as the "local-boy-made-good." Instead,
> > most folks, even his supporters, harbor the uneasy
> > suspicion that Al Gore has sold his honor and his good
> > word for political power.
> >
> > This week's editorial from our local newspaper, The
> > Herald News, explains it all. I hope you will spread
> > this as far and as wide as you possibly can, and ask
> > your friends to do so as well.
> >
> > This e-mail needs to go to millions of people. There is
> > too much at stake to remain quiet.
> >
> > -XXXX Myers
> >
> > ----------
> >
> > THE HERALD-NEWS, DAYTON, TENNESSEE, SUNDAY, SEPTEMBER
> > 10, 2000, P. A-4 (reprinted by permission)
> >
> > Tennessee hasn't had a native son in the White House in
> > more than a century. Certainly most Tennesseans would
> > agree it would be good to have one of our own as
> > president. The question is whether Al Gore is still a
> > Tennessean and whether we can afford for him to be
> > president.
> >
> > Al Gore is not the man Tennesseans sent to Washington as
> > vice president in 1992. He's certainly not the same man
> > Fourth District voters made the youngest Congressman in
> > decades at the tender age of 28, nor is he the same man
> > Tennessee sent to the U.S. Senate by huge margins in
> > 1984 and 1990.
> >
> > He has abandoned the conservative, Southern values for
> > which we once elected him.
> >
> > Let's look at some of the changes.
> >
> > Al Gore once told The Herald-News he was "personally
> > opposed" to abortion. He also said he was against
> > federal funding of abortions. Now Gore has positioned
> > himself as the great champion of abortion rights and
> > even defends the barbaric practice of partial-birth

> > abortions. America's youngest and most defenseless
> > citizens would receive no protection under a Gore
> > presidency.
> >
> > Ten years ago when Gore last ran for the Senate, The
> > Herald-News supported him, in part because he portrayed
> > himself as a defender of the Second Amendment. Gore was
> > a friend to hunters and sportsmen and considered himself
> > one.
> >
> > Since then he has changed directions 180 degrees. He now
> > supports national registration and licensure of all guns
> > and all gun owners. He is solidly in the gun control
> > camp that wants to eliminate all private ownership of
> > handguns, semiautomatic rifles and pump shotguns. Of
> > course, the private security forces for the elite would
> > still have easy access to these weapons. Oh, and of
> > course, so would the criminals.
> >
> > On environmental issues Gore was once essentially
> > mainstream. He believed in common sense EPA regulations
> > and continued private use of public lands by permit. Now
> > when it comes to environmental issues, Gore is on the
> > fringe. He is more closely aligned with Katuah Earth
> > First!, that radical environmentalist, tree-worshiping
> > group that chained themselves to concreted barrels to
> > block access to Watts Bar Nuclear Plat three years ago,
> > than with the average Tennessean.
> >
> > Gore writes in his book "Earth in the Balance: Ecology
> > and the Human Spirit," "we must make the rescue of the
> > environment the central organizing principle for
> > civilization." Surely we face greater issues than
> > protecting the environment.
> >
> > Once Gore told The Herald-News he believed it was an
> > admirable thing for committed parents to educate their
> > children at home for religious or personal reasons. Now
> > Gore supports a National Education Association policy
> > that would make it illegal for most families to home
> > school. It calls for all teachers, regardless of the
> > type of school they teach in--public, private, religious
> > or home--to be licensed by the federal government and to
> > only teach "state-approved" curriculum.
> >
> > Tennesseans have historically valued their independence
> > very highly, perhaps it is a remnant of the pioneer
> > spirit that built this great state. Unfortunately, Gore
> > now supports increasing control by the federal
> > government in most area of our lives.

> >
> > The bottom line is, Gore doesn't hold to the same
> > conservative Southern values that led Tennesseans to
> > elect him six times to Congress. During his time in
> > Washington, D.C., he has forgotten his roots.
> >
> > Al Gore may claim Tennessee. The question is, can
> > Tennessee still claim Al Gore?
> >
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1782. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u71sn$pp7$1@nnrp1.deja.com>
Source record: 177025

In article <8u6vjt$8rk$1@iac5.navix.net>,
"Fred Hambrecht" <Fred@w4jle.com> wrote:
> What I find really scary is that you really believe all the crap you
put
> out.
>

Yes, Fred, I do believe what I say here. If you would like to take a
quote from ANY messages I have posted and take exception to it
SPECIFICALLY, please do so!

Oh, if you dispute it, please document it as I have done many times.
Your word or my word alone and $.33 will buy you a postage stamp.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1783. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u720mpqv1@nnrp1.deja.com>
Source record: 177026

In article <8u700v$92a$1@iac5.navix.net>,
"Fred Hambrecht" <Fred@w4jle.com> wrote:
> You spout unsubstantiated facts, and yet demand others post
references to
> things we have all been witness to. Is the press more adapt at
understanding
> the English language than many of the observers on this newsgroup? I
think
> not.
>

By all means, post the facts that I have wrong! Please be specific.
Your "broad brush" tactics may work in politics, but they BLOW here!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1784. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <rJDN5.25827$Pw6.1979298@newsread1.prod.itd.earthlink.net>
Source record: 177027

I think that Mike Traffie doesn't intentionally mis-state his gain numbers. It's my understanding that he has measured the gain figures that he states. Anyone who wants to argue the point with him can reach him easily by dialing the 800 number listed in the Hexbeam ad in QST. I don't get too concerned about the gain figures that beam manufacturer's give. In the past, all of them have stretched things a bit, that's why QST stopped publishing the claimed numbers decades ago.

What I know for sure is that the Hexbeam works very well indeed, and the operating bandwidth is far in excess of anything else I've seen. The variations in gain and f/b ratio across the bands has been covered elsewhere - I believe W4RNA has some modeling info on the various compact wire beams at his website.

--
Floyd Sense - Angier, NC
"CAM" <cam2338@bigfoot.com> wrote in message
news:3A06BF48.B6A363E9@bigfoot.com...
> Floyd Sense wrote:
> > Beats me. What were they claiming?
>
> I just took a look at the hexbeam web page. They continue to make
> outrageous claims for gain. They claim 10dB gain over a dipole *at
> a similar height*. Since dipoles over ground often have a gain of
> 6dBi, that means they are claiming a gain of 16dBi for the hexbeam.
> 16dBi from any two element beam is a ridiculous claim. The maximum
> gain over a dipole for a two element beam with a reflector is about
> 5dB, not 10dB.
> --
> http://www.mindspring.com/~w6rca
>

1785. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <1a2e0t0fambivicl62qd4ufn6m8mgrp39i@4ax.com>
Source record: 177028

>This life and death subject has no room for antidotal experiences.
>Please obtain the necessary specifications and requirements directly
>from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
>the allowable antenna area for a 30ft self-supporting 25G tower
>exposed to ice and 90mph winds is ZERO.

I agree that the Rohn specs & requirements should be followed.
I have been to the Rohn website (www.rohn.net) and have sent an email
to them detailing my plans and seeking their recommended base size.

However, I am still interested in knowing what others have done.
Problems, etc that others have run into. The group I run with tends
to "over-engineer." Can a base ever be "too-big?"

73,

Bryan - k0emt

1786. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Pete <pete@lapxaf.com>
Message-ID: <L5EN5.27947$a7.655044@news1.rdc1.il.home.com>
Source record: 177029

What's all this crapp got to do with Ham Radio?

"Fred Hambrecht" <Fred@w4jle.com> wrote in message
news:8u6vjt$8rk$1@iac5.navix.net...
> What I find really scary is that you really believe all the crap you put
> out.
>
> A liberal says "Save the rainforest it may contain cancer drugs" and at
the
> same time aborts children that may contain the doctor who cures cancer...
>
> "RanHefner" <ranhefner@my-deja.com> wrote in message
> news:8u6si9$kn1$1@nnrp1.deja.com...
> > In article <8u6m1e$b4k$0@208.207.71.163>,
> > Dick Carroll <dixie@townsqr.com> wrote:
> > > Well, "Quibbling" would pretty well cover what you're doing, and for
> > > sure what Al and company are doing. Its all they have left to use as a
> > > weapon on the gullible. The fact still remains that what I saw on TV
> > was
> > > "Invent"ot create. Would Al and his media pals reshoot it for the
> > > benefit of you and the other gullible to recreate it differently than
> > > the original? Do I doubt it? not at all, given all the outright lies
> > > seen put forth by the media in this campaign. Again, its not obscure
> > at
> > > all that the media is over 90% leftist liberals, as you clearly are
> > too.
> >
> >
> > You did NOT see it on TV because it never happened. Provide ONE piece
> > of documentation backing-up your statement. Your INABILITY to do so
> > says much about your credibility.
> >
> > > There's a huge difference between "driving under the influence" and
> > > "driving while intoxicated". And 24 years ago it was even more
> > > different. Many states had laws prohibiting ANY alcohol content while
> > > driving. Today they have mostly evolved toward lower blood alcohol
> > > content for DWI.Accordingly some have no DUI prohibitions, depending
> > on
> > > the lowered DWI laws to cover all cases.
> > >
> >
> > TALK ABOUT QUIBBLING! He exceeded the legal limit for alcohol in the
> > blood stream for Maine. It is OUI in Maine, but it is the same as DWI
> > in other states. He was DRUNK DRIVING! And He lied about it to a

> > reporter!
> >
> > >
> > > Well We see that you do a fine job of parrotting the Party Line. When
> > > is Al ready to take responoibility for his ADULT insdescretions which
> > > which by far more greatly impact the nation in its entirety? When is
> > he
> > > ready to admit taking vast amounts of illegal campaign contributions
> > > from many of the enemies of our -and their own peoples- freedoms?
> > > Bush has repeatedly taken his responsibilities, and has performed very
> > > well as a two term Governor, being re-elected in a state where
> > Governors
> > > historically DON"T get re-elected.
> > >
> >
> > What illegal contributions did AL GORE take? Document them! You must
> > because you have PROVEN your inablity to witness accurate information
> > as with the internet quote.
> >
> > >
> > > "There ought to be limits on freedom."
> > >
> > > Every law IS a limit on freedom, you ninny.
> > >
> >
> > You have taken it out of context. GW said these words in response to
> > someone excercising his 1st amendment rights. GW is against the 1st
> > amendment of the Constitution.
> >
> > > > G.W. Bush...Not a crackhead anymore!
> > >
> > > Well, according to many reliable reports, that's one thing you can't
> > > say about the present occupant of 1600 Pennsylvania Ave. Maybe that's
> > > why they aren't playing this "card" openly and depend on the clueless
> > > like you to do it.
> > >
> >
> > If there are "many reliable reports" quote ONE! Please post the link
> > to any news organization's story making these "alligations". You can't!
> >
> > --
> > "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> > G.W. Bush...Not a crackhead anymore!
> > http://www.gwbush.com
> >
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
>

1787. Re: - Visit today - www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Charles Johnston <charles@ab7sl.com>
Message-ID: <8u73c4rug1@nnrp2.phx.gblx.net>
Source record: 177030
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.cb

Actually there was a typo in my previous post.

The Online Logbook has it's own dedicated page called " View AB7SL Logbook "

--

Charles Johnston - AB7SL
charles@ab7sl.com

AB7SL - Ham Radio Pages
Live DX Cluster telnet links
View Online DX Logbook
http://www.ab7sl.com

"Charles Johnston" <charles@ab7sl.com> wrote in message
news:8u6ve0rdg1@nnrp2.phx.gblx.net...
> Lots to see and do.....here are a few features
>
> 1. Live DX cluster telnet links - Try them out! - on The DX Page
> 2. Online DX Logbook - on The DX Page
> 3. Many station and equipment photos
> 4. Several photos of Prescott,Arizona USA
> 5. Post a public link to your site on the Free-For-All Links Page
>
> Plus lots more....including Guestbook,Station Description,3D Art Gallery
and
> Music Page with free downloads....
> --
>
> Charles Johnston - AB7SL
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Live DX Cluster telnet links
> View Online DX Logbook
> http://www.ab7sl.com
>
>
>
>
>

1788. Texas Miracle or Myth? Was Bush Telling Us the Truth?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u749urvl1@nnrp1.deja.com>
Source record: 177031

http://skirsch.propel.com/politics/ad.htm

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1789. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <nlEN5.346$bb.161432@paloalto-snr1.gtei.net>
Source record: 177032

"CAM" <cam2338@bigfoot.com> wrote in message
news:3A062A2F.2FC909E9@bigfoot.com...
> SNIP
> Now if he has ever lied about being arrested and pleading guilty, that's
> a different matter entirely. An example would be if he applied for a
> Texas concealed weapons permit. I had to swear that I have never been
> arrested. A person who signs his name to a lie is not fit to be President.

Simply because a person has been arrested does not preclude them from anything. If you look closely at those forms that ask the question, they ask if you have ever been CONVICTED of a crime. Anybody can be arrested for anything, but unless and until they go before a court of law and have a trial and are found guilty, they remain an innocent person.

There is a very big difference between an arrest and a conviction. That is why a persons' arrest record is not public information, it would only become public record if they went to trial and were convicted of the crime they were arrested for.

A CCW, a loan for a house, an employment application, etc. asks about convictions. Admitting you are guilty of a traffic violation (which was what a DWI was classified as at the time of GW's incident) and paying the fine does not mean you were convicted of a crime. If it did, then the vast majority of persons who drive a car would be classified as criminals.

73 de W6DKN

1790. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u75u3tjq1@nnrp1.deja.com>
Source record: 177033

In article <nlEN5.346$bb.161432@paloalto-snr1.gtei.net>,
"Dan K Nelson" <w6dkn@qsl.net> wrote:
>
> Simply because a person has been arrested does not preclude them from
> anything. If you look closely at those forms that ask the question,
they ask
> if you have ever been CONVICTED of a crime. Anybody can be arrested
for
> anything, but unless and until they go before a court of law and have
a
> trial and are found guilty, they remain an innocent person.
>
> There is a very big difference between an arrest and a conviction.
That is
> why a persons' arrest record is not public information, it would only
become
> public record if they went to trial and were convicted of the crime
they
> were arrested for.
>

You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
guilty and paid the fine. When you plead guilty, you may not have to
go before a judge, but you ARE convicted of the crime.

> A CCW, a loan for a house, an employment application, etc. asks about
> convictions. Admitting you are guilty of a traffic violation (which
was what
> a DWI was classified as at the time of GW's incident) and paying the
fine
> does not mean you were convicted of a crime. If it did, then the vast
> majority of persons who drive a car would be classified as criminals.
>
> 73 de W6DKN
>
>

Again, Dan, you are wrong. GW Bush WAS convicted of a crime.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1791. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8u759obfi1@iac5.navix.net>
Source record: 177034

You missspelled crap Peete...
"Pete" <pete@lapxaf.com> wrote in message
news:L5EN5.27947$a7.655044@news1.rdc1.il.home.com...
> What's all this crapp got to do with Ham Radio?
>
> "Fred Hambrecht" <Fred@w4jle.com> wrote in message
> news:8u6vjt$8rk$1@iac5.navix.net...
> > What I find really scary is that you really believe all the crap you put
> > out.
> >
> > A liberal says "Save the rainforest it may contain cancer drugs" and at
> the
> > same time aborts children that may contain the doctor who cures
cancer...
> >
> > "RanHefner" <ranhefner@my-deja.com> wrote in message
> > news:8u6si9$kn1$1@nnrp1.deja.com...
> > > In article <8u6m1e$b4k$0@208.207.71.163>,
> > > Dick Carroll <dixie@townsqr.com> wrote:
> > > > Well, "Quibbling" would pretty well cover what you're doing, and
for
> > > > sure what Al and company are doing. Its all they have left to use as
a
> > > > weapon on the gullible. The fact still remains that what I saw on TV
> > > was
> > > > "Invent"ot create. Would Al and his media pals reshoot it for the
> > > > benefit of you and the other gullible to recreate it differently
than
> > > > the original? Do I doubt it? not at all, given all the outright lies
> > > > seen put forth by the media in this campaign. Again, its not obscure
> > > at
> > > > all that the media is over 90% leftist liberals, as you clearly are
> > > too.
> > >
> > >
> > > You did NOT see it on TV because it never happened. Provide ONE piece
> > > of documentation backing-up your statement. Your INABILITY to do so
> > > says much about your credibility.
> > >
> > > There's a huge difference between "driving under the influence"
and
> > > "driving while intoxicated". And 24 years ago it was even more
> > > different. Many states had laws prohibiting ANY alcohol content
while

> > > > driving. Today they have mostly evolved toward lower blood alcohol
> > > > content for DWI.Accordingly some have no DUI prohibitions, depending
> > > on
> > > > the lowered DWI laws to cover all cases.
> > > >
> > >
> > > TALK ABOUT QUIBBLING! He exceeded the legal limit for alcohol in the
> > > blood stream for Maine. It is OUI in Maine, but it is the same as DWI
> > > in other states. He was DRUNK DRIVING! And He lied about it to a
> > > reporter!
> > >
> > > >
> > > > Well We see that you do a fine job of parrotting the Party Line.
When
> > > > is Al ready to take responoibility for his ADULT insdescretions
which
> > > > which by far more greatly impact the nation in its entirety? When is
> > > he
> > > > ready to admit taking vast amounts of illegal campaign contributions
> > > > from many of the enemies of our -and their own peoples- freedoms?
> > > > Bush has repeatedly taken his responsibilities, and has performed
very
> > > > well as a two term Governor, being re-elected in a state where
> > > Governors
> > > > historically DON"T get re-elected.
> > > >
> > >
> > > What illegal contributions did AL GORE take? Document them! You must
> > > because you have PROVEN your inablity to witness accurate information
> > > as with the internet quote.
> > >
> > > >
> > > > "There ought to be limits on freedom."
> > > >
> > > > Every law IS a limit on freedom, you ninny.
> > > >
> > >
> > > You have taken it out of context. GW said these words in response to
> > > someone excercising his 1st amendment rights. GW is against the 1st
> > > amendment of the Constitution.
> > >
> > > > > G.W. Bush...Not a crackhead anymore!
> > > >
> > > > Well, according to many reliable reports, that's one thing you
can't
> > > > say about the present occupant of 1600 Pennsylvania Ave. Maybe
that's
> > > > why they aren't playing this "card" openly and depend on the
clueless
> > > > like you to do it.

> > > >
> > >
> > > If there are "many reliable reports" quote ONE! Please post the link
> > > to any news organization's story making these "alligations". You
can't!
> > >
> > > --
> > > "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> > > G.W. Bush...Not a crackhead anymore!
> > > http://www.gwbush.com
> > >
> > >
> > > Sent via Deja.com http://www.deja.com/
> > > Before you buy.
> >
> >
>
>

1792. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A072442.278F78E5@uci.edu>
Source record: 177035

RanHefner wrote:
> You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
> guilty and paid the fine. When you plead guilty, you may not have to
> go before a judge, but you ARE convicted of the crime.

Dan is not incorrect just because you happen to disagree with him, Ran.
Usually a distinction is made between a felonious conviction and a
misdemeanor.

73, Jim AC6XG

1793. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a311729.1036164926@news.seanet.com>
Source record: 177036

On Mon, 06 Nov 2000 12:21:52 -0600, CAM <cam2338@bigfoot.com> wrote:

>Dick Carroll wrote:
>> THE VICE PRESIDENT ON TAXES:
>>
>> 88... separate tax increases along with 42 new user fees Gore proposed
>> in the 2001 budget.
>
>I saw Gore make an absolutely outrageous statement on TV. He said
>Bush's tax cutting plan is an attempt at wealth redistribution.
>Would someone please tell me how leaving tax money in the hands
>of the people who earned it is redistribution of wealth?

Hi Cecil,

Because those same people put us into debt that is not being repaid if
they get that money back - duh.

73's
Richard Clark, KB7QHC

1794. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A07266A.175E85E5@oio.net>
Source record: 177037

Bryan,
If I remember correctly, Rohn 25g can be un-guyed up to
50 feet. I also think that encludes an 'eave' brace on a
house. It just depends on what you 'hang' on the tower.
As to how large the base/pier should be, going slightly
larger than what Rohn recommends won't hurt a bit. doing
it 'right' the first time is always better than re-doing it.
'Doc

1795. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8u791q$ok0$1@bob.news.rcn.net>
Source record: 177038

> However, I am still interested in knowing what others have done.
> Problems, etc that others have run into. The group I run with tends
> to "over-engineer." Can a base ever be "too-big?"
>
> 73,
>
> Bryan - k0emt

Over-engineering in this case is good. Get the Rohn data and follow it.
Wind loading changes with geographical area as well, what works in
central Maine may not last in the Texas Gulf.

Pete

1796. Calling all Portland hams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <DJFN5.81148$hk2.180012@news6-win.server.ntlworld.com>
Source record: 177039

I am trying to organise a Portland on the air weekend and would like to hear from interested parties from all "Portland's" around the world. I know that there are quite a few in North America so please get in touch if interested so I can organising. I live on Portland in Dorset, England and think it would be a good event to get us all on air for a weekend friendly contest with certificates for working all of them etc.

Jon M0BQQ

1797. Re: Question on jungle radio for nature conservation project

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2794-3A072808-29@storefull-112.iap.bryant.webtv.net>
Source record: 177040

John Burke Burnett wrote:
"We are investigating how to set up a simple, low-cost, yet effective radio network---."
"---Local regulations require use of 27 MHz band frequency for CBs."

You`ve answered the question already. CBs on 27 MHz are the cheapest and most available radios in the world. They should easily do the job using available towers and hi-gain antennas to span 60 kilometers. All you need is line-of-sight clearance. In flat terrain, you`d need about 200 feet elevation on each end of the r-f path. For extra help, plenty of (illegal in the USA) high-power amplifiers are available.

FM repeater systems operating in the low-VHF range (30-50MHz) would be better, and could be strung together in a chain of repeaters with low towers, but would be much more expensive and perhaps not allowed anyway. Unmanned repeaters may be subject to theft and vandalism too. SSB is an unnecessary complication unless you are using high capacity multichannel radios.

H-F radios can be used at much more cost. I`ve replaced a troublesome SSB h-f link working on a 40-mile path with a low-band VHF link which gave much better results (and we really didn`t care about the cost), and it cost less than the SSB.

Best regards, Richard harrison, KB5WZI

1798. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A072B65.291321B9@bigfoot.com>
Source record: 177041

Dan K Nelson wrote:
>
> "CAM" <cam2338@bigfoot.com> wrote in message
> > Now if he has ever lied about being arrested and pleading guilty, that's
> > a different matter entirely. An example would be if he applied for a
> > Texas concealed weapons permit. I had to swear that I have never been
> > arrested. A person who signs his name to a lie is not fit to be President.
>
> Simply because a person has been arrested does not preclude them from
> anything. If you look closely at those forms that ask the question, they ask
> if you have ever been CONVICTED of a crime.

Note that I specifically said, "arrested and pleading guilty". What is it
about "pleading guilty" that you do not understand? Pleading guilty is,
by definition, the same as being CONVICTED of a crime.

> There is a very big difference between an arrest and a conviction.

Not if one pleads guilty, as George W. *allegedly* did. A guilty plea
is the same as a conviction.

> Admitting you are guilty of a traffic violation (which was what
> a DWI was classified as at the time of GW's incident) and paying the fine
> does not mean you were convicted of a crime.

If you pay the fine, then you are, by definition, guilty. Are you saying that
pleading guilty to a DWI is not a felony in Maine?
--
http://www.mindspring.com/~w6rca

1799. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A072BB1.DC00FE4D@bigfoot.com>
Source record: 177042

Jim Kelley wrote:
>
> RanHefner wrote:
> > You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
> > guilty and paid the fine. When you plead guilty, you may not have to
> > go before a judge, but you ARE convicted of the crime.
>
> Dan is not incorrect just because you happen to disagree with him, Ran.
> Usually a distinction is made between a felonious conviction and a
> misdemeanor.

So, which was it, a felony or a misdemeanor?
--
http://www.mindspring.com/~w6rca

1800. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A072BFC.4735B4B3@bigfoot.com>
Source record: 177043

RanHefner wrote:
> Yes, Fred, I do believe what I say here.

So what? Hitler believed what he said also.
--
http://www.mindspring.com/~w6rca

1801. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A072D4F.2798EEFD@bigfoot.com>
Source record: 177044

Richard Clark wrote:
>
> CAM <cam2338@bigfoot.com> wrote:
> >I saw Gore make an absolutely outrageous statement on TV. He said
> >Bush's tax cutting plan is an attempt at wealth redistribution.
> >Would someone please tell me how leaving tax money in the hands
> >of the people who earned it is redistribution of wealth?
>
> Because those same people put us into debt that is not being repaid if
> they get that money back - duh.

Sorry Richard, a graduated income tax is a redistribution of wealth.
By no stretch of the imagination can reducing taxes be construed to
be a redistribution of wealth. In fact, reducing taxes is the exact
opposite of a redistribution of wealth. If the tax rate was ZERO,
there would be, by definition, NO redistribution of wealth.
--
http://www.mindspring.com/~w6rca

1802. Re: - Visit today - www.k7on.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: k7on@earthlink.net
Message-ID: <MPG.147141a24d39b5129896c9@news.earthlink.net>
Source record: 177045
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.cb

In article <8u6ve0rdg1@nnrp2.phx.gblx.net>, charles@ab7sl.com says...
> Lots to see and do.....here are a few features

http://www.k7on.com

--
http://www.k7on.com/
--

1803. Re: - Visit today - www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: k7on@earthlink.net
Message-ID: <MPG.147141e3ebc8deb49896ca@news.earthlink.net>
Source record: 177046
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.swap,rec.radio.cb

In article <8u73c4rug1@nnrp2.phx.gblx.net>, charles@ab7sl.com says...
> Actually there was a typo in my previous post.
>

http://www.k7on.com/

--
http://www.k7on.com/
--

1804. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A072FA7.E36005F4@bigfoot.com>
Source record: 177047

Floyd Sense wrote:
> I think that Mike Traffie doesn't intentionally mis-state his gain numbers.

If 10dB over a dipole at the same height is not intentionally mis-stating
his gain numbers, then I don't know what is. It is impossible for a two-
element beam to have a 10dB gain over a dipole at the same height.
To maintain such is simply a lie and hams should be told who is engaging
in false advertising. The mealy-mouthing saying that customers have
reported 10dB gain over a dipole at the same height is snake oil tactics.
If customers actually knew the definition of 10 dB, they wouldn't show
their ignorance by making such claims.

The HEXBEAM is a good antenna that can stand on its own merits. Why must
the manufacturer lie about its merits?
--
http://www.mindspring.com/~w6rca

1805. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A07304B.22AFDEB8@bigfoot.com>
Source record: 177048

B Nehl wrote:
> However, I am still interested in knowing what others have done.

The guy who says, "I just stuck it in the ground with no concrete and
it has worked fine for six months", may experience a catastrophic
failure at any time, including death. Best to trust the Rohm engineers.
--
http://www.mindspring.com/~w6rca

1806. FAST CASH

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: steph@mwt.NET
Message-ID: <000a01c04842$7d4ccb00$d94c2e9c@steph>
Source record: 177049
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

------=_NextPart_000_0007_01C04810.31C8E560

charset="iso-8859-1"

Dear Friend,=20

This letter is about an opportunity to make an incredible amount of =
Money (CASH !!!) in a very short time. The cost is only $6.00! Give it =
a try! All I did was follow the instructions in the letter that I =
received below. Here is a testimony from one of the thousands who have =
benefited from this simple investment plan.=20

"I'm a retired attorney, and about a year ago a man came to me with a =
letter. The letter he brought to me is the same letter before you now . =
He asked me to verify that this letter was legal. I told him that I =
would review it and get back to him. When I first read the letter, I =
thought it was some off the wall idea to make money. A week later I met =
again with my client to discuss the issue. I told him that the letter =
will be all right. I was curious about the letter, so he told me how it =
worked. I thought it was a long shot, so I decided against =
participating. Before my client left, I asked him to keep me updated as =
to his results. About two months later he called me to tell me that he =
had received more than $800,000.00 in cash! I didn't believe him so he =
asked me to try the plan and see for myself. "=20

"I thought about it for a few days and decided that there was not much =
to lose. I followed the instructions exactly and mailed out 200 letters. =
Sure enough the money started coming in! It came slowly at first, but =
after three weeks I was getting more than I could open in a day. After =
three months the money stopped coming. I kept a precise record of my =
earnings and at the end it totaled $868,439.00. I earn a good living as =
an attorney, but as anyone in the legal profession will tell you, there =
is a lot of stress that comes with the territory. I decided if things =
worked out, I would retire from practice and play golf. This time I sent =
out 500 letters. Well, three months later, I had totaled $2,344,178.00." =

"I met my old client for lunch to find out exactly how it works. He told =
me that there were a few similar letters going around. What made this =
one different is the fact that there were six names on the letter, not =
three like most others. That act alone resulted in more returns. The =
other factor was the advice I gave him in making sure the whole thing =
was perfectly legal, since no one wants to risk doing anything illegal. =
I bet now you are curious about what little changes I told him to make. =

Well, if you send a letter like this one out, to be legal, you must sell = something if you expect to received a dollar. I told him that anyone = sending a dollar must received something in RETURN. So when you send a = dollar to each of the six names on the list, you must include a slip of = paper saying , "Please add me to your mailing list" and include your = name and mailing address. This is the key to the program. The item you = will received for your dollar sent, is THIS letter and the right to earn = thousands."=20

Follow the simple instructions EXACTLY, and in less than three months = you should receive MORE THAN $800,000.00 IN COLD HARD CASH!=20

1) IMMEDIATELY send $1.00 (US$) to each of the six people listed below. = THE SOONER YOU SEND THE "$1.00 LETTERS" THE SOONER YOU CAN START GETTING = A RETURN! Wrap the dollar in a note saying "PLEASE ADD ME TO YOUR = MAILING LIST".=20

1. C. Kolytiris 1312 4th Ave Seattle, WA 98101=20

2. Steve Werden 13625 55th dr se Everett, WA 98208=20

3. Chris Mcelhany 221 W. Mercer Apt #303 Seattle, WA 98119=20

4. Holly Ellingson 1451 E. Republican St. Apt #4 Seattle, WA 98112=20

5. J. Burke 22 Heron Place Rexford, NY 12148=20

6.Nicholas Gebhardt W1956 Crampton Rd. Warrens, WI 54666

2) REMOVE the NAME and ADDRESS NEXT to #1 at the top of the list and = move the rest of the names UP one position. Then place YOUR name in the = #6 spot. This is best done by saving this to a file and entering your = information on line #6. Be careful when you type the addresses. Don't = forget to PROOFREAD them. Make SURE that the names and addresses are = correct.=20

3) When you have COMPLETED the above instructions, you have several = options on how you market the letter - through the Postal Service, = through E-mail, through posting in "FREE CLASSIFIED ADS" and = "NEWSGROUPS" ON THE INTERNET, or through whatever way you think is most = effective. To send this letter out to thousands of people and increase = your profits, I suggest you use a Bulk E-mail company. They are fast, = effective and give excellent service. This letter has been proven = perfectly legal for all of the above as long as you follow the = instructions, because you are purchasing membership in our exclusive = mailing list. The more you send out, the more YOU will make. We strongly = encourage you to mail this letter to family, friends, and relatives as = well.=20

THIS IS A SERVICE AND IS 100% LEGAL. (Refer to title 18, section 1302 = &1341 of the US Postal and Lottery Laws) Assume for example you get a 8% = return rate.=20

1) When you mail out 200 letters, ONLY 16 people send you $1.00=20

2) Those 16 people mail out 200 letters, (3200 letters) and ONLY 256 = people send you $1.00=20

3) Those 256 people mail out 200 letters, (51,200 letters) and ONLY 4 , = 096 people send you $1.00=20

4) Those 4,096 people mail out 200 letters (812,200 letter) and ONLY = 65,536 people send you $1.00=20

5) Those 69,536 people mail out 200 letters (13,107,200 letters) and = ONLY 1,048,576 people send you $1.00.

At the Next level your name -drops off the list. Think about it. Look = what you WILL have BEFORE your name-drops off the list! I know this = looks and sounds unbelievable. Just try it, and you will be happy that = you did because you will received proof when THOUSANDS of ONE-DOLLAR = BILLS start to pile up!=20

***MAKE SURE you send One US dollar to each of the six names on the = list. (This is VERY IMPORTANT), with a note saying "PLEASE ADD ME TO = YOUR MAILING LIST"=20

P.S. You've read this far, so let me as you one simple question, WHAT = HAVE YOU GOT TO LOSE? Even with a 1% return you will still get = $100,000.00 in 90 DAYS!!! What you can gain is an income, like the = example in this letter. You will have a very small expense, but you will = reap HUGE potential returns. What do you have to lose? I invite you to = JOIN our mailing list RIGHT NOW!=20

Thanks you for your time. GOOD LUCK & BEST WISHES TO YOU !!!=20

------=_NextPart_000_0007_01C04810.31C8E560

charset="iso-8859-1"

Dear Friend,

This letter is about an opportunity to make an incredible amount of = Money (=20
CASH !!!) in a very short time. The cost is only $6.00! Give it a try! = All I did=20
was follow the instructions in the letter that I received below. Here is = a=20
testimony from one of the thousands who have benefited from this simple=20 investment plan.

"I'm a retired attorney, and about a year ago a man came to me with a = letter.=20
The letter he brought to me is the same letter before you now . He asked = me to=20
verify that this letter was legal. I told him that I would review it and = get=20
back to him. When I first read the letter, I thought it was some off the = wall=20
idea to make money. A week later I met again with my client to discuss =

the=20
issue. I told him that the letter will be all right. I was curious about =
the=20
letter, so he told me how it worked. I thought it was a long shot, so I =
decided=20
against participating. Before my client left, I asked him to keep me =
updated as=20
to his results. About two months later he called me to tell me that he =
had=20
received more than $800,000.00 in cash! I didn't believe him so he asked =
me to=20
try the plan and see for myself. "

"I thought about it for a few days and decided that there was not =
much to=20
lose. I followed the instructions exactly and mailed out 200 letters. =
Sure=20
enough the money started coming in! It came slowly at first, but after =
three=20
weeks I was getting more than I could open in a day. After three months =
the=20
money stopped coming. I kept a precise record of my earnings and at the =
end it=20
totaled $868,439.00. I earn a good living as an attorney, but as anyone =
in the=20
legal profession will tell you, there is a lot of stress that comes with =
the=20
territory. I decided if things worked out, I would retire from practice =
and play=20
golf. This time I sent out 500 letters. Well, three months later, I had =
totaled=20
$2,344,178.00."

"I met my old client for lunch to find out exactly how it works. He =
told me=20
that there were a few similar letters going around. What made this one =
different=20
is the fact that there were six names on the letter, not three like most =
others.=20
That act alone resulted in more returns. The other factor was the advice =
I gave=20
him in making sure the whole thing was perfectly legal, since no one =
wants to=20
risk doing anything illegal. I bet now you are curious about what little =
changes=20
I told him to make. Well, if you send a letter like this one out, to be =
legal,=20
you must sell something if you expect to received a dollar. I told him =
that=20
anyone sending a dollar must received something in RETURN. So when you =
send a=20

dollar to each of the six names on the list, you must include a slip of =
paper=20
saying , "Please add me to your mailing list" and include your name and =
mailing=20
address. This is the key to the program. The item you will received for =
your=20
dollar sent, is THIS letter and the right to earn thousands."

Follow the simple instructions EXACTLY, and in less than three months =
you=20
should receive MORE THAN $800,000.00 IN COLD HARD CASH!

1) IMMEDIATELY send $1.00 (US$) to each of the six people listed =
below. THE=20
SOONER YOU SEND THE "$1.00 LETTERS" THE SOONER YOU CAN START GETTING A =
RETURN!=20
Wrap the dollar in a note saying "PLEASE ADD ME TO YOUR MAILING LIST". =

1. C. Kolytiris 1312 4th Ave Seattle, WA 98101

2. Steve Werden 13625 55th dr se Everett, WA 98208

3. Chris Mcelhany 221 W. Mercer Apt #303 Seattle, WA 98119

4. Holly Ellingson 1451 E. Republican St. Apt #4 Seattle, WA 98112 =

5. J. Burke 22 Heron Place Rexford, NY 12148

6.Nicholas Gebhardt W1956 Crampton Rd. Warrens, WI 54666

2) REMOVE the NAME and ADDRESS NEXT to #1 at the top of the list and =
move the=20
rest of the names UP one position. Then place YOUR name in the #6 spot. =
This is=20
best done by saving this to a file and entering your information on line =
#6. Be=20
careful when you type the addresses. Don't forget to PROOFREAD them. =
Make SURE=20
that the names and addresses are correct.

3) When you have COMPLETED the above instructions, you have several =
options=20
on how you market the letter - through the Postal Service, through =
E-mail,=20
through posting in "FREE CLASSIFIED ADS" and "NEWSGROUPS" ON THE =
INTERNET, or=20
through whatever way you think is most effective. To send this letter =
out to=20
thousands of people and increase your profits, I suggest you use a Bulk =
E-mail=20
company. They are fast, effective and give excellent service. This =
letter has=20
been proven perfectly legal for all of the above as long as you follow =

the=20
instructions, because you are purchasing membership in our exclusive =
mailing=20
list. The more you send out, the more YOU will make. We strongly =
encourage you=20
to mail this letter to family, friends, and relatives as well.

THIS IS A SERVICE AND IS 100% LEGAL. (Refer to title 18, section 1302 =

&1341 of the US Postal and Lottery Laws) Assume for example you get =
a 8%=20
return rate.

1) When you mail out 200 letters, ONLY 16 people send you $1.00

2) Those 16 people mail out 200 letters, (3200 letters) and ONLY 256 =
people=20
send you $1.00

3) Those 256 people mail out 200 letters, (51,200 letters) and ONLY 4 =
, 096=20
people send you $1.00

4) Those 4,096 people mail out 200 letters (812,200 letter) and ONLY =
65,536=20
people send you $1.00

5) Those 69,536 people mail out 200 letters (13,107,200 letters) and =
ONLY=20
1,048,576 people send you $1.00.

At the Next level your name -drops off the list. Think about it. Look =
what=20
you WILL have BEFORE your name-drops off the list! I know this looks and =
sounds=20
unbelievable. Just try it, and you will be happy that you did because =
you will=20
received proof when THOUSANDS of ONE-DOLLAR BILLS start to pile up!

***MAKE SURE you send One US dollar to each of the six names on the =
list.=20
(This is VERY IMPORTANT), with a note saying "PLEASE ADD ME TO YOUR =
MAILING=20
LIST"

P.S. You've read this far, so let me as you one simple question, WHAT =
HAVE=20
YOU GOT TO LOSE? Even with a 1% return you will still get $100,000.00 in =
90=20
DAYS!!! What you can gain is an income, like the example in this letter. =
You=20
will have a very small expense, but you will reap HUGE potential =
returns. What=20

do you have to lose? I invite you to JOIN our mailing list RIGHT NOW! =

Thanks you for your time. GOOD LUCK & BEST WISHES TO YOU !!!=20

------=_NextPart_000_0007_01C04810.31C8E560--

1807. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <XQGN5.530$bb.220192@paloalto-snr1.gtei.net>
Source record: 177050

"CAM" <cam2338@bigfoot.com> wrote in message
news:3A072B65.291321B9@bigfoot.com...
> Dan K Nelson wrote:
> > There is a very big difference between an arrest and a conviction.
>
> Not if one pleads guilty, as George W. *allegedly* did. A guilty plea
> is the same as a conviction.
>
> > Admitting you are guilty of a traffic violation (which was what
> > a DWI was classified as at the time of GW's incident) and paying the
fine
> > does not mean you were convicted of a crime.
>
> If you pay the fine, then you are, by definition, guilty. Are you saying
that
> pleading guilty to a DWI is not a felony in Maine?
> --

24 years ago a DWI in Maine was classified as an infraction - a violation of the vehicle code. It was neither a misdemeanor nor a felony, therefore not a crime, therefore not a criminal act. To call it a crime by today's standard of definition would be considered "ex post facto" law, which is forbidden by the courts.

You might want to do some legal research so as to gain a better understanding of the differences between infraction, misdemeanor, and felony classifications.

73 de W6DKN

1808. 160M Dipole Hoist/Anchor Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <3a073912.32224990@news.erols.com>
Source record: 177051

Greetings,

Well, thx. for all your help so far. Here's where I stand right now.
I've got the dipole assembled and spread-eagle out in the back yard.
Turns out I did find 100ft. of 450ohm ladderline at HRO for 19.95 so I
bought a spool. This is very well soldered to the two legs each 125ft.
in length (plus 1 ft. for wrapping the egg insulators). A drilled center block
of good strong Beech wood is the center/anchor point. All laid out and
ready to hoist in the am.

My question is: Will using more 14AWG insulated for the hoist/
anchor points on center and ends mess me up? That is, will it cause
appreciable interference or really louse up my ability to send and recieve
well? Bear in mind this dipole is gonna be bent into an open "C" shape
to begin with. Reason for using is cheapness as I have plenty of the stuff
but no rope. Can easily anchor center and ends so there is no "touching"
of anchors to antenna. Fast reply tonite would be most welcome as I can't
hardly wait for sun-up to get this thing in the air.<grin>

Oh yeah; if you don't mind one more quick question. Given 20AWG
450ohm ladderlind feeding 14AWG solid,....What could I expect it to support
in the way of PEP? How much power could I crank thru it if I ever got a linear?

Again, big, BIG THX !!

Andrew
KG4JBM

1809. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A07399F.D85CB40E@uci.edu>
Source record: 177052

CAM wrote:
>
> Jim Kelley wrote:
> >
> > RanHefner wrote:
> > > You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
> > > guilty and paid the fine. When you plead guilty, you may not have to
> > > go before a judge, but you ARE convicted of the crime.
> >
> > Dan is not incorrect just because you happen to disagree with him, Ran.
> > Usually a distinction is made between a felonious conviction and a
> > misdemeanor.
>
> So, which was it, a felony or a misdemeanor?

According to the news reports I heard, he plead guilty to a
misdemeanor. Hey Cecil, you're in Texas, howz come you don't know?
He's your governor!

73, Jim AC6XG

1810. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u7fq3$6pu$1@nnrp1.deja.com>
Source record: 177053

In article <XQGN5.530$bb.220192@paloalto-snr1.gtei.net>,
"Dan K Nelson" <w6dkn@qsl.net> wrote:
>
> 24 years ago a DWI in Maine was classified as an infraction - a
violation of
> the vehicle code. It was neither a misdemeanor nor a felony,
therefore not a
> crime, therefore not a criminal act. To call it a crime by today's
standard
> of definition would be considered "ex post facto" law, which is
forbidden by
> the courts.
>
> You might want to do some legal research so as to gain a better
> understanding of the differences between infraction, misdemeanor, and
felony
> classifications.
>
> 73 de W6DKN
>
>

You are wrong. It was a misdemeanor. What is your source of
information that calls it an "infraction"?

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1811. Re: W4JLE's Antisemitic Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001106183111.06976.00000049@ng-fy1.aol.com>
Source record: 177054

Thank you Wayne. Unlike you or Dr. Laura, I do hold an advanced degree in the field where she claims expertese. Consequently, I find her partuicular brand of mouthy impostership and clinical incompetence exceedingly offensive. But, this being American and all, you're sure free to think what you like--and to like what you think :<)

What does this have to do with antennas? Absolutely nothing. Which is fine because I've been working with them all day and need a break (hi).

73

Rick K1BQT

1812. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8u7f0u$q44$1@bob.news.rcn.net>
Source record: 177055

"'Doc" <w5lz@oio.net> wrote in message news:3A07266A.175E85E5@oio.net...
> Bryan,
> If I remember correctly, Rohn 25g can be un-guyed up to
> 50 feet. I also think that encludes an 'eave' brace on a
> house. It just depends on what you 'hang' on the tower.
> As to how large the base/pier should be, going slightly
> larger than what Rohn recommends won't hurt a bit. doing
> it 'right' the first time is always better than re-doing it.
> 'Doc

Rohn 25 will not self-support at 50 feet--the only time this is done is when a Hazer system is raising or lowering the antennas on hopefully a very, very calm day. If a house bracket is used, it is no longer a self supporting tower, and Rohn has published guidelines for these installations as well.

Also, the base requirements differ for different style bases. For example, a foldover base requires a minimal base, but it can only be used on guyed towers regardless of the number of square yards of concrete used below ground. It is very risky to accept anedoctal advice from newsgroup participants, especially when the specifics for your tower aren't specified.

The Rohn engineering plans are a must, IMHO; since there are insurance and safety issues, as well as zoning regulations, that come into play as well.

Pete

1813. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <2mHN5.18$g5.121640@news.ntplx.net>
Source record: 177056

Richard Harrison <richardharrison@webtv.net> wrote:

> Ed Hare, W1RFI wrote:

> "With FF=2D^2/lambda, you would have to be 68400 wavelengths away to be
> in the far field to make accurace far field measurements."

> Fairly obvious it seems that FF = far field in the above. D may be some
> distance in some units. Even if so, I find it difficult to believe that
> you would have to be 68400 wavelengths away from a rhombic to accurately
> make far field measurements.

I'm sorry; I intended that to apply to the context of the conversation we were having about an antenna that was 180 wavelenghts above ground. If you want to make far-field measurements of an antenna over ground, you will have to be 2D^2/lambda away from the antenna, with D = the largest dimension of the antenna system, including its height above ground.

> The electrostatic field energy decays as the sixth power of the
> distance. The induction field decays as the fourth power of tne
> distance. The radiation field continues into the far field and decays
> with square of the distance.

I believe that those are approximations, not absolute values. The EM field, in the far field, consists of both an electric and magnetic field. The individual fields (E and H) do not decay as the inverse square, but as the inverse. In the near field, if one gets VERY close to the radiating source, the E and H fields are reactive, ie, they return power to the source. But when one considers this field, one is really very close to the antenna and is subject to this intense, reactive field from only a portion of the antenna. It would be very much an oversimplification to sate the the E and H fields decay as 1/4 and 1/6 D. The nature of these field also depends very much on the voltage and current present on the antenna at the point in question -- near the ends of a half-wave dipole, for example, the E field is stronger than the H field by quite a bit, and vice versa at the center.

> A good picture of near and far fields is shown by Arnold B. Bailey`s
> Fig. 5-33 in "TV and Other Receiving Antennas". He plots the fields for
> dstances between 0.1 and 10,000 wavelengths. It is clear that after 5 or
> 10 wavelengths, that your are in the far field.

It depends on what you are trying to measure. If you want to consider the interaction of the antenna and the earth, you may need to be much farther away than 10 wavelengths from the antenna. If you have an antenna 10 wavelengths high, you would need to be 200 wavelengths away to get far-field measurements that accuately reflect the antenna-over-ground pattern.

> A very large antenna might not behave like a point source.

No practical antenna behaves like a point source.

> So I can see that some adjustment may be needed in the application of this
near field
> / far field information.

The boundary between near and far field areas near an antenna is a boundary for the radiating portion of the antenna fields. In essence, in the radiating near field area, one is affected more by one portion of the antenna than others. Thus the field present at that point is not determined equally by all of the radiation from the different parts of the antennna. In the radiating near field, one can even have cases where the E or H field becomes smaller as one gets closer to the antenna. The boundary is also "fuzzy," meaning that in all cases, as one gets farther and farther from the antenna, one gets closer and closer to the far-field relationship between the different radiating portions of the antenna. At what point is that relationship "close enough?" That is the near-field/far-field boundary. That point is generally taken to be 2D^2/lambda, but that is very much application dependent. If one is trying to measure the very deep null that is off the back or side of some beams, one might have to be much farther away to have the deviation from true far-field conditions not affect the measurement, just as one example.

73,
Ed Hare, W1RFI

1814. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7pHN5.19$g5.122121@news.ntplx.net>
Source record: 177057

The Hexbeam was reviewed in QST, along with a few other compact antennas.

See:

http://www.arrl.org/members-only/prodrev/pdf/pr9803.pdf

73,
Ed Hare, W1RFI

1815. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001106185255.06976.00000051@ng-fy1.aol.com>
Source record: 177058

Hi Cecil--

Doesn't alter the fact that the product provides a great solution for a lot of people. I wished I knew how to convice Mike to present more realistic claims, but--failing that--I wouldn't let it stop me from building or buying one. Indeed, I've used his, built my own, and feel pretty confident they all work just about the way physics and mother nature dictate they should. I do see your point, however. If dishonest people aren't allowed to overstate their case, honest people shouldn't be allowed, either.

Rick K1BQT

1816. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <XyHN5.20$g5.122778@news.ntplx.net>
Source record: 177059

CAM <cam2338@bigfoot.com> wrote:

> If 10dB over a dipole at the same height is not intentionally mis-stating
> his gain numbers, then I don't know what is. It is impossible for a two-
> element beam to have a 10dB gain over a dipole at the same height.

His website seems a bit confusing. He has a graph that shows that the Hexbeam would have either a 4 or 6 dBd gain, under what he terms "line of sight" and "reflected path" conditions. I presume that the means free space and over ground conditions, with the reflected path considering ground gain. However, the FS numbers look about right -- around 4 dBd, but the reflected path numbers look a bit low. I would expect to see about 4 dB of ground gain. A dipole at a reasonable height above ground usually offers about 4 dBd gain.

This does not correspond to the claim that the antenna could show 10 dB of improvement over a dipole at the same height. An antenna that has 4 dBd free space gain could not do this under any circumstances I can think of. This may be based on some customer testimonials, but I don't see how it corresponds with the factual data on the Web page.

> The HEXBEAM is a good antenna that can stand on its own merits. Why must
> the manufacturer lie about its merits?

The overall review in QST was positive.

73,
Ed Hare, W1RFI

1817. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8u7gj4gsp1@iac5.navix.net>
Source record: 177060

I guess you showed us!

"CAM" <cam2338@bigfoot.com> wrote in message > I don't like either of those guys for president. That's why I voted
> for the Libertarian, Harry Browne.
> --
> http://www.mindspring.com/~w6rca

1818. Re: New Ham needing antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <MHHN5.21$g5.123228@news.ntplx.net>
Source record: 177061

DCSLLC Email wrote:
>
> I just ordered an Icom IC-707. It should radiate 100 W, and I have a home
> that I can mount either a dipole antenna up about 15 feet or any vertical,
> etc. antenna on the chimney.

> I'd like any input at all on what would be a good antenna to use and what
kind of pricing I can expect.

For the most part, for horizontally polarized (ie, horizontal dipole)
antennas, one must get height to expect good DX performance. If you want an
antenna that can talk to the world on 20 meters, then a 15-foot high dipole
is going to be somewhat disappointing. I would work *okay* on 80 and 40
meters for contacts out to a few hundred miles, but not really be great for
DX on any band.

The vertical would probably outperform the low horizontal antenna. There
are a number of verticals to choose from, some requiring ground connections
as an integral part of the antenna, others operating without a ground
connection. The latter can eliminate some of the losses associated with
poor ground, but for any vertical, the low-angle performance (ie, DX) will
be determined by the ground characteristics many wavelengths away from the
antenna. Some who live in areas of poor ground (rocky, dry sandy, etc) say
that a vertical antenna is an omnidirectional antenna that radiates equally
poorly in all directions. :-) Still, I think it would probably outdo a
dipole at 15 feet.

What you could do, however, if you can put up a vertical, is put a small
mast on the chimney and use it to support an inverted vee. I don't know how
much real estate you have, but if you can cut it about 50 feet to 150 feet
long and feed it with ladder line, you can probably use it on all bands 80 M
and up with an antenna tuner. My home antenna is a 40 meter inverted vee,
mounted on a 20-foot mast strapped to my chimney. I just used it /QRP in the
ARRL Sweepstakes and actually managed to make a number of contact calling
CQ. :-)

The thing to remember about building an antenna is that you are not building
your very last antenna, you are building your next antenna. I like wire
because wire is cheap. :-)

See http://www.arrl.org/tis and go to the information packages on
antennas -- there are a lot of QST articles available for free download.

73,
Ed Hare, W1RFI

1819. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a323830.1044619683@news.seanet.com>
Source record: 177062

On Mon, 06 Nov 2000 16:14:39 -0600, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>>
>> CAM <cam2338@bigfoot.com> wrote:
>> >I saw Gore make an absolutely outrageous statement on TV. He said
>> >Bush's tax cutting plan is an attempt at wealth redistribution.
>> >Would someone please tell me how leaving tax money in the hands
>> >of the people who earned it is redistribution of wealth?
>>
>> Because those same people put us into debt that is not being repaid if
>> they get that money back - duh.
>
>Sorry Richard, a graduated income tax is a redistribution of wealth.
>By no stretch of the imagination can reducing taxes be construed to
>be a redistribution of wealth. In fact, reducing taxes is the exact
>opposite of a redistribution of wealth. If the tax rate was ZERO,
>there would be, by definition, NO redistribution of wealth.

Hi Cecil,

We're talking about two different things.

You are talking about the immediate year, I am talking about
obligations made and gone unpaid over the stretch of years.

If years ago you suffered the government to cover your losses (see the
debacle we called the Savings and Loan bailout), and then this year
say you want your excess taxes back, then that is redistribution of
wealth such that your erase prior debts for yourself and leave them to
everyone else to pay.

The Bushes (Bushii?) were highly leveraged in this Savings and Loan
fiasco. Uncle Sugar covered their losses, and now the Bushes want
their debt removed from the books (it was already paid by us suckers,
so why can't they have their excess taxes back?).

What's wrong with this if they paid the most and they should get back
the most? They got the greater return by pushing us into debt, and
now they want out of the payback. They made money in the first place
(using our funds AND taking the tax dodge for the loss) and now they
don't want to pay down the principle. That is redistribution of
wealth.

73's
Richard Clark, KB7QHC

1820. Re: disk antenna for 2.4 Ghz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18969-3A07421E-29@storefull-116.iap.bryant.webtv.net>
Source record: 177063

Check the Andrew Corp. website for 2.4 Ghz dish information. You can use a grid dish at 2.4 GHz which saves on windloading and does not respond to cross-polarized signals.

Best regards, Richard Harrison, KB5WZI

1821. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A074F40.5AF44F41@uci.edu>
Source record: 177064

Richard Clark wrote:
> Hi Cecil,
>
> We're talking about two different things.
>
> You are talking about the immediate year, I am talking about
> obligations made and gone unpaid over the stretch of years.
>
> If years ago you suffered the government to cover your losses (see the
> debacle we called the Savings and Loan bailout), and then this year
> say you want your excess taxes back, then that is redistribution of
> wealth such that your erase prior debts for yourself and leave them to
> everyone else to pay.
>
> The Bushes (Bushii?) were highly leveraged in this Savings and Loan
> fiasco. Uncle Sugar covered their losses, and now the Bushes want
> their debt removed from the books (it was already paid by us suckers,
> so why can't they have their excess taxes back?).
>
> What's wrong with this if they paid the most and they should get back
> the most? They got the greater return by pushing us into debt, and
> now they want out of the payback. They made money in the first place
> (using our funds AND taking the tax dodge for the loss) and now they
> don't want to pay down the principle. That is redistribution of
> wealth.
>
> 73's
> Richard Clark, KB7QHC

The people you should be pointing your finger at are those who defaulted on their loans from the S&L's because they paid too much for the property they bought. The money went to the folks who sold property at over-inflated prices. The government simply covered the deposits that our grandmothers had in their savings accounts so they wouldn't be out on the street. How you can blame that on George Bush is beyond comprehension.

ac6xg

1822. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a075068_1@news3.prserv.net>
Source record: 177065

In his last paragraph, Peter has touched on the most important part of all, insurance and safety. Years ago, someone might get away with a tower falling on a neighbor's property with little lasting ill effect. Now, however, as they say, in today's litigious society, I sure would want to be able to say: "It was installed to the manufacturer's specifications plus a 50% safety factor." if something untoward happened. And, it seems like the weather is getting wilder. We had a couple dozen power poles snapped in the middle in a thunderstorm yesterday, and that used to never happen. When I was a kid, back when dirt was new, I put up a tower with minimal guying, and sure enough, it blew down. Put a couple of holes in the roof, and broke most of the elements on one side of the tribander, and bent one of the tower sections. I made it a point that would never happen again. So I have a whole file of Rohn, Andrew, and Hy-Gain commercial tower specs. It sure makes the cement companies happy when I install a new tower now.
--
Crazy George

Peter Bertini <commquart@erols.com> wrote in message
news:8u7f0u$q44$1@bob.news.rcn.net...
>
> "'Doc" <w5lz@oio.net> wrote in message news:3A07266A.175E85E5@oio.net...
> > Bryan,
> > If I remember correctly, Rohn 25g
<snip>
>
>
> Rohn 25 will not self-support at 50 feet--
<snip>
>
> The Rohn engineering plans are a must, IMHO; since there are insurance
> and safety issues, as well as zoning regulations, that come into play as
> well.
>
> Pete
>
>
>
>

1823. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A075AED.78585F3D@uci.edu>
Source record: 177066

RanHefner wrote:
> Grandma didn't benifit as much as the GW types did! The FDIC insured
> accounts up to $200,000 (maybe $100,000)...Anyway, the bailout was to
> those who had MORE that the insured amount in their accounts.

So then I guess these people are guilty of obtaining money that already belonged to them. Those scoundrels!

ac6xg

1824. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7263-3A0756F6-13@storefull-113.iap.bryant.webtv.net>
Source record: 177067

Ed Hare, W1RFI wrote:
"The individual fields (E and H) do not decay as the inverse square, but as the inverse."

So, why is it called "The Inverse Square Law"?

We are talking power per square meter here. Field strength is customarily quoted in volts per meter. This voltage is squared and divided by the 377 ohms of free space to obtain the power in a square meter of the wavefront.

The volts per meter in the far field decay linearly with distance from the sender. If you have a volt per meter at one mile from the transmitter at 1 MHz, you will have 0.5 volts per meter at two miles, less some additional loss from imperfect soil, etc.

With the power, the decay is 6db or divided by four every time you double the distance as we did in the second mile above.

The volts decay linearly with distance from the transmitter in the far field, but the power declines by the square of the distance from the sender. Hence, "The Inverse Square Law".

Ed is right, E and H don`t each decline by the square of the distance. But, the power in a square meter of the wavefront sure does.

Best regards, Richard Harrison, KB5WZI

1825. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-06 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18969-3A075FAB-38@storefull-116.iap.bryant.webtv.net>
Source record: 177068

Ed Hare, W1RFI wrote:
"It would be very much of an oversimplification to state the E and H fields decay as 1/4 and 1/6 D."

And it would be wrong. The above needs restatement to more nearly agree with my posting. I`ll try. The electrostatic field due to the high voltage points of the antenna decays in power as the sixth power of the distance from the radiator.

The induction field decays as the fourth power of the distance.

The radiation field near the radiator does not return, but continues its exodus to generate the far field. It decays as the square of the distance from the radiator.

Best regards, Richard Harrison, KB5WZI

1826. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A085823.2309DFB4@bigfoot.com>
Source record: 176919

Jim Kelley wrote:
>
> CAM wrote:
> >
> > Jim Kelley wrote:
> > > Hey Cecil, you're in Texas, howz come you don't know?
> > > He's your governor!
> > >
> > Not my governer - I voted Libertarian.
>
> Ah, I stand corrected. So how many governors you got down there in
> Texas?

Just one, but he's not mine. I took the governer off my engine. :-)
--
http://www.mindspring.com/~w6rca

1827. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A0858EA.D3FB9ED9@uci.edu>
Source record: 176920

Fractenna wrote:
> Hi Harry--
>
> On the contrary: I am unwilling to answer fractal antenna questions HERE by
> design.

Funny, you don't exhibit any such reticense to pontificate and deliver monologues. Perhaps you could try modifying the design to include things other than fractal antennas as well, to include lawsuits, firings, perceived abuse, and semitism to name just a few.

This is a discussion group about antennas. To discuss, according to Websters, is to "investigate by reasoning or argument". Investigation is precisely what draws many of us to this discussion. If you do not wish to participate in the discussions of fractal antennas, then why do post to a discussion group?

1828. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A08597D.AEBAFF65@bigfoot.com>
Source record: 176921

BillN6VLR wrote:
> In principle I agree 100% with Paul and Peter.

How about Matthew, Mark, Luke, and John? :-)
--
http://www.mindspring.com/~w6rca

1829. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <E_YN5.32$g5.168089@news.ntplx.net>
Source record: 176922

Wes Stewart <n7ws@azstarnet.com> wrote:

> If I understand Richard's position correctly (always a dubious proposition on my
> part) he believes that increased height above ground causes increased path loss
> between the antenna and the ground underneath. This in turn reduces the effects
> of ground reflection upon both the pattern and the mutual impedance between the
> antenna and its image.

The mutual coupling between the antenna and its image does indeed change as the distance between them varies. However, the "attenuation" between the antenna and its ground reflection does not affect the pattern -- at the infinite distance that NEC uses for far field calculations, the attenuation between the direct signal and the reflected signal is the same for both signals, so they will add or subtract to form a pattern.

> What this suggests to me is that the modeling program, at least for pattern
> calculation, treats the perfect ground as a perfect image antenna with the same
> impedance and fed with the same power, regardless of the separation between the
> "two" antennas. "Near" or "far" seem to have no bearing on the results.

> Seems to me that the model is wrong unless the antenna is "near" ground.

The model is not wrong. The effect of a reflection off of perfect ground is exactly the same as the effect of feeding another antenna, located 2H below the first antenna in free space, where H is the height of the antenna over perfect ground. In the far field, the patterns should be exactly as you describe, with exactly the 3 dB difference you describe. The far-field pattern is beign calculated at infinite distance, and the ground plane is infinite, so the antenna is always "near" ground as far as the far-field pattern is concerned.

73,
Ed Hare, W1RFI

1830. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <8u9mjf$9hj$1@lily.cs.ubc.ca>
Source record: 176923

Dick Hughes <rhughes33@cableone.net> writes:
>I have two, VHF radios. One for voice and one for packet cluster. I
>would like them to be able to share the same 2-meter antenna without
>manual switching. A 2-meter/2-meter duplexer would be nice, but I
>have never seen such an animal. Any ideas?

The problem is that you need a *lot* of isolation between the two radios on a duplexer in order to avoid leakage from the one transmitter to wipe out the sensitivity of the other receiver, since you want to be able to use both simultaneously.

In the case of multi-band duplexer, where one port is 146 MHz and the other 445 for example, the wide frequency separation allows good isolation just using ordinary filter components: capacitors and inductors. These can also be broadly enough tuned to cover all of both bands without adjustment.

But for the same sort of isolation between two frequencies in the same band, you need much narrower filters, typically cavity filters of some sort. Ask someone who operates a VHF repeater to show you the filters needed to operate a receiver and transmitter simultaneously 600 kHz apart at 146 MHz. There are typically several cavities in both the transmit and receive paths. These work, but they are big and expensive, and they need to be tuned to the specific transmit and receive frequencies in use. This could work if your voice and packet radios both operate on a single frequency each.

Dave

1831. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A085BB8.7BE9714E@bigfoot.com>
Source record: 176924

Floyd Sense wrote:
> If Mike claims that some users have reported a 10 dB gain compared to a
> dipole, I take that to mean that users have told him they have seen that
> gain figure in relation to dipoles installed at their location. What's
> wrong with passing that information along?

What's wrong, indeed. It simply is NOT TRUE. I assume that Mike knows it is not true, yet he passes it along anyway. IMO, that's snake oil marketing. "I didn't say it, they said it." Give us a break, Floyd. If someone says they can catch a .357m bullet in their teeth, are you going to pass that on as the truth? Mike should drop the "super-gain" stuff and admit that the highest possible gain of a two element beam over a dipole at the same height is about 5dB. IMO, he is simply trying to make a buck at the expense of ignorant hams. The Hexbeam is an excellent antenna that can stand on its own merits. Why must snake oil marketing techniques be employed?
--
http://www.mindspring.com/~w6rca

1832. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u9nsi$16b$1@nnrp1.deja.com>
Source record: 176925

In article <3A084F75.7BE8FC27@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:

> To paraphrase Ed McMahon, you're incorrect sir !! That's not the way
it
> works at all. It's insurance on deposits. You don't get more than
100%
> on your dollar. Sorry, but nice try.
>
> Are you a commie by any chance there, Ran? ;-)
>

Well you are incorrect on both accounts. FDIC and FSLIC insure
deposits up to a fixed maximum dollar amount. If you put more than
that amount in your account, you stand a change of losing all over the
max.

You must be the commie!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

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Before you buy.

1833. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8u9o0h$1fa$1@nnrp1.deja.com>
Source record: 176926

In article <20001107060412.15485.00000159@ng-mj1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
...
> The extraordinary abuse and hate filled atmosphere create here by a
few
> individuals does not make it conducive to discuss anything creative or
> innovative.
>
> Harry, perhaps sincerely, you have a better suggestion which:
>
> 1) makes a scientist accessible;
> 2) prevents this abuse?
>

I see posts from quite a number of engineers and scientists and other interested parties on this newsgroup and on others which certainly don't seem abusive to me, and which reflect accessibility. Perhaps, if you look at such exchanges (assuming you can find some you feel similarly about), you can determine for yourself what in them makes them that way. Then perhaps you can emulate that behavior. I don't mean that you have to agree with them technically, only that you use (one or more of) the styles as a prototype for expressing your own thoughts. -- Indeed, there are people who post here whose posts I really look forward to, because I almost always learn something from them. Frankly, yours have not been in that category for me, and the feedback I read from others tells me they aren't for a lot of others, too. If your postings are frequent, but not eagerly awaited, what response do you expect to them? I'm personally not very surprised by the responses I see.

I can tell you that it's a real turn-off to me to be told that details are available a certain place, only to find that indeed they are not there. It makes me very unlikely to bother to look when told of some other place they might be: like the boy who cried, "Wolf!" Or, "Fool me once, shame on you; fool me twice, shame on me."

It's clear to me that there are a few folk who post here who do not want to have productive exchanges with me; those are people I simply ignore. It's better for me, and it's better for them. Perhaps you could make that technique work for you as well.

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

1834. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A085D85.3688EDF8@bigfoot.com>
Source record: 176927

David wrote:
> What do you recommend? An antenna that will work *and* look ok on my car?
> And, if it matters, I'm willing to spend the big bucks for what will do the
> job.

It's your call, David. The physics are: Get the tallest antenna possible,
with the highest-Q center-mount coil possible, and the largest top hat
possible for your boundary conditions. I have seen screwdrivers mounted
on an Accord. Incidentally, that's the entire reason that I drive a full-
sized GMC pickup and I always score near the top in the 75m mobile shootouts.
--
http://www.mindspring.com/~w6rca

1835. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A085E00.9B2B8A4B@bigfoot.com>
Source record: 176928

Bill Turner wrote:
> I like Hamsticks. They are not as efficient as the monster-coil types
> which I have used in the past, but they are not too long (7 feet),
> unobtrusive, easy to tune, inexpensive and they get out ok for me. I
> can work almost anything I hear and that's good enough.

Yep, that just means the 75m Hamstick is a lousy receiving antenna. :-)
--
http://www.mindspring.com/~w6rca

1836. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8u9oko$22a$1@nnrp1.deja.com>
Source record: 176929

I'll reiterate something Dave M. replied: duplexers are for all practical purposes fixed-tuned, and necessarily large to get very high Q.

However, you mention manual switching, so I assume that you really DON'T need to use both at the same time. If that's the case, perhaps there's some hope. One possibility is an automatic switch...perhaps just controlled by the power switch on one rig. Turn off the rig, and the antenna feed switches to the other rig. There are relays which have decent isolation at 150MHz, and you might even arrange to switch the "off" rig into a 50-ohm load, just to keep it happy in case it was turned on to transmit. I assume that you can figure out how to implement this idea.

You might also want to be able to monitor both radios at once, so long as neither was transmitting. If that's the case, there's maybe something that could be done with a PIN-diode-switched preamp that can feed two outputs for receive...but that all gets more complicated (and seems pretty disruptive for packet communications!). Let us know just what you have in mind operationally.

Hope this thought helps...

Cheers,
Tom

In article <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>,
Dick Hughes <rhughes33@cableone.net> wrote:
> I have two, VHF radios. One for voice and one for packet cluster. I
> would like them to be able to share the same 2-meter antenna without
> manual switching. A 2-meter/2-meter duplexer would be nice, but I
> have never seen such an animal. Any ideas?
>
> Dick Hughes - W6CCD
>

--
Tom Bruhns -- K7ITM

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1837. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3A086C98.4E04E925@west.raytheon.com>
Source record: 176930

Wes Stewart wrote:
>

> This thread has progressed while I thought about this, but here goes anyway.
>
> If I understand Richard's position correctly (always a dubious proposition on my
> part) he believes that increased height above ground causes increased path loss
> between the antenna and the ground underneath. This in turn reduces the effects
> of ground reflection upon both the pattern and the mutual impedance between the
> antenna and its image.

The mutual coupling is dominated by fields which decay much faster
than the radiation fields. The mutual impedance between an antenna 180
wl above ground and it's image is almost certainly negligible. The
effect of the 'image' antenna on the far field radiation pattern is
profound. As the distance approaches infinity, the difference in
field strength between the direct, and reflected (image) field becomes
negligible. The phase difference between the direct and reflected
field will change rapidly with elevation angle. Near the horizon, the
relative phase shift will rotate 360 degrees for every 0.16 degree
change in elevation angle.

> On the other hand, we have Ed's Eznec plot that clearly shows a pattern with
> myriad nulls that can only be due to equal, or nearly equal, amplitude and
> oppositely phased interference "signals."

I don't know which ground model Ed used but for low elevation angles
at UHF frequencies it doesn't matter much since the reflection
coefficient will be very close to -1 in the theoretical case of a
perfectly flat ground. As the elevation angle increases, partial
absorption of the reflected wave will result in shallower nulls and
slightly less peaking but the overall pattern will remain similar.
Real world conditions are often very close to the the theoretical
model for low elevation angles but surface roughness alters the
picture significantly for higher angles.

[snip]

> So I did a little modeling experiment as follows:
>
> First I modeled a self-resonant dipole at 299.793 MHz (the Eznec example dipole
> tweaked in length for zero reactance) at some height above a perfect ground.
> Then I modeled a pair of the same dipoles spaced twice the height distance apart
> in free space. The second dipole was fed with the same current but 180 degrees
> phase difference. This in effect is the "image" antenna that is used in the
> perfect ground analogy as described in paragraph 4 of Terman's chapter on

> antennas and elsewhere. It should be noted that Terman qualifies by saying,
> "When the antenna is near the ground." What he considers "near" to be is
> unclear.
>
> What I saw was that the patterns were identical except for the fact that the
> lower hemisphere was missing over the perfect ground and the amplitudes differed
> by three dB. The pattern peaks and nulls all occured at the same places
> regardless of the separation.

As the separation between the two radiators increases, so should the number of peaks and nulls. There should always be a null located along the perpendicular bisector (horizon) if the antennas are fed out of phase.

> What this suggests to me is that the modeling program, at least for pattern
> calculation, treats the perfect ground as a perfect image antenna with the same
> impedance and fed with the same power, regardless of the separation between the
> "two" antennas. "Near" or "far" seem to have no bearing on the results.

That's precisely what the 'perfect' ground model does. The 'real' ground model computes the complex reflection coefficient based on the angle of reflection and the specified material parameters. For horizontally polarized antennas, the low angle pattern will substantially independent of the ground parameters but you should see some filling in of the high angle nulls when the 'real' ground model is used.

> Seems to me that the model is wrong unless the antenna is "near" ground.

NEC does a good job of predicting the far field pattern over a flat homogenous earth. I imagine that if the overal physical size represented by the problem gets too large that numerical precision errors will creep in but I don't think that's problem for the scenerio's being discussed on this thread. The real world is often more complex than the NEC model but when used appropriately, NEC does a good job of predicting the far field radiation pattern of antenna systems.

> And I confused or what?

We all are probably :-) Certainly the semantics of what constitutes near and far effects varies with industry. For example, a radar system designer considers the far field pattern to be what NEC predicts (including cross polarization effects). The point to point microwave system engineering point of view is often to consider the interference arising from ground reflection as a propagation effect instead of an antenna system property.

bart
wb6hqk

1838. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A086D64.9A8871E6@uci.edu>
Source record: 176931

RanHefner wrote:
>
> In article <3A084F75.7BE8FC27@uci.edu>,
> Jim Kelley <jwkelley@uci.edu> wrote:
>
> > To paraphrase Ed McMahon, you're incorrect sir !! That's not the way
> it
> > works at all. It's insurance on deposits. You don't get more than
> 100%
> > on your dollar. Sorry, but nice try.
> >
> > Are you a commie by any chance there, Ran? ;-)
> >
>
> Well you are incorrect on both accounts. FDIC and FSLIC insure
> deposits up to a fixed maximum dollar amount. If you put more than
> that amount in your account, you stand a change of losing all over the
> max.

You seem to have a slight skip in the old record groove there, Ran.
What was this supposed to mean?

"No, they did not get money that belonged to them. That is like saying
if you insure your car for $5,000 and you have an accident that causes
$10,000 worth of damage, you would hold the insurance company for the
extra five grand! HEHEHE RIGHT! Talk about "fuzzy math"!"

It appears to be an assertion of how "the scoundrels" were able to
recoup more than the amount they had on deposit. Such an idea is a
fantasy.

1839. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29956-3A086DF3-15@storefull-114.iap.bryant.webtv.net>
Source record: 176932

My internet connection has been out for a day. Several postings I`d written are obviated, Here is one which may still be relavent.

Ed Hare wrote:
"With FF = 2D^2 / lambda, you would have to be 68400 wavelengths away to be in the far field to make accurate far field measurements."

I wasn`t familiar with that formula, but found a similar formula in Lenkurt Electric literature for the divide suggested for far field / near field from a microwave reflector:
d = 10 a^2 / pi lambda
Since we know the value of pi this can be stated as: d = 3.18 a^2 / lambda.

If I pick a as 3 feet for my 3 GHz which was a little under 3 feet long, for grins, and plug it in the formula, (the lambda is 0.333 feet), I get about 86 feet. I think Ed`s 22,777 feet is excessive.

Best regards, Richard Harrison, KB5WZI

1840. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A0870AA.6BCFA9BF@uci.edu>
Source record: 176933

Richard Clark wrote:
> Hi Jim,
>
> Sour grapes? Its a matter of record.

Yes, it is. As I said, there were no Bushs involved in the Savings and Loans failures in California.

> Me hold perpetrators harmless?
> That's a stretch to exonerate the Bushii.

The people who benefitted from the S&L failures were those people who defaulted on their loans. They got out of a bad investment free of charge.

> A Pox on all their houses.

Does it help to have a target of blame for ones anger at the world or lot in life?

1841. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <5777-3A087509-79@storefull-118.iap.bryant.webtv.net>
Source record: 176934

All this started when someone said that a 3GHz rhombic at 60 feet above earth would not have an 11 db gain as it would in free space. I had predicted it would.

If I hang a dish specified as having 30 db gain in place of my rhombic, for my purposes it has 30 db gain. The fact that at the path grazing point Fresnel zones may add or subtract from the path db accounting, most microwave people would consider as a path development and no reflection on the dish`s gain figure.

I think it`s rational to think what happens out on the path is a path condition, not an antenna condition.

Best regards, Richard Harrison, KB5WZI

1842. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8u9t8n$2uk$1@bob.news.rcn.net>
Source record: 176935

"'Doc" <w5lz@oio.net> wrote in message news:3A08080B.15388F39@oio.net...
>
>
> Peter Bertini,
> I dug out the Rohn spec book. The eave braced tower
> is considered a 'non-guyed' tower. I'll admit the spec-
> book is a bit old, but I doubt if they would change their
> minds...
> 'Doc

Hello 'Doc...

I think the original wording was "Self Supporting", not 'non-guyed'.

73

Pete

1843. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u9utm$7pl$1@nnrp1.deja.com>
Source record: 176936

In article <3A0870AA.6BCFA9BF@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:
>
> The people who benefitted from the S&L failures were those people who
> defaulted on their loans. They got out of a bad investment free of
> charge.
>

You are displaying you lack of understanding of the S&L failures. Many
people who had savings and investments in the S&L's would have lost
their money of the country had not bailed them out.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1844. NEW HARDLINE FOR SALE CHEAP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001107170457.21110.00000193@ng-ff1.aol.com>
Source record: 176937

The following Andrew cable is available as of 06 November :

Length Type Condition Quantity Comments Price

250' HJ7-50a used 2 pieces air dielectric make offer
160' LDF7-50a NEW 1 piece foam " " $2/ft.
130' LDF7-50a NEW 1 piece foam " " " "
100' LDF7-50a NEW 5 pieces foam " " " "

100' EW-56 used 2 pieces waveguide, 6 gHz $1/ft.

Also, hundreds of waveguide hangers for EW-56 are available at $.50 each. **Note : These hangers also fit LDF6-50A cable.**

Currently, a few connectors are available for the HJ7 and the waveguide, at extra cost.

used for: PN condition Quantity Description Price

1+5/8 87S used 4 pieces 7/8" EIA flange $50 each
1+5/8 87R used 6 pieces 1+5/8" EIA flange 25 each
1+5/8 87NT used 4 pieces N-F tunable 2.3gHz 75 each
EIA 2261A used 6 pieces N-F to 1+5/8 EIA flange 25 each

EW-56 256BET used 19 pieces waveguide connectors
EW-56 156BZ alternate PN
EW-56 203222 alternate PN
Note : waveguide transitions have WR229 flanges.

*All items subject to prior sale

1845. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a3869ad.1122824636@news.seanet.com>
Source record: 176938

On Tue, 07 Nov 2000 13:14:18 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Richard Clark wrote:
>> Hi Jim,
>>
>> Sour grapes? Its a matter of record.
>
>Yes, it is. As I said, there were no Bushs involved in the Savings and
>Loans failures in California.

680 million lost was lost in one bank alone in Texas (not California)
- Bush's fingerprints are all over that. We may have been talking at
cross purposes.

>
>> Me hold perpetrators harmless?
>> That's a stretch to exonerate the Bushii.
>
>The people who benefitted from the S&L failures were those people who
>defaulted on their loans. They got out of a bad investment free of
>charge.

I've no doubt of this, and to date absolutely no one has been brought
before the bar of justice (insofar as that Texas S&L that Bush senior
snuffed any investigation for - for which Jeb worked).

The folks that lent the money (Jeb and associates) and those that took
it (Jeb and associates' friends) walked away free. The rest of us
paid for those losses with the investigations scotched. A cozy deal
in any state.

>
>> A Pox on all their houses.
>
>Does it help to have a target of blame for ones anger at the world or
>lot in life?

That's what makes races of elections. ;-)

73's
Richard Clark, KB7QHC

1846. Re: TX to Duplexer cable, Adverse cable length? Advice?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A0877C3.EA3DEFE3@nettally.com>
Source record: 176939

Thanks Bart;
I will try the 1/4 wave at RX freq and see what happens. The duplexer manufacturer recommended the cable be a multiple of 1/4 wave so I will defer to their experience on that issue and make a trial with that as well. Unfortunately, the station is not too well metered so it is not possible to see limiter or RSSI indications. The duplexers are Vari-Notch type and are generally good performers. Unfortunately as you noted, all these things tend to interact and we are troubleshooting "in field". Likely I will recommend the whole mess get looked at in the lab to better understand the problem. So far we are having problems even into a good dummy load, the antenna problems and site noise are another issue altogether!

Bart Rowlett wrote:

> Joe Leikhim wrote:
> >
> > I have an application where some low-band (47 MHz) repeaters are being
> > used with TX-RX duplexers (2 MHz T-R split). Apparently the solid state
> > PA's in the repeaters are not at all happy with the inductive load of
> > the duplexers. Indeed the repeater manufacturer has provided a Z-Matcher
> > in an attempt to fix the problem, and their rep has cut the cable to an
> > arbitrary length that worked (for a time).
>
> Has the Zmatcher been adjusted for minimum reflected power back into the
> transmitter? If so, the cable length shouldn't matter as long as the
> transmitter see's the 50 ohm load it was designed for at the transmitter
> frequency.
>
> > The symptom is desense of the
> > receiver due to TX noise. Cabling and shielding and other aspects of the
> > repeaters are fine.
>
> Severe mismatch of the transmitter output (at the Tx frequency) can
> result in increased intermodulation distortion but is not likely to
> significantly increase the wideband (or spot) noise at the receive
> frequency. Just to be sure, add approximately a quarter wavelength (at
> Rx frequency) of transmission line between the transmitter and
> Zmatcher. This should have no effect at the transmitter frequency where
> the load impedance is 50 ohms. The impedance seen by the transmitter at
> the receive frequency corresponds to a nearly perfect mismatch and will
> therefore be almost purely reactive at an arbitrary phase angle. Adding
> a quarter wavelength of transmission line will invert the reactance
> (half turn around the Smith chart) and can significantly alter the noise
> developed at the receive frequency by the transmitter.
>

> > Normally I would spec an isolator panel in such a rare situation, but it
> > appears that these are a rare commodity in this frequency range, very
> > expensive and of questionable performance.
>
> Does your duplexer have a notch filter on the transmit side tuned to the
> receive frequency? If so, it may need more careful tuning, especially
> after the feedline change suggested above. If not, you probably should
> add one.
>
> > TX-RX's troubleshooting guide suggests that "adverse cable length" is a
> > possible contributor to the problem.
>
> The idea of course is to maximize the coupling from the transmitter to
> the antenna at the transmit frequency while minimizing the coupling
> between the transmitter and receiver, at both the transmit and receive
> frequency. Transmission line lengths can have a dramatic effect
> depending on the design of the transmitter and duplexer.
>
> > I have been given conflicting advice by sources who say "use an odd
> > multiple of 1/4 wavelength" or "use an odd multiple of 1/2
> > wavelength".
>
> Unfortunately, the uncertainties in the duplexer characteristics make it
> very difficult to know in advance what the optimum cable length should
> be. Make up a couple of high quality patch cables and carefully
> experiment. There is a handfull of variables involved and it's pretty
> easy to get confused. I suggest you draw a schematic of the system and
> keep records of the receive limiter current (or RSSI) with transmitter
> on and off, for the various experimental configurations.
>
> If you don't have a notch cavity for the transmitter, you can try a
> shorted half wave shunt stub tuned to the receive frequency, located
> between the Zmatcher and duplexer. The optimum location for the stub is
> at a place which is high impedance at the receive frequency. The correct
> location depends on duplexer design but would typically be 1/4
> wavelength from the duplexer (I think).
>
> bart
> wb6hqk

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

1847. Re: TX to Duplexer cable, Adverse cable length? Advice?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A0877D1.D02B7AA@nettally.com>
Source record: 176940

Thanks Bart;
I will try the 1/4 wave at RX freq and see what happens. The duplexer manufacturer recommended the cable be an odd multiple of 1/4 wave so I will defer to their experience on that issue and make a trial with that as well. Unfortunately, the station is not too well metered so it is not possible to see limiter or RSSI indications. The duplexers are Vari-Notch type and are generally good performers. Unfortunately as you noted, all these things tend to interact and we are troubleshooting "in field". Likely I will recommend the whole mess get looked at in the lab to better understand the problem. So far we are having problems even into a good dummy load, the antenna problems and site noise are another issue altogether!

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> > used with TX-RX duplexers (2 MHz T-R split). Apparently the solid state
> > PA's in the repeaters are not at all happy with the inductive load of
> > the duplexers. Indeed the repeater manufacturer has provided a Z-Matcher
> > in an attempt to fix the problem, and their rep has cut the cable to an
> > arbitrary length that worked (for a time).
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> transmitter see's the 50 ohm load it was designed for at the transmitter
> frequency.
>
> > The symptom is desense of the
> > receiver due to TX noise. Cabling and shielding and other aspects of the
> > repeaters are fine.
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> result in increased intermodulation distortion but is not likely to
> significantly increase the wideband (or spot) noise at the receive
> frequency. Just to be sure, add approximately a quarter wavelength (at
> Rx frequency) of transmission line between the transmitter and
> Zmatcher. This should have no effect at the transmitter frequency where
> the load impedance is 50 ohms. The impedance seen by the transmitter at
> the receive frequency corresponds to a nearly perfect mismatch and will
> therefore be almost purely reactive at an arbitrary phase angle. Adding
> a quarter wavelength of transmission line will invert the reactance
> (half turn around the Smith chart) and can significantly alter the noise
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>

> > Normally I would spec an isolator panel in such a rare situation, but it
> > appears that these are a rare commodity in this frequency range, very
> > expensive and of questionable performance.
>
> Does your duplexer have a notch filter on the transmit side tuned to the
> receive frequency? If so, it may need more careful tuning, especially
> after the feedline change suggested above. If not, you probably should
> add one.
>
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> > possible contributor to the problem.
>
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> depending on the design of the transmitter and duplexer.
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> > multiple of 1/4 wavelength" or "use an odd multiple of 1/2
> > wavelength".
>
> Unfortunately, the uncertainties in the duplexer characteristics make it
> very difficult to know in advance what the optimum cable length should
> be. Make up a couple of high quality patch cables and carefully
> experiment. There is a handfull of variables involved and it's pretty
> easy to get confused. I suggest you draw a schematic of the system and
> keep records of the receive limiter current (or RSSI) with transmitter
> on and off, for the various experimental configurations.
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> If you don't have a notch cavity for the transmitter, you can try a
> shorted half wave shunt stub tuned to the receive frequency, located
> between the Zmatcher and duplexer. The optimum location for the stub is
> at a place which is high impedance at the receive frequency. The correct
> location depends on duplexer design but would typically be 1/4
> wavelength from the duplexer (I think).
>
> bart
> wb6hqk

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

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i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

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1848. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A08819F.D9769DC2@uci.edu>
Source record: 176941

Richard Clark wrote:
> The folks that lent the money (Jeb and associates) and those that took
> it (Jeb and associates' friends) walked away free. The rest of us
> paid for those losses with the investigations scotched. A cozy deal
> in any state.

That's a crime, if true. Since it wasn't prosecuted, there's at least
some indication that it might not be true.

1849. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A08826D.F2761728@uci.edu>
Source record: 176942

CAM wrote:
>
> Jim Kelley wrote:
> >
> > CAM wrote:
> > > Not my governer - I voted Libertarian.
> >
> > Ah, I stand corrected. So how many governors you got down there in
> > Texas?

> Just one, but he's not mine. I took the governer off my engine. :-)

I didn't vote for the one we've got out here, either. He still claims
to be my governor though. Better watch what I say.

73, ac6xg

1850. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <3a088366.76204128@news.azstarnet.com>
Source record: 176943

On Tue, 07 Nov 2000 12:56:56 -0800, Bart Rowlett <BHRowlett@west.raytheon.com>
wrote:

>
>
>Wes Stewart wrote:
>>
>
>> This thread has progressed while I thought about this, but here goes anyway.

Obviously, I didn't think long enough about this. The issue that was clogging
up my brain was the null that occurs "overhead" when the height above ground is
some multiple of 1/2 wavelength. The depth of the null is most certainly
dependent upon the ground characteristics, but not the number of wavelengths
above ground. To expand further upon my though process and where I went wrong
will just clog up everyone else's brains, so I will just stand corrected and
slink off.

Wes

>>
>> If I understand Richard's position correctly (always a dubious proposition on my
>> part) he believes that increased height above ground causes increased path loss
>> between the antenna and the ground underneath. This in turn reduces the effects
>> of ground reflection upon both the pattern and the mutual impedance between the
>> antenna and its image.
>
>The mutual coupling is dominated by fields which decay much faster
>than the radiation fields. The mutual impedance between an antenna 180
>wl above ground and it's image is almost certainly negligible. The
>effect of the 'image' antenna on the far field radiation pattern is
>profound. As the distance approaches infinity, the difference in
>field strength between the direct, and reflected (image) field becomes
>negligible. The phase difference between the direct and reflected
>field will change rapidly with elevation angle. Near the horizon, the
>relative phase shift will rotate 360 degrees for every 0.16 degree
>change in elevation angle.
>
>> On the other hand, we have Ed's Eznec plot that clearly shows a pattern with
>> myriad nulls that can only be due to equal, or nearly equal, amplitude and
>> oppositely phased interference "signals."
>
>I don't know which ground model Ed used but for low elevation angles
>at UHF frequencies it doesn't matter much since the reflection
>coefficient will be very close to -1 in the theoretical case of a

>perfectly flat ground. As the elevation angle increases, partial
>absorption of the reflected wave will result in shallower nulls and
>slightly less peaking but the overall pattern will remain similar.
>Real world conditions are often very close to the the theoretical
>model for low elevation angles but surface roughness alters the
>picture significantly for higher angles.
>
>[snip]
>
>> So I did a little modeling experiment as follows:
>>
>> First I modeled a self-resonant dipole at 299.793 MHz (the Eznec example dipole
>> tweaked in length for zero reactance) at some height above a perfect ground.
>> Then I modeled a pair of the same dipoles spaced twice the height distance apart
>> in free space. The second dipole was fed with the same current but 180 degrees
>> phase difference. This in effect is the "image" antenna that is used in the
>> perfect ground analogy as described in paragraph 4 of Terman's chapter on
>> antennas and elsewhere. It should be noted that Terman qualifies by saying,
>> "When the antenna is near the ground." What he considers "near" to be is
>> unclear.
>>
>> What I saw was that the patterns were identical except for the fact that the
>> lower hemisphere was missing over the perfect ground and the amplitudes differed
>> by three dB. The pattern peaks and nulls all occured at the same places
>> regardless of the separation.
>
>As the separation between the two radiators increases, so should the
>number of peaks and nulls. There should always be a null located along
>the perpendicular bisector (horizon) if the antennas are fed out of
>phase.
>
>> What this suggests to me is that the modeling program, at least for pattern
>> calculation, treats the perfect ground as a perfect image antenna with the same
>> impedance and fed with the same power, regardless of the separation between the
>> "two" antennas. "Near" or "far" seem to have no bearing on the results.
>
>That's precisely what the 'perfect' ground model does. The 'real'
>ground model computes the complex reflection coefficient based on the
>angle of reflection and the specified material parameters. For
>horizontally polarized antennas, the low angle pattern will
>substantially independent of the ground parameters but you should see
>some filling in of the high angle nulls when the 'real' ground model
>is used.
>
>> Seems to me that the model is wrong unless the antenna is "near" ground.
>
>NEC does a good job of predicting the far field pattern over a flat
>homogenous earth. I imagine that if the overal physical size
>represented by the problem gets too large that numerical precision
>errors will creep in but I don't think that's problem for the

>scenerio's being discussed on this thread. The real world is often
>more complex than the NEC model but when used appropriately, NEC does
>a good job of predicting the far field radiation pattern of antenna
>systems.
>
>> And I confused or what?
>
>We all are probably :-) Certainly the semantics of what constitutes
>near and far effects varies with industry. For example, a radar
>system designer considers the far field pattern to be what NEC
>predicts (including cross polarization effects). The point to point
>microwave system engineering point of view is often to consider the
>interference arising from ground reflection as a propagation effect
>instead of an antenna system property.
>
>bart
>wb6hqk

1851. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <tv0h0tcnj8ad14c4j9rdd9hmakfqbidmc9@4ax.com>
Source record: 176944

Yes, I know a duplexer would not work. I was just giving that as an example of the functionality I was looking for. I really do want to be able to use both transceivers at essentially (but not necessarily exactly) the same time. I don't have a speaker on the packet radio, and I want it to be listening to the DX packet cluster frequency all the time. At the same time, I want to be able to pick up the mike on the VHF voice radio and transmit if someone is calling me. You have given me food for thought. Perhaps some kind of RF sensing switch on each radio mated to an antenna relay would do the job. The trick would be to keep the packet radio from over-riding the voice radio when I am talking on it. And not letting either radio see an open circuit at any time. Sounds like a good project for this winter. Or maybe I'll just take down the 6-meter beam on the tower and install a 2-meter beam in its place. What the heck. :-)

Dick Hughes - W6CCD

On Tue, 07 Nov 2000 20:28:20 GMT, tom_bruhns@agilent.com wrote:

>I'll reiterate something Dave M. replied: duplexers are for all
>practical purposes fixed-tuned, and necessarily large to get very high
>Q.
>
>However, you mention manual switching, so I assume that you really
>DON'T need to use both at the same time. If that's the case, perhaps
>there's some hope. One possibility is an automatic switch...perhaps
>just controlled by the power switch on one rig. Turn off the rig, and
>the antenna feed switches to the other rig. There are relays which have
>decent isolation at 150MHz, and you might even arrange to switch the
>"off" rig into a 50-ohm load, just to keep it happy in case it was
>turned on to transmit. I assume that you can figure out how to
>implement this idea.
>
>You might also want to be able to monitor both radios at once, so long
>as neither was transmitting. If that's the case, there's maybe
>something that could be done with a PIN-diode-switched preamp that can
>feed two outputs for receive...but that all gets more complicated (and
>seems pretty disruptive for packet communications!). Let us know just
>what you have in mind operationally.
>
>Hope this thought helps...
>
>Cheers,
>Tom
>

>In article <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>,
> Dick Hughes <rhughes33@cableone.net> wrote:
>> I have two, VHF radios. One for voice and one for packet cluster. I
>> would like them to be able to share the same 2-meter antenna without
>> manual switching. A 2-meter/2-meter duplexer would be nice, but I
>> have never seen such an animal. Any ideas?
>>
>> Dick Hughes - W6CCD
>>

1852. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ua2flarl1@nnrp1.deja.com>
Source record: 176945

In article <3A08819F.D9769DC2@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:
>
> That's a crime, if true. Since it wasn't prosecuted, there's at least
> some indication that it might not be true.
>

It wasn't prosecuted because George H.W. Bush, Sr. was president!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1853. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001107181716.15503.00000299@ng-mj1.aol.com>
Source record: 176946

<<And, if it matters, I'm willing to spend the big bucks for what will do the job.>>

I have an ICOM 706 MK II. I LOVE the radio...
In your circumstances, I might suggest the Yaseu FT 100 w/ the ATAS antenna system. If I understand it right, they are integrated together & you tune the small screwdriver w/ the radio(maybe automaticly).
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

1854. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001107182904.23806.00000173@ng-cr1.aol.com>
Source record: 176947

>The Hexbeam is an excellent antenna that can stand on its own merits. Why must snake oil marketing techniques be employed?<

My mantra, exactly, and it does sound like Mike is trimming things up a bit. The inaccurate performance of the average radio's S-meter and the anecdotal reports that result are partially responsible. Mike seems to be more careful now about identifying what is anecdotal and what is not.

Rick K1BQT

1855. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A089173.20A42085@uci.edu>
Source record: 176948

RanHefner wrote:
>
> In article <3A08819F.D9769DC2@uci.edu>,
> Jim Kelley <jwkelley@uci.edu> wrote:
> >
> > That's a crime, if true. Since it wasn't prosecuted, there's at least
> > some indication that it might not be true.

> It wasn't prosecuted because George H.W. Bush, Sr. was president!

Proof please. Thanks.

1856. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A0891E0.B8B8467B@uci.edu>
Source record: 176949

RanHefner wrote:
>
> In article <3A0870AA.6BCFA9BF@uci.edu>,
> Jim Kelley <jwkelley@uci.edu> wrote:
> >
> > The people who benefitted from the S&L failures were those people who
> > defaulted on their loans. They got out of a bad investment free of
> > charge.

> You are displaying you lack of understanding of the S&L failures. Many
> people who had savings and investments in the S&L's would have lost
> their money of the country had not bailed them out.

What we have here is a failure to communicate, and you are displaying a
lack of cognitive skill.

1857. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0896D8.1813@bellsouth.net>
Source record: 176950

Hey Cecil,

See below. We agree on something! LOL! Good post!

Jerry
K4KWH
>
> Yep, that just means the 75m Hamstick is a lousy receiving antenna. :-)
> --
> http://www.mindspring.com/~w6rca

1858. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0899AB.7EFD@bellsouth.net>
Source record: 176951

David,

It really depends on what you want. The hard, fast rule is that you can have Pretty, or you can have Performance. The big, ugly antennas DO work better. Personally, I don't think a screwdriver would look bad on a Honda. And, of course, if you are willing to sacrifice signal for looks, then go for something "skinny". True, a hamstick will work, but how WELL? Comparing the difference between a hamstick, a Texas Bug-catcher, and a screwdriver is like the difference in a "real" antenna and a dummy load! (my opinion, but based on real tests) If you do some field tests, and you are as serious about HF mobile as I am, the dif-ference will make you sick! I know some people won't agree, but I can prove why the hamstick is not a good choice, and I'll only allude to it briefly. Have you ever wondered why a hamstick needs no impedance match at the feedpoint? Think about it.

Hope this helps

73

Jerry
K4KWH
David wrote:
>
> Hello folks....
>
> Last time I operated an HF rig mobile was back in the late '70's with an
> FT-101e sitting in the backseat of my Monte Carlo using a 20mtr Hustler on
> the bumper. I was very popular with the County Hunters back then as I drove
> through the hills of eastern Kentucky.
>
> Now, I have a fairly small vehicle (Honda Accord coupe) but I'm bound and
> determined to put an HF rig in it (probably the Icom 706mk2g). I spend
> several hours a day driving around and would love to have a rig to listen
> to. I've been looking at all the choices for HF antennas and can't get a
> grip on what will work the best for me. Obviously the big screwdriver ones
> will perform well, but can you picture one of these on my Accord? I can't.
> What do you recommend? An antenna that will work *and* look ok on my car?
> And, if it matters, I'm willing to spend the big bucks for what will do the
> job.
>
> Thanks for your advice,
> David, K4ZZR
>
> p.s. Just fyi, I've got a 1 1/4" ball hitch on the back of the car if that

> will help.

1859. Re: Self Supporting Rohn 25G/Attn Doc!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A089B02.2189@bellsouth.net>
Source record: 176952

Doc,

This thread brings up a question for me. My 25G is 60', non-guyed, 5 feet in the ground, concrete, corner braced at 2 points to the house. It sits in a "L" shaped part of the house and braced on 2 sides. At 50', before I extended it, it stood thru Hurricane Hugo in '89. Do I have safety issues here? (Winds in that Hurricane were 96+ gusts).

TNX,

Jerry
K4KWH

'Doc wrote:
>
> Peter Bertini,
> I dug out the Rohn spec book. The eave braced tower
> is considered a 'non-guyed' tower. I'll admit the spec-
> book is a bit old, but I doubt if they would change their
> minds...
> 'Doc

1860. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8ua7fpkri1@slb7.atl.mindspring.net>
Source record: 176953

CAM wrote in message <3A08597D.AEBAFF65@bigfoot.com>...
>BillN6VLR wrote:
>> In principle I agree 100% with Paul and Peter.
>
>How about Matthew, Mark, Luke, and John? :-)
>--
>http://www.mindspring.com/~w6rca

Someone is being sexist here! Why was Mary not included with Peter and Paul? :o)

Dean Craft -- W4IHK

1861. Re: W4JLE's Antisemitic Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Woods_Glen
Message-ID: <3A08A33F.DE241C05@attglobal.net>
Source record: 176954

Thanks Rick,

Wayne
N3TNS

email wgvideo at attglobal dot net

1862. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8ua9bn$d1r$1@slb6.atl.mindspring.net>
Source record: 176955

"Fractenna" <fractenna@aol.com> wrote in message
news:20001107120802.20512.00000221@ng-cg1.aol.com...
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001107060412.15485.00000159@ng-mj1.aol.com...
> >> >Mark,
> >> >How long have you been subscribed?? I have been watching with interest
> >the
> >> >parry and thrust of the Fractenna honcho and the rest of the thinking
> >group,
> >> >and its my opinion that Mr Cohen has been deliberately evasive in
order
> >to
> >> >stir up interest in his airy fairy idea, maybe you should look back
and
> >read
> >> >the postings, and then make you comment.
> >> >John McLean VK2KCE
> >> >
> >> >> > Congratulations you turkeys. You've taken someone whose done
> >something
> >> >positive
> >> >> > and through jeaolusy and hatred changed his life. You are to be
> >> >pitied.
> >> >> > >
> >> >> > Nathan Cohen has his position terminated on 1 Nov.
> >> >> >
> >> >> > Looks like the neo-Luddites won this round. It doesn't come out
of
> >a
> >> >> > box ready to run, so kill it. So much for experimentation.
> >> >> >
> >> >> > I subscribed to this NG in hopes of seeing information on
advances
> >> >> > in antennas, because Hams are historically famous for thinking
> >outside
> >> >> > the box.
> >> >> >
> >> >> > Instead I find a bunch of people who give rednecks a bad name.
> >> >> >
> >> >> > Bye.
> >> >> >
> >> >> > Mark L. Fergerson

> >> >>
> >> Hi Harry--
> >>
> >> On the contrary: I am unwilling to answer fractal antenna questions
HERE
> >by
> >> design. However, as I have stated AT LEAST 12 times in the last year, I
am
> >> happy to answer questions on the fractal antenna reflector:
> >>
> >> fractalantenna-subscribe@egroups.com.
> >> Thus I AM accessible on the web.
> >>
> >> The extraordinary abuse and hate filled atmosphere create here by a few
> >> individuals does not make it conducive to discuss anything creative or
> >> innovative.
> >>
> >> Harry, perhaps sincerely, you have a better suggestion which:
> >>
> >> 1) makes a scientist accessible;
> >> 2) prevents this abuse?
> >>
> >> Cordially,
> >>
> >> NC
> >If you are unwilling to answer questions HERE then don't bring the
subject
> >up HERE. Bringing up a subject you are unwilling to discuss is just dumb
> >and literally invites abuse. Now you will probably give the reply, "How
is
> >it my fault that others choose to insult me? Here is another case of the
> >innocent being blamed for others actions." That is BS and you know it,
and
> >if you don't you need to grow up and figure out how the world works
before
> >you interact with it any further or you are in for a lot of heart ache..
>
> From 1996-1999 I did just that. I answered questions on this NG. But I see
no
> reason to continue to allow ANYONE to hold me up as a target. It is beyond
> human decency, as readily seen in recent weeks.

You hold your self up as a target by making statements in this newsgroup and
then refusing to discuss them here any further. If you don't want to
discuss a topic here then don't bring it up as a subject for discussion.

>
> No sir; I see no problem whatsoever making relevant info available on this
> forum, and guiding to another link to assure that objective and relevant
> discussions may continue.

It ceases to be relevant info if you are unwilling to follow up on topics you bring up. On your reflector it is relevant because you discuss the topic there. Here it is irrelevant because you refuse to discuss the topic.
>
> Thus although I am aware of your opinion and respect it, I cannot take your
> suggestion, as I have historically found it untenable.

untenable adjective
not able to be supported or defended against criticism, or no longer able to continue

Are you saying you find that you have to make postings here that you refuse to back up. That you have tried and found that you were unable to continue not making them? That would be a compulsive disorder and should be checked out.
I highly doubt that you received criticism for not posting things you had no intentions of clarifying, elaborating on or discussing.
>
> This concludes my discussion on my availability on the internet.

The idea isn't that you are unavailable on the internet for open discussion of the fractal topic. The point is that you aren't available here where you keep bringing the subject up and then dropping it like a hot rock and then getting po'd when others comment on it or have incorrect assumptions.

A customer is talking to two produce salesmen at a farmers market and one says, "My carrots are better than his." The customer then asks, "What makes yours better?" Do you think the customer is going to go along with, "I'll only discuss that at my store"? Heck no. The customer is going to walk over to the other salesman who is willing to openly discuss the merits of his produce. Some may later check out the guy at the store and ask him there why he thinks his are better and may find out that he was in fact correct. Most, though, won't bother and will only deal with the other salesman in the future labeling the other man as a nut. Especially if every week he is there claiming to have improved the rutabegga or cumquat but refusing to give any details to support his claims. Add to that a little weasel faced guy on the back of the truck yelling at customers that this guy is a professional farmer and they are only customers and wouldn't know a good rhubarb if they saw it because they don't have credentials and then started cursing and muttering to himself.....
Just some "food" for thought. I know, bad pun but I like it.
>
> Cordially,
>
> NC

1863. Re: Self Supporting Rohn 25G/Attn Doc!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8uaf4apaa1@bob.news.rcn.net>
Source record: 176956

"Joe Schlatter" <joe@schlatter.org> wrote in message > I'll dig out my Rohn
>
> I had a 40' 25G with NO concrete -- it was on a base staked into the
> ground -- eave bracket at 30' and it was rated at a lot of MPH with the
> 10 sq ft of antennas I had on it.
>
> --
> Regards,
> Joe Schlatter
>
> Respond to: joe@schlatter.org

I can believe that. With a 40' tower firmly attached to the house at the
30' mark, there would be very little leverage applied against the tower
base.

Pete

1864. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8uaj8m$mt6$1@news.gate.net>
Source record: 176957

First of all, thanks for all of the replies (both public and private).

Ok, let's assume for a minute that I've been convinced that a screwdriver would be a better. Which one is the "best" (in your opinion) and would I be able to mount it to the ball hitch on my Accord? How long are those things anyway? I'd be primarily operating on 10, 15 and 20 and occasionally on 40 and 2 mtrs.

Thanks again,
David
K4ZZR

1865. Re: 10 Meter beam antennas!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Mike N4DIA <michaelj@networktel.net>
Message-ID: <t0hmrvcche5n12@corp.supernews.com>
Source record: 176958
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Dino,

These were GREAT Antennas! (Moonraker) Switchable Vet / Horz I put one
together for my father back in the 70's when he was into CB. I then
modified it later when he got his ham ticket and it had fantastic gain and
front to back rejection on 10 meters!

73's
Mike
N4DIA

"Dino" <dinod@deltanet.com> wrote in message
news:rWVN5.174437$g6.78218789@news2.rdc2.tx.home.com...
> Do you remember the Antenna Specialist PDL-2 and Moonraker IV beams?
>
> Well they have been discontinued! BUT, Antenna Specialist has approx
> 200 each of these left! They are also selling DIRECT!
>
> PDL-2 = $85.88
> Moonraker IV = $169.00
>
> Shipping is $20.00 and they will charge you your local tax.
>
>
> These antennas were designed for the 11 meter band which makes them
> modifiable for the 10 meter band.
>
> For the Moonraker IV, you would shorten each of the elements by cutting
> the bottoms off and re-inserting them; shortening the fiberglass sections
> and wire loop; re-spacing the elements on the boom; re-tuning the gamma
> match section.
>
> I DO NOT KNOW THE MEASUREMENTS! (Wish I did) I'm hoping that Roy
> can (has?) model this antenna and will publish the info!
>
> The PDL-2 modifications should be similar.
>
> This is a GREAT opportunity to jump on well built and designed antennas
> that are inexpensive and easy to turn!
>
> Antennas Specialist says, "When they are gone...they are gone!"
>
> Dino
>

1866. Re: Atlanta area transmitter fox hunt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8uan66tmu1@slb0.atl.mindspring.net>
Source record: 176959

Penn McClatchey <pmmnospame@saf.com> wrote in message
news:3A0779E7.FCD15010@saf.com...
> The Atlanta Radio Club is hosting a FOX HUNT this Saturday,
> November 11th!! This hunt will be conducted at the Kennesaw
> Mountain National Battlefield and the transmitter will be hidden
> somewhere in the park. All are welcome. We will meet at 10:15 AM
> at the visitors center at Kennesaw. For details see our website
> at http://www.saf.com
>
> The park is about 3 miles long and the hunt will be on foot.
> A map of the park can be downloaded at http://www.nps.gov/kemo/
>

Sounds fun! Where will the fox be?

73, Corry

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Someday this is gonna work." -K4DOH, before every fox hunt.

1867. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4364-3A08E835-75@storefull-113.iap.bryant.webtv.net>
Source record: 176960

My contention is that the gain and directivity of my 3 GHz rhombic at 60 feet can be considered as an antenna in free space as microwave antennas normally are. At that elevation over smooth ground, the horizon is about 11 miles away. The "near field" extends only a small percentage of that distance.

I can measure the gain and directivity outside the near field and inside the path grazing distance. I will be susceptible to the ground reflection at my measurement location, but can screen it out. This is practical because I don`t have to move around my rhombic to measure, I can rotate the tiny rhombic. Or, I may choose some other technique to get rid of the reflected ray.

But, measurement wasn`t my initial goal. I already knew what to expect from the rhombic if it were reasonably clear of the ground. That was specified by the designer. I advised the questioner that were he to build the 10-meter rhombic, the 11 db gain figure wouldn`t be accurate because of the influence of the ground. The same would be true of a yagi or most other antennas.

Another questioner facetiously asked how he could fit a rhombic in a small space, and I responded he might scale it down by a factor of 100 and operate it at 3 GHz. But by not reducing the height, he should get the advertized 11 db gain.

At so many wavelengths above ground, the current and impedance into the rhombic will be very nearly the same as if the antenna were at any greater altitude, even way out in space.

What happens between a direct ray and a reflected ray at a point 11 miles away has nothing to do with the antenna`s characteristics, but with the characteristics of the path at the reflection point.

What signal a receiver gets from the combined contributions of the direct and reflected signals depends on the difference in distances each has traveled and conditions at the reflection point where the signal grazes the earth.

There are various opinions on the extent of the near field. There is no hard and fast definition because it ends where you decide it is no longer a problem to you.

Best regards, Richard Harrison, KB5WZI

1868. Re: Bush & U.S. Constitution (dunno what this has to do with skyhooks, but ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <6bPN5.378$Vf7.2667@newsfeed.slurp.net>
Source record: 176991

Hi, Richard:

You forgot to blame the Bushes For TEFRA 1986, which, in one fell swoop, dropped the bottom out of the RE market and put Gramma's S&L (the one with no deposit insurance) in sole possession of acres of unsaleable RE. As I recall, same thing happened to the J's. One thing about foreigners owning the Empire State Building: when things go west, they can't pack up and take it home with them.

73, Dave, K3BHJ

1869. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001107060412.15485.00000159@ng-mj1.aol.com>
Source record: 176992

>Mark,
>How long have you been subscribed?? I have been watching with interest the
>parry and thrust of the Fractenna honcho and the rest of the thinking group,
>and its my opinion that Mr Cohen has been deliberately evasive in order to
>stir up interest in his airy fairy idea, maybe you should look back and read
>the postings, and then make you comment.
>John McLean VK2KCE
>
>> > > Congratulations you turkeys. You've taken someone whose done something
>positive
>> > > and through jeaolusy and hatred changed his life. You are to be
>pitied.
>> > >
>> > > Nathan Cohen has his position terminated on 1 Nov.
>> >
>> > Looks like the neo-Luddites won this round. It doesn't come out of a
>> > box ready to run, so kill it. So much for experimentation.
>> >
>> > I subscribed to this NG in hopes of seeing information on advances
>> > in antennas, because Hams are historically famous for thinking outside
>> > the box.
>> >
>> > Instead I find a bunch of people who give rednecks a bad name.
>> >
>> > Bye.
>> >
>> > Mark L. Fergerson
>>
Hi Harry--

On the contrary: I am unwilling to answer fractal antenna questions HERE by design. However, as I have stated AT LEAST 12 times in the last year, I am happy to answer questions on the fractal antenna reflector:

fractalantenna-subscribe@egroups.com.
Thus I AM accessible on the web.

The extraordinary abuse and hate filled atmosphere create here by a few individuals does not make it conducive to discuss anything creative or innovative.

Harry, perhaps sincerely, you have a better suggestion which:

1) makes a scientist accessible;
2) prevents this abuse?

Cordially,

NC

1870. kenwood ma-5 hf mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Luis Fonseca <lfonseca@sonae.pt>
Message-ID: <973594272.271963@tubarao.ip.pt>
Source record: 176993

Hello
You can help me ? I have that antenna, and it was calibrate with the alinco dx70th on my land rover jeep. I put the antenna in the same car without no changes but worked with a kenwood ts50 and i have a lot reflections wave, anyone can tell me why ? Wath i have to do ?

thanks,
ham regards CT1FHL

1871. Re: kenwood ma-5 hf mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A07F9B9.900A1E40@oio.net>
Source record: 176994

Luis Fonseca wrote:
>
> Hello
> You can help me ? I have that antenna, and it was calibrate with the alinco
> dx70th on my land rover jeep. I put the antenna in the same car without no
> changes but worked with a kenwood ts50 and i have a lot reflections wave,
> anyone can tell me why ? Wath i have to do ?
>
> thanks,
> ham regards CT1FHL

Luis,
That isn't unusual with any mobile antenna. Just
re-tune the antenna.
'Doc

1872. Re: Atlanta area transmitter fox hunt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8u8ues$jj6$1@slb0.atl.mindspring.net>
Source record: 176995

Hi Penn,

Unfortunately it's the same weekend as the Montgomery Area Radio Club's Hamfest (http://jschool.troyst.edu/~w4ap/), otherwise I suspect a lot of us here in Birmingham would be headed your way. But please let us of know of future stuff.

By the way, tried to go to your website, but the link you gave goes to the Southern Aluminum Finishing Company. A quick inet search shows you have to add the /arc after it, as in:
http://www.saf.com/arc/

Thanks and 73,

Robert, KG4FGN

"Penn McClatchey" <pmmnospame@saf.com> wrote in message news:3A0779E7.FCD15010@saf.com...
> The Atlanta Radio Club is hosting a FOX HUNT this Saturday,
> November 11th!! This hunt will be conducted at the Kennesaw
> Mountain National Battlefield and the transmitter will be hidden
> somewhere in the park. All are welcome. We will meet at 10:15 AM
> at the visitors center at Kennesaw. For details see our website
> at http://www.saf.com
>
> The park is about 3 miles long and the hunt will be on foot.
> A map of the park can be downloaded at http://www.nps.gov/kemo/
>
> 73,
>
> Penn
> K4PE
> --
> Buy aluminum sheet and extrusions on-line at http://www.saf.com

1873. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A08080B.15388F39@oio.net>
Source record: 176996

Peter Bertini,
I dug out the Rohn spec book. The eave braced tower
is considered a 'non-guyed' tower. I'll admit the spec-
book is a bit old, but I doubt if they would change their
minds...
'Doc

1874. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <8u948d$7ha$1@nnrp2.phx.gblx.net>
Source record: 176997

Ed Hare, W1RFI <w1rfi@arrl.net> wrote (a day or so ago):

> ...
> The boundary between near and far field areas near an antenna is a boundary
> for the radiating portion of the antenna fields. In essence, in the
> radiating near field area, one is affected more by one portion of the
> antenna than others. Thus the field present at that point is not determined
> equally by all of the radiation from the different parts of the antennna.
> In the radiating near field, one can even have cases where the E or H field
> becomes smaller as one gets closer to the antenna. The boundary is also
> "fuzzy," meaning that in all cases, as one gets farther and farther from the
> antenna, one gets closer and closer to the far-field relationship between
> the different radiating portions of the antenna. At what point is that
> relationship "close enough?" That is the near-field/far-field boundary.
> That point is generally taken to be 2D^2/lambda, but that is very much
> application dependent. If one is trying to measure the very deep null that
> is off the back or side of some beams, one might have to be much farther
> away to have the deviation from true far-field conditions not affect the
> measurement, just as one example.
>

The boundary between the radiating near-field and radiating far-field
is that point where the *radial* component of the E and H fields becomes
neglible. The 2D^2/lambda criterion specifies that point to be where
the phase difference between waves arriving from opposite sides of the
D-sized antenna aperture is 90 degrees. The fact that a radial field
component exists that far from the antenna is due to simple vector
addition of the transverse fields from point sources separated by
the distance D, not any energy storage mechanism. (That energy storage
region defines the reactive near-field).

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

1875. HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8u96t0$1nrm$1@news.gate.net>
Source record: 176998

Hello folks....

Last time I operated an HF rig mobile was back in the late '70's with an FT-101e sitting in the backseat of my Monte Carlo using a 20mtr Hustler on the bumper. I was very popular with the County Hunters back then as I drove through the hills of eastern Kentucky.

Now, I have a fairly small vehicle (Honda Accord coupe) but I'm bound and determined to put an HF rig in it (probably the Icom 706mk2g). I spend several hours a day driving around and would love to have a rig to listen to. I've been looking at all the choices for HF antennas and can't get a grip on what will work the best for me. Obviously the big screwdriver ones will perform well, but can you picture one of these on my Accord? I can't. What do you recommend? An antenna that will work *and* look ok on my car? And, if it matters, I'm willing to spend the big bucks for what will do the job.

Thanks for your advice,
David, K4ZZR

p.s. Just fyi, I've got a 1 1/4" ball hitch on the back of the car if that will help.

1876. Re: TX to Duplexer cable, Adverse cable length? Advice?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3A082195.B041A2DB@wb6hqk.ampr.org>
Source record: 176999

Joe Leikhim wrote:
>
> I have an application where some low-band (47 MHz) repeaters are being
> used with TX-RX duplexers (2 MHz T-R split). Apparently the solid state
> PA's in the repeaters are not at all happy with the inductive load of
> the duplexers. Indeed the repeater manufacturer has provided a Z-Matcher
> in an attempt to fix the problem, and their rep has cut the cable to an
> arbitrary length that worked (for a time).

Has the Zmatcher been adjusted for minimum reflected power back into the transmitter? If so, the cable length shouldn't matter as long as the transmitter see's the 50 ohm load it was designed for at the transmitter frequency.

> The symptom is desense of the
> receiver due to TX noise. Cabling and shielding and other aspects of the
> repeaters are fine.

Severe mismatch of the transmitter output (at the Tx frequency) can result in increased intermodulation distortion but is not likely to significantly increase the wideband (or spot) noise at the receive frequency. Just to be sure, add approximately a quarter wavelength (at Rx frequency) of transmission line between the transmitter and Zmatcher. This should have no effect at the transmitter frequency where the load impedance is 50 ohms. The impedance seen by the transmitter at the receive frequency corresponds to a nearly perfect mismatch and will therefore be almost purely reactive at an arbitrary phase angle. Adding a quarter wavelength of transmission line will invert the reactance (half turn around the Smith chart) and can significantly alter the noise developed at the receive frequency by the transmitter.

> Normally I would spec an isolator panel in such a rare situation, but it
> appears that these are a rare commodity in this frequency range, very
> expensive and of questionable performance.

Does your duplexer have a notch filter on the transmit side tuned to the receive frequency? If so, it may need more careful tuning, especially after the feedline change suggested above. If not, you probably should add one.

> TX-RX's troubleshooting guide suggests that "adverse cable length" is a
> possible contributor to the problem.

The idea of course is to maximize the coupling from the transmitter to the antenna at the transmit frequency while minimizing the coupling between the transmitter and receiver, at both the transmit and receive

frequency. Transmission line lengths can have a dramatic effect depending on the design of the transmitter and duplexer.

> I have been given conflicting advice by sources who say "use an odd
> multiple of 1/4 wavelength" or "use an odd multiple of 1/2
> wavelength".

Unfortunately, the uncertainties in the duplexer characteristics make it very difficult to know in advance what the optimum cable length should be. Make up a couple of high quality patch cables and carefully experiment. There is a handfull of variables involved and it's pretty easy to get confused. I suggest you draw a schematic of the system and keep records of the receive limiter current (or RSSI) with transmitter on and off, for the various experimental configurations.

If you don't have a notch cavity for the transmitter, you can try a shorted half wave shunt stub tuned to the receive frequency, located between the Zmatcher and duplexer. The optimum location for the stub is at a place which is high impedance at the receive frequency. The correct location depends on duplexer design but would typically be 1/4 wavelength from the duplexer (I think).

bart
wb6hqk

1877. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <8nVN5.203$qr.10182@newsread2.prod.itd.earthlink.net>
Source record: 177000

If one did not visit the www.hexbeam.com website and read it himself, one might believe that your statements have some basis in fact. I just left the site and extracted these two quotes from the pages of the Performance, and Supergain sections:

"Present HEX-BEAM users report an average signal improvement of approximately 10dB (2½ S-units) when compared to a dipole at similar height and a F/B ratio of approximately 10-30 dB. "

"In summary, you should expect to experience overall real gains with the HEX-BEAM in the range of 4 dBd (free-space and line-of-sight) to 10 dBd (reflected path) depending upon the installation and propagation conditions. "

Mike has refined the information on gain and front/back ratio several times over the past months, in an attempt to reflect what Hexbeam users are telling him and what he has observed in his testing with the antenna. Anyone who has done extensive antenna experimentation knows that you'll often observe results that can't be explained by what you know about antenna design and modeling. I have neither the inclination nor the resources to compare the forward gain of my antenna with a reference dipole. However, I've looked at the front/back ratio of the Hexbeam dozens of times, using a calibrated attenuator in the feedline to get accurate front/back numbers. With the exception of 20 meters, I see the ratio's that Mike talks about. Even though my f/b on 20 measures less than the 10 db 90% of the time, there are instances when I see far more than that. For example, I've seen a 35 db f/b on VK0MM's CW signals several times. I can't explain why this is true, but it is.

If Mike claims that some users have reported a 10 dB gain compared to a dipole, I take that to mean that users have told him they have seen that gain figure in relation to dipoles installed at their location. What's wrong with passing that information along? A reasonable person would read it and conclude that there is indeed some gain to be had with the Hexbeam, and it's not an insignificant amount. If your first inclination is to run to your PC and prove that it's simply impossible based on your models, then I feel sorry for you and suggest you might want to find another hobby.

As I stated before, I've talked with Mike Traffie on the telephone several times and, among other things, we discussed his performance claims and how they were stated. He was very concerned that he not appear to be making claims that might be interpretted as being unfounded. To demean him the way you have in this forum is simply wrong and uncalled for. Frankly, many of us who frequent this newsgroup are growing mighty weary of the personal attacks and negativism that you and a few others seem to thrive on.

I suggest you pick up the telephone and call Mr. Traffie and discuss your beef directly with him rather than venting here.

--
Floyd Sense - Angier, NC
"CAM" <cam2338@bigfoot.com> wrote in message
news:3A072FA7.E36005F4@bigfoot.com...
> Floyd Sense wrote:
> > I think that Mike Traffie doesn't intentionally mis-state his gain numbers.
>
> If 10dB over a dipole at the same height is not intentionally mis-stating
> his gain numbers, then I don't know what is. It is impossible for a two-
> element beam to have a 10dB gain over a dipole at the same height.
> To maintain such is simply a lie and hams should be told who is engaging
> in false advertising. The mealy-mouthing saying that customers have
> reported 10dB gain over a dipole at the same height is snake oil tactics.
> If customers actually knew the definition of 10 dB, they wouldn't show
> their ignorance by making such claims.
>
> The HEXBEAM is a good antenna that can stand on its own merits. Why must
> the manufacturer lie about its merits?
> --
> http://www.mindspring.com/~w6rca
>

1878. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <FBVN5.26$g5.155094@news.ntplx.net>
Source record: 177001

CAM <cam2338@bigfoot.com> wrote in message
news:3A079BFA.AD86F2C3@bigfoot.com...

> Roy Lewallen wrote:

> > NEC calculates the far field pattern at an infinite distance.

> Thus ignoring the speed of light? :-)

NEC also ignores the curvature of the earth, assumes space to be Euclidean
and ignores relatvistic effects, too. :-)

73,
Ed Hare, W1RFI

1879. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u99p4$jh7$1@nnrp1.deja.com>
Source record: 177002

In article <8u7p4h$674$5@208.206.142.84>,
Dick Carroll <dixie@townsqr.com> wrote:
> It's all a matter of public record, and I have no intention of doing
> your research for you. Your mind (such as it is) is already made up
and
> such mundanities as facts couldn't begin to penetrate the granite that
> is your skull. So stew in it.
>

Just what I expected. You say it is a matter of public record, but you refuse to cite the "public record" it came from. You are just spewing mindless dribble from your right-wing fanatics. Typical.

Talk about LACK of credibility!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1880. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u99t4$jk4$1@nnrp1.deja.com>
Source record: 177003

In article <3A075AED.78585F3D@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:
> So then I guess these people are guilty of obtaining money that
already
> belonged to them. Those scoundrels!
>
> ac6xg
>

No, they did not get money that belonged to them. That is like saying
if you insure your car for $5,000 and you have an accident that causes
$10,000 worth of damage, you would hold the insurance company for the
extra five grand! HEHEHE RIGHT! Talk about "fuzzy math"!

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1881. 10 Meter beam antennas!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: dinod@deltanet.com
Message-ID: <rWVN5.174437$g6.78218789@news2.rdc2.tx.home.com>
Source record: 177004
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Do you remember the Antenna Specialist PDL-2 and Moonraker IV beams?

Well they have been discontinued! BUT, Antenna Specialist has approx
200 each of these left! They are also selling DIRECT!

PDL-2 = $85.88
Moonraker IV = $169.00

Shipping is $20.00 and they will charge you your local tax.

These antennas were designed for the 11 meter band which makes them
modifiable for the 10 meter band.

For the Moonraker IV, you would shorten each of the elements by cutting
the bottoms off and re-inserting them; shortening the fiberglass sections
and wire loop; re-spacing the elements on the boom; re-tuning the gamma
match section.

I DO NOT KNOW THE MEASUREMENTS! (Wish I did) I'm hoping that Roy
can (has?) model this antenna and will publish the info!

The PDL-2 modifications should be similar.

This is a GREAT opportunity to jump on well built and designed antennas
that are inexpensive and easy to turn!

Antennas Specialist says, "When they are gone...they are gone!"

Dino

1882. bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8u9c29$9fv$1@slb7.atl.mindspring.net>
Source record: 177005

"Fractenna" <fractenna@aol.com> wrote in message
news:20001107060412.15485.00000159@ng-mj1.aol.com...
> >Mark,
> >How long have you been subscribed?? I have been watching with interest
the
> >parry and thrust of the Fractenna honcho and the rest of the thinking
group,
> >and its my opinion that Mr Cohen has been deliberately evasive in order
to
> >stir up interest in his airy fairy idea, maybe you should look back and
read
> >the postings, and then make you comment.
> >John McLean VK2KCE
> >
> >> > > Congratulations you turkeys. You've taken someone whose done
something
> >positive
> >> > > and through jeaolusy and hatred changed his life. You are to be
> >pitied.
> >> > >
> >> > > Nathan Cohen has his position terminated on 1 Nov.
> >> >
> >> > Looks like the neo-Luddites won this round. It doesn't come out of
a
> >> > box ready to run, so kill it. So much for experimentation.
> >> >
> >> > I subscribed to this NG in hopes of seeing information on advances
> >> > in antennas, because Hams are historically famous for thinking
outside
> >> > the box.
> >> >
> >> > Instead I find a bunch of people who give rednecks a bad name.
> >> >
> >> > Bye.
> >> >
> >> > Mark L. Fergerson
> >>
> Hi Harry--
>
> On the contrary: I am unwilling to answer fractal antenna questions HERE
by
> design. However, as I have stated AT LEAST 12 times in the last year, I am
> happy to answer questions on the fractal antenna reflector:
>

> fractalantenna-subscribe@egroups.com.
> Thus I AM accessible on the web.
>
> The extraordinary abuse and hate filled atmosphere create here by a few
> individuals does not make it conducive to discuss anything creative or
> innovative.
>
> Harry, perhaps sincerely, you have a better suggestion which:
>
> 1) makes a scientist accessible;
> 2) prevents this abuse?
>
> Cordially,
>
> NC

If you are unwilling to answer questions HERE then don't bring the subject up HERE. Bringing up a subject you are unwilling to discuss is just dumb and literally invites abuse. Now you will probably give the reply, "How is it my fault that others choose to insult me? Here is another case of the innocent being blamed for others actions." That is BS and you know it, and if you don't you need to grow up and figure out how the world works before you interact with it any further or you are in for a lot of heart ache..

1883. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a3427e2.1105981927@news.seanet.com>
Source record: 177006

On Mon, 06 Nov 2000 18:30:32 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>Sounds like sour grapes, Richard. The Bushes had nothing to do with any
>of the S&L failures out here. The people who didn't pay back their
>loans are at fault however you look at it. Why do you want to hold them
>harmless?
>
>ac6xg

Hi Jim,

Sour grapes? Its a matter of record. Me hold perpetrators harmless?
That's a stretch to exonerate the Bushii.

A Pox on all their houses.

73's
Richard Clark, KB7QHC

1884. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001107120802.20512.00000221@ng-cg1.aol.com>
Source record: 177007

```
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001107060412.15485.00000159@ng-mj1.aol.com...
>> >Mark,
>> >How long have you been subscribed?? I have been watching with interest
>the
>> >parry and thrust of the Fractenna honcho and the rest of the thinking
>group,
>> >and its my opinion that Mr Cohen has been deliberately evasive in order
>to
>> >stir up interest in his airy fairy idea, maybe you should look back and
>read
>> >the postings, and then make you comment.
>> >John McLean VK2KCE
>> >
>> >> > > Congratulations you turkeys. You've taken someone whose done
>something
>> >positive
>> >> > > and through jeaolusy and hatred changed his life. You are to be
>> >pitied.
>> >> > >
>> >> > > Nathan Cohen has his position terminated on 1 Nov.
>> >> >
>> >> > Looks like the neo-Luddites won this round. It doesn't come out of
>a
>> >> > box ready to run, so kill it. So much for experimentation.
>> >> >
>> >> > I subscribed to this NG in hopes of seeing information on advances
>> >> > in antennas, because Hams are historically famous for thinking
>outside
>> >> > the box.
>> >> >
>> >> > Instead I find a bunch of people who give rednecks a bad name.
>> >> >
>> >> > Bye.
>> >> >
>> >> > Mark L. Fergerson
>> >>
>> Hi Harry--
>>
>> On the contrary: I am unwilling to answer fractal antenna questions HERE
>by
>> design. However, as I have stated AT LEAST 12 times in the last year, I am
```

>> happy to answer questions on the fractal antenna reflector:
>>
>> fractalantenna-subscribe@egroups.com.
>> Thus I AM accessible on the web.
>>
>> The extraordinary abuse and hate filled atmosphere create here by a few
>> individuals does not make it conducive to discuss anything creative or
>> innovative.
>>
>> Harry, perhaps sincerely, you have a better suggestion which:
>>
>> 1) makes a scientist accessible;
>> 2) prevents this abuse?
>>
>> Cordially,
>>
>> NC
>If you are unwilling to answer questions HERE then don't bring the subject
>up HERE. Bringing up a subject you are unwilling to discuss is just dumb
>and literally invites abuse. Now you will probably give the reply, "How is
>it my fault that others choose to insult me? Here is another case of the
>innocent being blamed for others actions." That is BS and you know it, and
>if you don't you need to grow up and figure out how the world works before
>you interact with it any further or you are in for a lot of heart ache..

From 1996-1999 I did just that. I answered questions on this NG. But I see no reason to continue to allow ANYONE to hold me up as a target. It is beyond human decency, as readily seen in recent weeks.

No sir; I see no problem whatsoever making relevant info available on this forum, and guiding to another link to assure that objective and relevant discussions may continue.

Thus although I am aware of your opinion and respect it, I cannot take your suggestion, as I have historically found it untenable.

This concludes my discussion on my availability on the internet.

Cordially,

NC

1885. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <5deg0t8pm3ruunpkg7h437s9jumu4kq2v7@4ax.com>
Source record: 177008

On Tue, 7 Nov 2000 10:25:33 -0500, "David" <k4zzrNONSPAM@gate.net>
wrote:

>What do you recommend? An antenna that will work *and* look ok on my car?

I like Hamsticks. They are not as efficient as the monster-coil types
which I have used in the past, but they are not too long (7 feet),
unobtrusive, easy to tune, inexpensive and they get out ok for me. I
can work almost anything I hear and that's good enough.

73, Bill W7TI

1886. VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>
Source record: 177009

I have two, VHF radios. One for voice and one for packet cluster. I would like them to be able to share the same 2-meter antenna without manual switching. A 2-meter/2-meter duplexer would be nice, but I have never seen such an animal. Any ideas?

Dick Hughes - W6CCD

1887. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u9gtgqhd1@nnrp1.deja.com>
Source record: 177010

I don't think you have seen one because a Duplexer will allow you to
use both radios at the same time which would be bad. Why wouldn't a
simple antenna switch work?

In article <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>,
Dick Hughes <rhughes33@cableone.net> wrote:
> I have two, VHF radios. One for voice and one for packet cluster. I
> would like them to be able to share the same 2-meter antenna without
> manual switching. A 2-meter/2-meter duplexer would be nice, but I
> have never seen such an animal. Any ideas?
>
> Dick Hughes - W6CCD
>

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1888. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <d3f9u8.6o7.ln@mail.specsol.com>
Source record: 177011

Fractenna <fractenna@aol.com> wrote:

<big snip>

> From 1996-1999 I did just that. I answered questions on this NG. But I see no
> reason to continue to allow ANYONE to hold me up as a target. It is beyond
> human decency, as readily seen in recent weeks.

Then why do you continue to post here? Beyond human decency? What a crock.

A common symptom of mental illness is to continually set yourself up for
the condition you complain about, e.g. the abused woman with a long string
of abusive partners.

<rest snipped>

Jim Pennino

1889. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <3a084638.60540572@news.azstarnet.com>
Source record: 177012

On Sat, 4 Nov 2000 15:30:01 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Ed Hare, W1RFI wrote:
>"I don`t know at what distance NEC calculates the far field, but in the
>far field, the direct ray and the reflected ray have traveled
>approximately the same distance so they could well be at equal and
>opposite polarity at a point very far away from the antenna."
>
>Please see Fig. 10 of the chapter on Antennas in Terman`s "Radio
>Engineers` Handbook". This figure is the: "Mutual impedance between
>parallel half-wave radiators". This is the situation between a
>horizontal dipole and its ground image. The resistive part shrinks as
>spacing grows and has become asymptotic to zero at only 7 wavelengths.
>It is 90 ohms at very close spacing, and drops to 3 ohms at 7
>wavelengths. This is the accepted measure of coupling and interaction.
>
>At 180 wavelengths, asymptotic can be assumed to have reached its limit
>and the coupling is zero.
>
>An earth reflection distant from an antenna can`t be counted as part of
>an antenna`s directivity any more than an ionospheric reflection in one
>direction but not in another can be claimed as antenna directivity.
>
>Best regards, Richard Harrison, KB5WZI

This thread has progressed while I thought about this, but here goes anyway.

If I understand Richard's position correctly (always a dubious proposition on my part) he believes that increased height above ground causes increased path loss between the antenna and the ground underneath. This in turn reduces the effects of ground reflection upon both the pattern and the mutual impedance between the antenna and its image.

Figure 10 in Terman's book seems to bear this out. (Didn't think I had the book did you Richard?<g>)

On the other hand, we have Ed's Eznec plot that clearly shows a pattern with myriad nulls that can only be due to equal, or nearly equal, amplitude and oppositely phased interference "signals."

Intuitively, I agree with Richard. However, Eznec does not and it appears that one of them has to be wrong.

So I did a little modeling experiment as follows:

First I modeled a self-resonant dipole at 299.793 MHz (the Eznec example dipole tweaked in length for zero reactance) at some height above a perfect ground. Then I modeled a pair of the same dipoles spaced twice the height distance apart in free space. The second dipole was fed with the same current but 180 degrees phase difference. This in effect is the "image" antenna that is used in the perfect ground analogy as described in paragraph 4 of Terman's chapter on antennas and elsewhere. It should be noted that Terman qualifies by saying, "When the antenna is near the ground." What he considers "near" to be is unclear.

What I saw was that the patterns were identical except for the fact that the lower hemisphere was missing over the perfect ground and the amplitudes differed by three dB. The pattern peaks and nulls all occured at the same places regardless of the separation.

What this suggests to me is that the modeling program, at least for pattern calculation, treats the perfect ground as a perfect image antenna with the same impedance and fed with the same power, regardless of the separation between the "two" antennas. "Near" or "far" seem to have no bearing on the results.

Seems to me that the model is wrong unless the antenna is "near" ground.

And I confused or what?

Wes

>

1890. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8u9iblrva1@nnrp1.deja.com>
Source record: 177013

In article <3A04AC72.DB2D5414@thegrid.net>,
Paul Zander <paulz@thegrid.net> wrote:
> I agree with the idea of using PVC. Use a big size so you can
easily install a
> second
> run in the future. All the effort of digging, etc the cost of few
feet of pipe
> will be
> a very worthwhile addition.
>
> If for some reason you don't use conduit, at least do something to
help you
> locate the cable
> when you are digging. For example, cover the cable with a few inches
of sand,
> and then
> put some of that yellow caution tape over that when you back fill the
hole.
>
> Then when you are doing some gardening project, you can more easily
avoid
> cutting the
> cable with a shovel.
>
> Paul AA6PZ
>
> Peter Bertini wrote:
>
> > "Al" <ABurzynski@swri.edu> wrote in message
> > news:t00o8v7kvh8r21@corp.supernews.com...
> > > Is all PVC coax cable buryable? If not, what characteristic makes
coax
> > cable
> > > buryable? Specifically, I plan on getting an RG6 with quad
shielding and I
> > > plan to bury about 15 feet of it. All I know about the jacket is
that it
> > is
> > > PVC.
> >
> > Use electrical PVC conduit to protect the cable. The conduit will
also
> > allow you to remove and replace the coax at will with out redigging
the

> > trench.
> >
> > Peter
> >
> > >
> > > Thanks for any info.
> > > Al
> > > KA5JGV
> > >
>
>
In principle I agree 100% with Paul and Peter. On longer runs it is by far the best way to go. For only 15 feet though, the thought of having to retrench isn't that scary. Of course if the 15 feet is going to be covered with concrete or something then conduit is the way to go.
BillN6VLR

Sent via Deja.com http://www.deja.com/
Before you buy.

1891. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A084F75.7BE8FC27@uci.edu>
Source record: 177014

RanHefner wrote:
>
> In article <3A075AED.78585F3D@uci.edu>,
> Jim Kelley <jwkelley@uci.edu> wrote:
> > So then I guess these people are guilty of obtaining money that
> already
> > belonged to them. Those scoundrels!
> >
> > ac6xg

> No, they did not get money that belonged to them. That is like saying
> if you insure your car for $5,000 and you have an accident that causes
> $10,000 worth of damage, you would hold the insurance company for the
> extra five grand! HEHEHE RIGHT! Talk about "fuzzy math"!

To paraphrase Ed McMahon, you're incorrect sir !! That's not the way it
works at all. It's insurance on deposits. You don't get more than 100%
on your dollar. Sorry, but nice try.

Are you a commie by any chance there, Ran? ;-)

1892. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3A0852C3.5B0EF8CD@west.raytheon.com>
Source record: 177015

Richard Harrison wrote:
>
> Ed Hare, W1RFI wrote:
> "It would be very much of an oversimplification to state the E and H
> fields decay as 1/4 and 1/6 D."
>
> And it would be wrong. The above needs restatement to more nearly agree
> with my posting. I`ll try. The electrostatic field due to the high
> voltage points of the antenna decays in power as the sixth power of the
> distance from the radiator.

The electrostatic field, which is expressed in volts/meter, from a point charge. drops off proportional to 1/R^2. The electrostatic field from a balanced pair of point charges of opposite polarity (electric dipole), falls off proportional to 1/R^3 as is also the case for a magnetic dipole. Balanced higher order distributions, e.g. quadrapoles, fall off faster yet.

The rhombic being discussed in this thread probably has a total of 10 wavelengths of wire making for a total of 20 'poles' in the antenna, plus another 20 in the primary image. Evaluating the field at any point in space is straightforward once the current distribution is known. Attempting to express the result in polar coordinates as a power series in R would likely be an exercise in futility. First of all, the solutions to the integrals involved (Ci(x) & Si(x) etc.) lack closed form expressions and secondly, there would be an overwhelming number of terms of various orders which would need sorting out....

bart
wb6hqk

1893. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <kukg0tcrasasu2f5f3air7qj3c1313epis@4ax.com>
Source record: 177016

>In article <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>,
> Dick Hughes <rhughes33@cableone.net> wrote:
>> I have two, VHF radios. One for voice and one for packet cluster. I
>> would like them to be able to share the same 2-meter antenna without
>> manual switching. A 2-meter/2-meter duplexer would be nice, but I
>> have never seen such an animal. Any ideas?
>>
>> Dick Hughes - W6CCD
>> Seems like you will need two ants.cl.

1894. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A08553A.CF55DC82@uci.edu>
Source record: 177017

CAM wrote:
>
> Jim Kelley wrote:
> > Hey Cecil, you're in Texas, howz come you don't know?
> > He's your governor!
>
> Not my governer - I voted Libertarian.

Ah, I stand corrected. So how many governors you got down there in Texas? One for every political party?

1895. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <vqlg0to90uoo25vmfqlfs60cfh3qkauli6@4ax.com>
Source record: 177018

>Is all PVC coax cable buryable? If not, what characteristic makes
>coax cable buryable?

PVC is not the best for burying. Polyethylene is better. See:

http://www.davisrf.com/ham1/coax.htm#buryflex

for more info. The usual disclaimer applies.

Also, if you live where there are burrowing critters like moles,
gophers, etc, put it in metal conduit. Plastic conduit is not a
sufficient barrier to them.

73, Bill W7TI

1896. DX-394 MODS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:39:40 UTC
From: garry smith <gazzy3166@garry96.fsnet.co.uk>
Message-ID: <8u7j3pjpl1@newsg4.svr.pol.co.uk>
Source record: 176975

could anyone help ,is their any mods for the above reciever ,also any ideas how to stop interfierance from comp many thanks garry

1897. N8WWM on PSK31 Tonight!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 00:43:47 UTC
From: n8wwm@aol.com
Message-ID: <20001106194347.27732.00000112@ng-cu1.aol.com>
Source record: 176976

Hello Gang

For anyone who is interested, I will be on PSK31 mode at 50.290 USB starting 0100 UTC.
That's 8PM Eastern for those like me who get befuddled by the time change.
Will start out pointing SE from EN81 <Toledo, OH> and move around looking for sigs.

Hope to hear you there!
73 Doug

1898. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:05:10 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8u7kg2arv1@nnrp1.deja.com>
Source record: 176977

In article <3A074F40.5AF44F41@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:
>
> The people you should be pointing your finger at are those who
defaulted
> on their loans from the S&L's because they paid too much for the
> property they bought. The money went to the folks who sold property
at
> over-inflated prices. The government simply covered the deposits that
> our grandmothers had in their savings accounts so they wouldn't be out
> on the street. How you can blame that on George Bush is beyond
> comprehension.
>
> ac6xg
>

Grandma didn't benifit as much as the GW types did! The FDIC insured
accounts up to $200,000 (maybe $100,000)...Anyway, the bailout was to
those who had MORE that the insured amount in their accounts.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1899. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:22:12 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A076728.CD9C89BE@dvol.com>
Source record: 176978

CAM wrote:

> Floyd Sense wrote:
> > Beats me. What were they claiming?
>
> I just took a look at the hexbeam web page. They continue to make
> outrageous claims for gain. They claim 10dB gain over a dipole *at
> a similar height*. Since dipoles over ground often have a gain of
> 6dBi, that means they are claiming a gain of 16dBi for the hexbeam.
> 16dBi from any two element beam is a ridiculous claim. The maximum
> gain over a dipole for a two element beam with a reflector is about
> 5dB, not 10dB.
> --
> http://www.mindspring.com/~w6rca

>
C'mon Cecil, we all know antenna advertisers go 'way over the edge when it comes to "gain" claims. Go check the fifty years of mindless hype in the Mosely and HyGain "specs", 10Db out of a short-boom tribander. As if. It's a shame they're compelled to pump out such transparent garbage but that's just the way they are. Traffie upped that "art" to a new low and hasn't done himself any favors in the process. Anybody who knows ferschtink about antennas ignores it all and moves on.
>
The hexbeam has a quite useful F/B ratio which 4dBd gain dipoles certainly do not have, my own philosophy being that lacking some 40 foot boom thingey or another with some actually noticeable forward gain I don't care about gain, I go for F/B ratio. "Ya can't work 'em if ya can't hear 'em", thus a hexbeam should be a big operating asset even with the same gain as a dipole installed at the same height over the same ground.
>
w3rv

1900. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:52:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7n9b$674$0@208.206.142.84>
Source record: 176979

Jim Kelley wrote:
>
> RanHefner wrote:
> > You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
> > guilty and paid the fine. When you plead guilty, you may not have to
> > go before a judge, but you ARE convicted of the crime.
>
> Dan is not incorrect just because you happen to disagree with him, Ran.
> Usually a distinction is made between a felonious conviction and a
> misdemeanor.

Not just usually. ALWAYS. The two do not equate.

It is more than clear that Mr.Hefner would deal with the truth exactly
as his champion, Al Gore chooses to do.

1901. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:53:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7n9s$674$1@208.206.142.84>
Source record: 176980

Jim Kelley wrote:
>
> RanHefner wrote:
> > You are incorrct Dan. GW Bush WAS convicted of the crime. He plead
> > guilty and paid the fine. When you plead guilty, you may not have to
> > go before a judge, but you ARE convicted of the crime.
>
> Dan is not incorrect just because you happen to disagree with him, Ran.
> Usually a distinction is made between a felonious conviction and a
> misdemeanor.

Not just usually. ALWAYS. The two do not equate.

It is more than clear that Mr.Hefner would deal with the truth exactly
as his champion, Al Gore chooses to do.

1902. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:54:14 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7nc6$674$2@208.206.142.84>
Source record: 176981

CAM wrote:
>
> So, which was it, a felony or a misdemeanor?

It was a misdemeanor, of course.

1903. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:54:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7ncj$674$3@208.206.142.84>
Source record: 176982

CAM wrote:
>
> So, which was it, a felony or a misdemeanor?

It was a misdemeanor, of course.

1904. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 01:57:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7nhg$674$4@208.206.142.84>
Source record: 176983

CAM wrote:
>

. Are you saying that
> pleading guilty to a DWI is not a felony in Maine?

I know of NO state in which pleading gulity to DUI or DWI is a felony.
Repeats of a third offense are prosecutable as felonies in my state.

1905. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 02:24:17 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8u7p4h$674$5@208.206.142.84>
Source record: 176984

RanHefner wrote:
>
> YOu spew this dribble, but you refuse to list your source for this
> information. Until you can link it to a credible news
> organization...Heck use FOX news if you like, they are far enough to
> the right to suite your desires!
>

It's all a matter of public record, and I have no intention of doing
your research for you. Your mind (such as it is) is already made up and
such mundanities as facts couldn't begin to penetrate the granite that
is your skull. So stew in it.

> In article <8u6qs2rgd0@208.207.71.157>,
> Dick Carroll <dixie@townsqr.com> wrote:
> > RanHefner wrote:
> > >
> > > In article <3A05E5B3.F64EF326@bigfoot.com>,
> > > CAM <cam2338@bigfoot.com> wrote:
> > > >
> > > > Can you tell us the big difference between "invent" and "create"?
> > > > Can you tell us how a man who hasn't had a drink in 14 years can
> > > > possibly be called a "drunken jerk". I don't like either one but
> > > > fair is fair.
> > >
> > > I was not quibbling over "invent" and "create" (but I do like
> > > accuracy), I was making the observation that he did not say "and
> > > invented" but rather he said "in creating". There is a big
> > > difference.
> >
> > OK Dude, here's enough tokeep you busy till well paste election day.
> >
> > AL GORE BY THE NUMBERS
> >
> > While Al Gore has a habit of exaggerating his record, these numbers
> tell
> > us
> > the real truth about his record on education, healthcare and taxes:
> >
> > AL GORE'S EDUCATION PLANS...
> >
> > $10,000... tax deduction that Al Gore says will be received by "all
> > students who want to go to college". $800... tax deduction is the
> > reality.
> >

> > 0... students working their way through college getting a tax credit
> > because they do not pay enough in income taxes.
> >
> > 30,000,000... low-income households get no benefit on Gore's
> education
> > plan.
> >
> > 0... families making over $20,000 get a benefit.
> >
> > 5,000,000... upper income families are ineligible.
> >
> > 0... deductions or credits for room, board, books, supplies, and
> travel.
> >
> > 1... education plan that is almost identical to the one that failed in
> > the Clinton White House.
> >
> > AL GORE'S PROGRAM ON HEALTHCARE:
> >
> > $600... access fee per year to obtain prescription drug coverage under
> > the
> > Gore plan.
> > 412... new regulatory mandates created by the Gore Medicare plan.
> >
> > 182... new regulations dealing with prescription drugs alone.
> >
> > 64.5 ... the age you are when you have your one and only opportunity
> to
> > buy into a government HMO.
> >
> > 8... year wait for Gore's plan to be implemented.
> >
> > 2... times the price of Bush's plan to create more government
> > bureaucrats
> >
> > THE VICE PRESIDENT ON TAXES:
> >
> > 88... separate tax increases along with 42 new user fees Gore proposed
> > in
> > the 2001 budget.
> >
> > 11%... how much the tax burden has increased over the last 8 years.
> >
> > $500... per child tax credit was never included in previous
> Clinton/Gore
> > budgets.
> >
> > 50,000,000... taxpayers will not get tax relief under Gore's plan.
> >
> > $1,400... couples will pay in taxes because Gore opposed the Marriage

> > Penalty tax cut.
> >
> > 4.3 cents... tax increase on a gallon of gas because of Gore's
> > tie-breaking vote.
> >
> > $4.00 per gallon...The price of gasoline under Gore's plan as laid out
> > in his book on "preserving the environment".
> >
> > ----------
> >
> > Subject:
> > What Tennesseans Think Of Al Gore
> > Date:
> > Sun, 8 Oct 2000 11:43:00 EDT
> > From:
> > xxxxxxxxxxxxxx@aol.com
> >
> > SUBJECT: WHAT TENNESEENS THINK ABOUT AL GORE
> >
> > Dear friends,
> >
> > When I ask my friends and neighbors here in Rhea County,
> > Tennessee whether they plan to support Al Gore, they
> > invariably look at their feet, clear their throats and
> > mumble a reply. Sometimes they say, "No, I don't think
> > so." Other times, with great discomfort, they say,
> > "Yeah, probably."
> >
> > Regardless of the response, I was bewildered at the
> > sense of embarrassment that the mention of Al Gore's
> > name brings.
> >
> > You see, Al Gore represented our district in the House
> > of Representatives since the tender age of 28. He was
> > one of Tennessee's senators for 8 years until becoming
> > vice president. It is hard to find people who haven't
> > voted for him at one time or another.
> >
> > Why are locals now so embarrassed when this man, whom
> > they supported for so long, makes it big on the
> > political scene? You think they'd be as proud as punch.
> >
> > Here in east Tennessee being honest, honorable and true
> > to your word is vastly more important than how much
> > money you make or how powerful you are.
> >
> > People here know, better than anyone else in America,
> > that Al Gore has reversed most of his fundamental
> > convictions. When confronted, he has blatantly lied.
> >

> > He is not viewed as the "local-boy-made-good." Instead,
> > most folks, even his supporters, harbor the uneasy
> > suspicion that Al Gore has sold his honor and his good
> > word for political power.
> >
> > This week's editorial from our local newspaper, The
> > Herald News, explains it all. I hope you will spread
> > this as far and as wide as you possibly can, and ask
> > your friends to do so as well.
> >
> > This e-mail needs to go to millions of people. There is
> > too much at stake to remain quiet.
> >
> > -XXXX Myers
> >
> > ----------
> >
> > THE HERALD-NEWS, DAYTON, TENNESSEE, SUNDAY, SEPTEMBER
> > 10, 2000, P. A-4 (reprinted by permission)
> >
> > Tennessee hasn't had a native son in the White House in
> > more than a century. Certainly most Tennesseans would
> > agree it would be good to have one of our own as
> > president. The question is whether Al Gore is still a
> > Tennessean and whether we can afford for him to be
> > president.
> >
> > Al Gore is not the man Tennesseans sent to Washington as
> > vice president in 1992. He's certainly not the same man
> > Fourth District voters made the youngest Congressman in
> > decades at the tender age of 28, nor is he the same man
> > Tennessee sent to the U.S. Senate by huge margins in
> > 1984 and 1990.
> >
> > He has abandoned the conservative, Southern values for
> > which we once elected him.
> >
> > Let's look at some of the changes.
> >
> > Al Gore once told The Herald-News he was "personally
> > opposed" to abortion. He also said he was against
> > federal funding of abortions. Now Gore has positioned
> > himself as the great champion of abortion rights and
> > even defends the barbaric practice of partial-birth
> > abortions. America's youngest and most defenseless
> > citizens would receive no protection under a Gore
> > presidency.
> >
> > Ten years ago when Gore last ran for the Senate, The
> > Herald-News supported him, in part because he portrayed

> > himself as a defender of the Second Amendment. Gore was
> > a friend to hunters and sportsmen and considered himself
> > one.
> >
> > Since then he has changed directions 180 degrees. He now
> > supports national registration and licensure of all guns
> > and all gun owners. He is solidly in the gun control
> > camp that wants to eliminate all private ownership of
> > handguns, semiautomatic rifles and pump shotguns. Of
> > course, the private security forces for the elite would
> > still have easy access to these weapons. Oh, and of
> > course, so would the criminals.
> >
> > On environmental issues Gore was once essentially
> > mainstream. He believed in common sense EPA regulations
> > and continued private use of public lands by permit. Now
> > when it comes to environmental issues, Gore is on the
> > fringe. He is more closely aligned with Katuah Earth
> > First!, that radical environmentalist, tree-worshiping
> > group that chained themselves to concreted barrels to
> > block access to Watts Bar Nuclear Plat three years ago,
> > than with the average Tennessean.
> >
> > Gore writes in his book "Earth in the Balance: Ecology
> > and the Human Spirit," "we must make the rescue of the
> > environment the central organizing principle for
> > civilization." Surely we face greater issues than
> > protecting the environment.
> >
> > Once Gore told The Herald-News he believed it was an
> > admirable thing for committed parents to educate their
> > children at home for religious or personal reasons. Now
> > Gore supports a National Education Association policy
> > that would make it illegal for most families to home
> > school. It calls for all teachers, regardless of the
> > type of school they teach in--public, private, religious
> > or home--to be licensed by the federal government and to
> > only teach "state-approved" curriculum.
> >
> > Tennesseans have historically valued their independence
> > very highly, perhaps it is a remnant of the pioneer
> > spirit that built this great state. Unfortunately, Gore
> > now supports increasing control by the federal
> > government in most area of our lives.
> >
> > The bottom line is, Gore doesn't hold to the same
> > conservative Southern values that led Tennesseans to
> > elect him six times to Congress. During his time in
> > Washington, D.C., he has forgotten his roots.
> >

> > Al Gore may claim Tennessee. The question is, can
> > Tennessee still claim Al Gore?
> >
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1906. Atlanta area transmitter fox hunt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 03:41:12 UTC
From: Penn McClatchey <pmmnospame@saf.com>
Message-ID: <3A0779E7.FCD15010@saf.com>
Source record: 176985

The Atlanta Radio Club is hosting a FOX HUNT this Saturday,
November 11th!! This hunt will be conducted at the Kennesaw
Mountain National Battlefield and the transmitter will be hidden
somewhere in the park. All are welcome. We will meet at 10:15 AM
at the visitors center at Kennesaw. For details see our website
at http://www.saf.com

The park is about 3 miles long and the hunt will be on foot.
A map of the park can be downloaded at http://www.nps.gov/kemo/

73,

Penn
K4PE
--
Buy aluminum sheet and extrusions on-line at http://www.saf.com

1907. TX to Duplexer cable, Adverse cable length? Advice?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 05:26:29 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A079285.7E2F7557@nettally.com>
Source record: 176987

I have an application where some low-band (47 MHz) repeaters are being used with TX-RX duplexers (2 MHz T-R split). Apparently the solid state PA's in the repeaters are not at all happy with the inductive load of the duplexers. Indeed the repeater manufacturer has provided a Z-Matcher in an attempt to fix the problem, and their rep has cut the cable to an arbitrary length that worked (for a time). The symptom is desense of the receiver due to TX noise. Cabling and shielding and other aspects of the repeaters are fine.

Normally I would spec an isolator panel in such a rare situation, but it appears that these are a rare commodity in this frequency range, very expensive and of questionable performance.

TX-RX's troubleshooting guide suggests that "adverse cable length" is a possible contributor to the problem.

I have been given conflicting advice by sources who say "use an odd multiple of 1/4 wavelength" or "use an odd multiple of 1/2 wavelength".

Has anyone a definitive answer, hopefully with a reference for this problem?

Thanks!

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

1908. Re: 160M Dipole Hoist/Anchor Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 05:47:40 UTC
From: cathexis@erols.com
Message-ID: <3a079632.56067975@news.erols.com>
Source record: 176986

On Mon, 06 Nov 2000 21:52:11 -0600, 'Doc <w5lz@oio.net> wrote:

>Andrew,
> Using wire, or any other conductor, as supports may lead to
>a problem, but it may not. (thats a 'help', isn't it?) If you
>keep the support cable/wire's length away from multiples of a
>1/4 wave on the band(s) you use, you should have no big problems
>with it. Go ahead and use it, see what happens.
> Changing conductor size between feed line and antenna makes
>very little difference in this case, don't worry about it. there
>will be an impedance mismatch between antenna and feed line, but
>that's something else that just doesn't matter in this case, and
>the antenna/feed line will handle any power you can put into it.
>If there's a problem because of power, it will be at the tuner
>you use for matching, in the station. If the tuner is rated for
>twice the power your transmitting, you should have no problem
>with the system. (Most amateur tuners are rated in 'PEP', so
>use a tuner that is at least twice the maximum power of what
>your going to feed it).
> It doesn't matter how it goes in the morning... let us know
>what happens!!
> 'Doc

Thx. for coming back Doc. I'm headed for Home Depot
to grab some rope. (Always thought it was goofy they were open 24/7
yet here I go <grin>).

No problems on the tuner for now, it's good for 300W and my
rig is rated 100W PEP. Good to hear the antenna will take whatever I
can throw at it. Wx. report is no rain until dusk on tues. nite. Will report
back, here's hoping !!

73,

Andrew
KG4JBM

1909. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 06:00:34 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A079A82.15CF5988@bigfoot.com>
Source record: 176988

Jim Kelley wrote:
> Hey Cecil, you're in Texas, howz come you don't know?
> He's your governor!

Not my governer - I voted Libertarian.
--
http://www.mindspring.com/~w6rca

1910. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 06:06:50 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A079BFA.AD86F2C3@bigfoot.com>
Source record: 176989

Roy Lewallen wrote:
> NEC calculates the far field pattern at an infinite distance.

Thus ignoring the speed of light? :-)
--
http://www.mindspring.com/~w6rca

1911. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-07 07:50:11 UTC
From: Harry Harms <hrbe@dingoblue.net.au>
Message-ID: <3a07b336$0$19437$7f31c96c@news01.syd.optusnet.com.au>
Source record: 176990

Mark,
How long have you been subscribed?? I have been watching with interest the parry and thrust of the Fractenna honcho and the rest of the thinking group, and its my opinion that Mr Cohen has been deliberately evasive in order to stir up interest in his airy fairy idea, maybe you should look back and read the postings, and then make you comment.
John McLean VK2KCE

> > > Congratulations you turkeys. You've taken someone whose done something positive
> > > and through jeaolusy and hatred changed his life. You are to be pitied.
> > >
> > > Nathan Cohen has his position terminated on 1 Nov.
> >
> > Looks like the neo-Luddites won this round. It doesn't come out of a
> > box ready to run, so kill it. So much for experimentation.
> >
> > I subscribed to this NG in hopes of seeing information on advances
> > in antennas, because Hams are historically famous for thinking outside
> > the box.
> >
> > Instead I find a bunch of people who give rednecks a bad name.
> >
> > Bye.
> >
> > Mark L. Fergerson
>

1912. Re: Rotatable Dipole Design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3A09539C.C1499760@aol.com>
Source record: 176869

I disagree with W5YR on the resonance thing. If you can borrow a MFJ-259B somewhere, tuning should be easy. If you are already planning to have separate feeds (coax, I'm assuming), you can avoid interactions by juggling the feedpoint connection. You may find 15m and 10m interaction.

Also, Channel Master has a 30 foot telescoping TV mast that sells for $39.00 at my local Lowes. You could probably have it ordered if it is not in stock in your area. If you have a firm point to anchor against the side of your house, it should have no problem with a dipole. Its of hefty galvanized(i.e., better than "Radio Shack" quality). Guying may be called for it cannot be firmly anchored, and is a good idea anyway.

73, W4KAZ

"George, W5YR" wrote:
>
> Since you are using a tuner, save yourself some effort and only put ONE
> wire in the PVC. You will likely never find a combination of lengths
> that are actually even close to resonance on each band. So, just use one
> length and use the tuner.
>
> W6RCA has a design using a 44 ft radiator fed with ladderline that he
> rotates. Check his web site for details.
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> WB3EGX wrote:
> >
> > I am playing with the idea of cutting 5 full length dipoles from 5 conductor
> > rotor cable (20,17, 15, 12, 10 mtrs) and placing it in a non-metalic boom. They
> > will be connected as parallel dipoles with a seperate feedline for the WARC
> > bands. I will let my Kenwood auto tuner, sort out the dipole interaction. I
> > plan to use a nylon cord as a truss, to eliminate sag. Does this show a glimmer
> > of hope ??, and what would be an adequate mast to get 30 to 40'. I've read
> > that steel water pipe will bend, and that perhaps chain link fence "top rails"
> > are better ?? In any case, I'd like to go "free standing", and don't have a
> > tower. Thanks & 73's....Doug

1913. Re: 10 Meter beam antennas!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: trout <trout@cityusa.net>
Message-ID: <1p3j0t0dj5n6ltl9k8s4bq33sheonac4sd@4ax.com>
Source record: 176870
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

>> Do you remember the Antenna Specialist PDL-2 and Moonraker IV beams?
>> Well they have been discontinued! BUT, Antenna Specialist has approx
>> 200 each of these left! They are also selling DIRECT!
>> PDL-2 = $85.88
>> Moonraker IV = $169.00
>> Shipping is $20.00 and they will charge you your local tax.

The H&Y catalog has the moonraker 4 and is
selling for $227, so they are around, but your
price is much better and no person should
buy from H&Y / Copper.

1914. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6326-3A09613F-10@storefull-117.iap.bryant.webtv.net>
Source record: 176871

I wrote: "What happens between a direct ray and a reflected ray at a point 11 miles away has nothing to do with the antenna`s characterisitics, but with the characteristics of the path at the reflection point.

The reflection point may not be at 11 miles because it depends on the height of the antenna at the other end of the path in addition to the height of the small rhombic of interest.

The reflection point is only at half the path length where the antennas are at equal heights. The reflection point is unique. No other ground reflections reach the antennas at the ends of the path in the usual case. The angle of incidence is equal to the angle of reflection.

Best regards, Richard Harrison, KB5WZI

1915. EMAIL PROCESSORS WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: adenby@consultant.COM
Message-ID: <382704168.973696560828.JavaMail.root@web577-mc>
Source record: 176872

#1 - VERY BRIEF INTRODUCTION

Due to an enormous client list, I can only take serious applicants at this time. I am offering a full or part-time position in processing e-mail. You can work at home. I do require that you have a computer and are familiar with internet/e-mail functions. As to the salary it's totally up to you. You will be running your own business, the sky is the limit. What you will see represents a totally legal money making business that anyone can generate a significant residual income.

You will receive full instructions, and I will always be available to help you and answer your questions. This is a genuine home business. This is not a chain letter, money game, telecom scheme, or any of the multitudes of dubious "business" offers that come through your e-mail box. This business will generate a residual income of $2,000 to $6,000 every month with only part-time commitment (about 10 hours a week).

A full time commitment (about 30 hours a week) based on statistics gathered from associates world wide, will translate into an income of $10,000 or more per month!

To prove my confidence and sincerity in this opportunity, there is NO CHARGE to join us for the first month. You will receive all information to get started plus the first month's information package ($90 value). If by remote chance you are not satisfied with the program after the first month and want to discontinue, you may by all means do so and I will not contact you again.

But on the other hand, if you are satisfied with the program and wish to continue after the first month, that is when you have to pay $90 for the next month's information package. Since you DO NOT pay anything until after you are already earning an incredible residual income, you have absolutely nothing to lose.

IMPORTANT!

If the above opportunity interests you in the least, and you would like more specific information about our business please contact me at adenby@consultant.com and type in the SUBJECT LINE: "FORWARD PROJECT 21 INFO". Insert your full name, your correct e-mail address, and any specific questions you may have at this time in the body of the message.

We are successful only if YOU are successful, and therefore we will do everything in our power to ensure that your relationship with us is a profitable and successful one. I look forward to your response.

Sincerely,
Angela Denby

adenby@consultant.com
http://www.geocities.com/businessgirl2002

_____
FREE Personalized Email at Mail.com
Sign up at http://www.mail.com/?sr=signup

1916. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ubvbu$oe2$0@208.207.71.161>
Source record: 176873

Dick Carroll wrote:
>
> Fractenna wrote:
>
> Thus although I am aware of your opinion and respect it, I cannot take your
> > suggestion, as I have historically found it untenable.
> >
> > This concludes my discussion on my availability on the internet.
> >
> > Cordially,
> >
> > NC
>
> You are a lying SOB, "doc".

Aw, Geez..2am Typo---should have read "...lying SLOB....."

And that may even have been too strong language for your tender and
fragile ego. So let's just rework it to read:

"Gee, Sir, I find it impossible to believe that you are capable of
recounting the truth under any circumstance.You surely must be related
to Al Gore".

1917. Re: 10 Meter beam antennas!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <1NfO5.3614$925.119614@news.direcpc.com>
Source record: 176874
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hello Mike:

I agree with you about these antennas because I too had one in the early70's and all that has to be done to modify them is to cut about about 4" off of each stainless steel radial end in addition to shrinking the circumference of the reflector loop by about 1'.

However if one is to use the Moonraker 4 for 10 meter ham use, the vertical half of the antenna is wasted because it doesnt get used (unless contacting local 10 meter mobiles is considered). If one takes away the vertical use of this antenna, all one has left is a 4 element horizontal quagi which can be bought or homemade for alot less than $169. I agree that if one of these antennas were a freebee or a gift for someone that it would definately be worth the time installing, but not if one has to buy it new for $169.

The PDL II (AV-122) on the otherhand is definately worth buying for $89 (if this is the correct price) and converting it to10 meters because the fiberglass spreader arms and the orbital gamma matching sections alone are probably worth $30-$40. Not to mention the mounting hardware, the #14 bare copper wire, and the boom itself.

1918. Gain of 1/4 vertical over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: ab6mb@my-deja.com
Message-ID: <8uc5j1$c6$1@nnrp1.deja.com>
Source record: 176875

I am going to be putting up a 1/4 verticals for 20 and 40 meters next to
a salt water slough. How much gain could I expect to get on my receive
and transmitt over the salt water?
I've seen various articles about the adavantages but I never really seen
a definitive answer on this.

Thanks!

Jeff

Sent via Deja.com http://www.deja.com/
Before you buy.

1919. Re: h a t r e d DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Gian Luca Cazzola <glcazzola@iol.it>
Message-ID: <UIgO5.16786$BF.563238@news.infostrada.it>
Source record: 176876

I agree, after being on this reflector from 2 years, that I havent seen anything interesting from Fractenna and his friends.
I now think that they have little knowledgement about antennas matter, and they like only to disturb this reflector sewing hate and the worst things.
So from some time I HAVE USED MY MICROSOFT
EXPLORER TO FILTER ALL FRACTENNA AND FRIENDS MESSAGES.

PLEASE ALL OM ON THE REFLECTOR FILTER THESE MESSAGES AND STOP REPLY TO THE MR. FRACTENNA, RETURNING THIS REFLECTOR TO AN ANTENNAS DISCUSSION FORUM.

PLEASE UNDERSTAND THAT THIS KIND OF PEOPLE NEED BE LEFT ALONE, HOPING THEY TAKE THE MEDICAL CARE THEY NEED.
By the way, I am going to filter also all message with "hatred" in the subject - hi!

73
Ian

"Jim Kelley" <jwkelley@uci.edu> ha scritto nel messaggio news:3A0858EA.D3FB9ED9@uci.edu...
>
>
> Fractenna wrote:
> > Hi Harry--
> >
> > On the contrary: I am unwilling to answer fractal antenna questions HERE by
> > design.
>
> Funny, you don't exhibit any such reticense to pontificate and deliver
> monologues. Perhaps you could try modifying the design to include things
> other than fractal antennas as well, to include lawsuits, firings,
> perceived abuse, and semitism to name just a few.
>
> This is a discussion group about antennas. To discuss, according to
> Websters, is to "investigate by reasoning or argument". Investigation
> is precisely what draws many of us to this discussion. If you do not
> wish to participate in the discussions of fractal antennas, then why do
> post to a discussion group?

1920. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <gv5j0t4t2kcacuoufh2f8e2prte5qkvetr@4ax.com>
Source record: 176877

On Tue, 07 Nov 2000 13:54:40 -0600, CAM <cam2338@bigfoot.com> wrote:

>Yep, that just means the 75m Hamstick is a lousy receiving antenna. :-)

Ok, you got me there. I've never used the 75 meter hamstick, only
40-10. It's probably a dummy load, but you have me curious. I think
I'll get one and see what happens. 75 can surprise you sometimes when
QRM is low.

73, Bill W7TI

1921. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <456j0tkovb8qpq5hi1ojgp7e2irsr9ph7o@4ax.com>
Source record: 176878

On Tue, 07 Nov 2000 19:09:15 -0500, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

> Have you ever wondered why a hamstick needs no impedance match
>at the feedpoint? Think about it.

The above statement is not true. An impedance matching coil is
available from the manufacturer and on 40 and 20 I can not get 1:1
without it.

73, Bill W7TI

1922. Re: Gain of 1/4 vertical over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001108145902.28165.00000367@ng-fp1.aol.com>
Source record: 176879

>I am going to be putting up a 1/4 verticals for 20 and 40 meters next to
>a salt water slough. How much gain could I expect to get on my receive
>and transmitt over the salt water?
>I've seen various articles about the adavantages but I never really seen
>a definitive answer on this.
>
>Thanks!
>
>Jeff
>

You can expect about 10 - 15 dB gain over inland verticals with average radial system and vertical pattern to reach down to horizon - very low angles.
See
http://pages.prodigy.net/k2kw/
by Team Vertical (and Force 12 bunch) about their experiences with verticals on the beach.
I just did some operating with simple verticals on the beach from Cape Hatteras during CQ WW phone on 10m and I am impressed!

73 and GL Yuri, K3BU
Tesla RC, N2EE

1923. Re: Gain of 1/4 vertical over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A09B27F.30AED75B@eznec.com>
Source record: 176880

Whenever you talk about gain, you have to include what the gain is relative to. If you're asking about how much gain you'll get relative to the same antenna over average ground, the answer depends on the elevation angle. At very low angles above the horizon, which are important for working DX, the gain will be considerable if the salt water extends for at least a few hundred feet beyond the antenna. A quick run with EZNEC on 40 meters, comparing salt water with average ground on 40 meters, shows about 10 dB at 5 degrees elevation angle, about 6 dB at 10 degrees, and 5 dB at 20 degrees. These assume that you have a very good ground radial system. If you have only a few radials, you'll pick up a bit more at all angles because the ground system loss will be less for the same number of radials when the radial system is just over salt water.

You can easily see this for yourself, and make other comparisons, with the free EZNEC demo program available from http://eznec.com.

Roy Lewallen, W7EL

ab6mb@my-deja.com wrote:
>
> I am going to be putting up a 1/4 verticals for 20 and 40 meters next to
> a salt water slough. How much gain could I expect to get on my receive
> and transmitt over the salt water?
> I've seen various articles about the adavantages but I never really seen
> a definitive answer on this.
>
> Thanks!
>
> Jeff
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1924. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: nannycam@iwvisp.com
Message-ID: <3a09aff3.16178907@news.iwvisp.com>
Source record: 176881

This is a very intersetin thread.
I have breen off of the low bands for a long time, and recently got a
IC-735. I'm using a G5RV in a vee configuration, and even pinched in a
horizontal vee facing East. I use it mostly on ten and forty, and get
excellent rteports. Low noise is a plus. I have a limited space, and
the rear of my residential property has high voltage lines, but it
still seems to work great. I don't know what I can do to improve on
it, but I'm listening, , , :-}~

==========

On Sat, 28 Oct 2000 16:13:45 -0500, Mark Keith <nm5k@wt.net> wrote:

>K4IA wrote:
>>
>> The auto tuner in my Icom 746 handles the G5RV just fine on all bands including
>> 30 meters where it isn't "supposed" to work. Your results may vary.
>
>You could be having cases where it could run awful hot though. And you
>can't really tell if it is or not.
>That would make me very nervous. The built in tuners pretty
>lightweight. And if it went south it would cost half a mint to fix.
>But... it's your radio..:/
>>
>> According to the folks at Radio Works, a G5RV is not very good in an inverted V
>> configuration when the angle of the legs is less than 140 degrees. Too much
>> radiation straight up. Check out www.radioworks.com Of course, if that is
>> all you can do, it is better than nothing. My G5RV is an inverted V and it
>> works OK but is being replaced this weekend with a ladder line fed
>> dipole.
>
>Hummm, I would think the height above ground would have more of an
>effect on the radiation. Even a flat top dipole will shoot straight up
>if low to the ground in WL. In a case like that the angle of the legs
>has little difference. And even an inv Vee with a 90 angle will show
>good low angle radiation if over 1/2 Wl high. MK
>--
>http://web.wt.net/~nm5k

1925. parasitic vertical array

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Lennart Grahn <lennart.grahn@iname.com>
Message-ID: <8ucf7c$9jd$1@nnrp1.deja.com>
Source record: 176882

Hello antenna people

I read some old postings in rec.radio.amateur.antenna. I search on a favourite subject: parasitic vertical array, and I see a thread that I started some 18 months ago.

The thread was:
"Anyone else experimenting with several verticals, one is feed"

At this time I am ready with three elements, all in line, distance 0.25 lambda and just the centre is feed. The band I am using is 40 meters.

The results are great, really great I should say.

Directional beaming is made by shorting one element with a capacitor. The other one is slightly longer than the centre element.

Achieved FB is equal with my 4 el yagi for 20 meter up about 18 meters. Gain compared to a single GP is noticeable. Received signal difference on long distance, when compared with a single GP or a delta loop is between 1-3 S units.

The single GP has fever radials than the array, about 36 compared to 72 for the array, for each element.

Forward direction may be S7-S8, and backward S1. (Best case, recorded on a normal ham receiver.)

Measured impedance at bottom of center element is about 22-24 ohm. Impedance matching is done.

The system did for some reason not produce any good FB when I had just two elements. The real kick was when I decide to work with three elements. With three elements it was possible to null away the back signal much, much better than with two elements.

It is very nice to be able to rapidly switch direction; to give me a indication of witch signals comes from northeast (UA9, JA, HL, VK, ZL ..), and which comes from southwest (Europe, and South America).

Now I can work them from my QTH, DX that I very seldom heard on 40 before.

I say, that vertical parasitic ground plane antennas, do work.

Best regards

SM2IXM
/Lennart

--
Lennart Grahn

�liden 25 home: lennart.grahn@iname.com
936 91 Skellefte� work: lennart.grahn@dataductus.se

Sent via Deja.com http://www.deja.com/
Before you buy.

1926. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A09BAF8.DD72D820@bigfoot.com>
Source record: 176883

Bill Turner wrote:

> Ok, you got me there. I've never used the 75 meter hamstick, only
> 40-10. It's probably a dummy load, but you have me curious. I think
> I'll get one and see what happens. 75 can surprise you sometimes when
> QRM is low.

Compared to a well-designed Bugcatcher, a 75m Hamstick will lower
far-field QRM by 12dB. :-)
--
http://www.mindspring.com/~w6rca

1927. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8uci8acbp1@nnrp1.deja.com>
Source record: 176884

In article <3A0891E0.B8B8467B@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:

> What we have here is a failure to communicate, and you are displaying
a
> lack of cognitive skill.
>

Great dodge! Good move to not address the subject.

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

1928. Re: [OT] [Fractal][Troll] Blue Chip versus Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001108175417.06903.00000426@ng-fy1.aol.com>
Source record: 176885

>From: Jim Pennino

>A common trait of the mentally ill is no sense of humor....

>Jim Pennino

Were you really laughing with him, Jim, or were you laughing at him? Many people can take a good ribbing, but the nature of the posts did not appear to me to be good natured ribbing at all...

Just an impartial observation.

73,
Ed Hare, W1RFI

1929. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001108175854.06903.00000427@ng-fy1.aol.com>
Source record: 176886

>From: Jim Pennino

>A common symptom of mental illness is to . . .

If you really believe that he is ill, do you think it is appropriate to keep sticking it to him? I wonder what that is a common sign of...

73,
Ed Hare, W1RFI

1930. Re: Gain of 1/4 vertical over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001108181446.13294.00000052@ng-fm1.aol.com>
Source record: 176887

>
>I am going to be putting up a 1/4 verticals for 20 and 40 meters next to
>a salt water slough. How much gain could I expect to get on my receive
>and transmitt over the salt water?
>I've seen various articles about the adavantages but I never really seen
>a definitive answer on this.
>
>Thanks!
>
>Jeff
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>

That depends, in part, in how good your GP is to start with.

The best you can do above a with perfect , infinite grounds is about 5.4 dBi(unless you raise your radials more than a bit).. That will peak at the horizon. In practice you will get within a dB or two of that with the proximity to sea water, and your launch angle will be approximately 10 degrees.

I would say, typically, you will experience a 3-5 dB gain compared typical grounds.

73
Chip N1IR

1931. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <39ncu8.1ep.ln@mail.specsol.com>
Source record: 176888

W1RFI <w1rfi@aol.com> wrote:
>>From: Jim Pennino

>>A common symptom of mental illness is to . . .

> If you really believe that he is ill, do you think it is appropriate to keep
> sticking it to him? I wonder what that is a common sign of...

> 73,
> Ed Hare, W1RFI

Yes, I really believe he is mentally ill.

No, I don't think it is appropriate to make fun of the mentally ill.

I think he is such a flaming, pompous ass, he is REALLY hard for me to ignore.

OK, I'll try harder.

Jim Pennino

1932. Re: [OT] [Fractal][Troll] Blue Chip versus Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2cncu8.1ep.ln@mail.specsol.com>
Source record: 176889

W1RFI <w1rfi@aol.com> wrote:
>>From: Jim Pennino

>>A common trait of the mentally ill is no sense of humor....

>>Jim Pennino

> Were you really laughing with him, Jim, or were you laughing at him? Many
> people can take a good ribbing, but the nature of the posts did not appear to
> me to be good natured ribbing at all...

> Just an impartial observation.

> 73,
> Ed Hare, W1RFI

Answered in the other thread.

Jim Pennino

1933. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <tkoj0tsap2edno3obfb77lbaufk2kc6ifu@4ax.com>
Source record: 176890

On Wed, 08 Nov 2000 14:43:36 -0600, CAM <cam2338@bigfoot.com> wrote:

>Compared to a well-designed Bugcatcher, a 75m Hamstick will lower
>far-field QRM by 12dB. :-)

No doubt correct, but for most casual mobile QSOs, -12dB (2 s-units)
is not a problem. I wouldn't go near a shootout with one though. :-)

73, Bill W7TI

1934. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001108184500.21104.00000405@ng-ff1.aol.com>
Source record: 176891

>
>W1RFI <w1rfi@aol.com> wrote:
>>>From: Jim Pennino
>
>>>A common symptom of mental illness is to . . .
>
>> If you really believe that he is ill, do you think it is appropriate to
>keep
>> sticking it to him? I wonder what that is a common sign of...
>
>> 73,
>> Ed Hare, W1RFI
>
>Yes, I really believe he is mentally ill.
>
>No, I don't think it is appropriate to make fun of the mentally ill.
>
>I think he is such a flaming, pompous ass, he is REALLY hard for me to
>ignore.
>
>OK, I'll try harder.
>
>Jim Pennino
>

This is a self-contradictory, personal attack by Jim Pennino against me

Why do we tolerate this??

On what basis , Jim, do you, or anyone else who claims I have some mental debility, feel that you have the right or expertise to make such assertions?

Are you aware that I have stated many times--including just the other day--that if someone wants to arrange and pay for a shrink from Maclean Hospital to meet with me I've said 'no problem'? As long as you pay== and the report is made public?

Why is this tactic of personal attack now concentrated on this fantasy of mental illness??

Why this obsession with ME, even when I don't participate in discussions?

NC

1935. 160M Dipole (Definite Erection :-))

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <3a09e484.64785532@news.erols.com>
Source record: 176892

Greetings,

Well, it's up. LOTS of compromises made. For one underestimated
available length I had because didn't take into account the "extra" length
needed for angle/elevation changes. Coulda had an honest 264ft. (Sigh)
but didn't realize until too late. Also, this left my wire ends 30ft. up in one
case and 50+ ft. in the other-- so had to tye down with rope and no insulators
otherwise. Too high up to reach and do anything else.

On the positive side, It's up !! Finally. 450 ohm ladderline is very
well soldered and secured so wind will strain center block, not 450 ohm.
Height there is 56 ft. The whole thing is zig-zag and dog-legged but that
never stopped the random from working well on certain bands Considering
lengthy rope, reasonably secure with some slack on ladderline in case
adjustments are needed later. Ladderline never within 4 inches of other metal.
Antenna more than 4ft. minimum from old random, usually much more..

A hunk of a Dominoes Pizza box is my window feed point for now and
will replace with plexi/wood whatever once I'm more settled in. Gnd is to old
8ft. that's about 18ft. from where rig will be and will pound another one down
closer in the by and by. (Better hurry, ground's getting cold--<grin>)

Might get tuned up tonite, but more likely the weekend and will report
back with test reports. Kinda nervous over so much effort, here's hoping ! Thx.
for all everyones help.

73,

Andrew
KG4JBM

1936. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <AGlO5.37$s83.5543@monger.newsread.com>
Source record: 176893

I missed the initial post and it is no longer on my server, but if you are talking about conduit, the PVC stuff works just fine. If you install your own underground service the power company requires it around here.

As for using it with coax, I'd install at least two inch and seal the joints.
When you put the stuff together run a nylon line through it so you will have a way to pull the coax through.

Each time you pull a coax through, tie a rope, or nylon line to the front so that you pull a new line in which will allow pulling in the next run(s).

I'm currently using a 30 foot run of 5 inch plastic sewer pipe with a 45 set up to drain into the sand backfill. So...any water that does get into the line is drained, rather than running on into the basement. Also the inlet points down with drip loops in all of the cables.

One thing I do is throw in a few mothballs and then plug the pipe at the basement end with a small towel. The towel keeps the breeze down to a minimum and the mothballs keep the critters out.

With the new tower, I'll be using three inch PVC conduit as there will be 7 runs of LMR 400, two runs of RG-6, and three runs of 8 conductor cable.

There is a version of LMR 400, (LMR-400U, I think) that has a gel in the braid for direct burial. Wish they'd had this stuff before I installed all the cable on the old tower.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"BillN6VLR" <billn6vlr@my-deja.com> wrote in message
news:8u9iblrva1@nnrp1.deja.com...
> In article <3A04AC72.DB2D5414@thegrid.net>,
> Paul Zander <paulz@thegrid.net> wrote:
> > I agree with the idea of using PVC. Use a big size so you can
> easily install a
> > second
> > run in the future. All the effort of digging, etc the cost of few
> feet of pipe
> > will be
> > a very worthwhile addition.
> >
> > If for some reason you don't use conduit, at least do something to
> help you
> > locate the cable

> > when you are digging. For example, cover the cable with a few inches
> of sand,
> > and then
> > put some of that yellow caution tape over that when you back fill the
> hole.
> >
> > Then when you are doing some gardening project, you can more easily
> avoid
> > cutting the
> > cable with a shovel.
> >
> > Paul AA6PZ
> >
> > Peter Bertini wrote:
> >
> > > "Al" <ABurzynski@swri.edu> wrote in message
> > > news:t00o8v7kvh8r21@corp.supernews.com...
> > > > Is all PVC coax cable buryable? If not, what characteristic makes
> coax
> > > cable
> > > > buryable? Specifically, I plan on getting an RG6 with quad
> shielding and I
> > > > plan to bury about 15 feet of it. All I know about the jacket is
> that it
> > > is
> > > > PVC.
> > >
> > > Use electrical PVC conduit to protect the cable. The conduit will
> also
> > > allow you to remove and replace the coax at will with out redigging
> the
> > > trench.
> > >
> > > Peter
> > >
> > > >
> > > > Thanks for any info.
> > > > Al
> > > > KA5JGV
> > > >
> >
> >
> In principle I agree 100% with Paul and Peter. On longer runs it is by
> far the best way to go. For only 15 feet though, the thought of having
> to retrench isn't that scary. Of course if the 15 feet is going to be
> covered with concrete or something then conduit is the way to go.
> BillN6VLR
>
>
> Sent via Deja.com http://www.deja.com/

> Before you buy.

1937. Re: parasitic vertical array

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: ardujenski@aol.com
Message-ID: <20001108185551.03177.00000425@ng-cq1.aol.com>
Source record: 176894

You may want to try this site for the OFFSET MULTIBAND TRAPLESS VERTICAL
usingone driven element on 40m and auto switching to 20 and either 17 or 15m.
It appeared in Oct 1995 QST and a correction appeared in Dec 1995.

http://www.qsl.net/zr1dq/antennas.htm

Alan KB7MBI in Woodinville, WA

1938. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A09E838.73F4@bellsouth.net>
Source record: 176895

Bill Turner wrote:
>
> On Tue, 07 Nov 2000 19:09:15 -0500, Jerry Oxendine
> <joxendi@bellsouth.net> wrote:
>
> > Have you ever wondered why a hamstick needs no impedance match
> >at the feedpoint? Think about it.
> ----------
OK, what does it do without the coil? I hear folks screaming 1:1, 1:1, etc and just can't stand it if they can't get below 1:4 or 5. The difference between the 2 figures is so minute that there isn't a SSM that will read it. That's OK, if it floats yer boat (no flames intended), but I never spend extra time trying to get down to 1:1. If it happens to go that low, fine. But it really ain't worth the trouble.

Even with the matching coil, the ham stick is a sorry antenna compared to the "big-ugly" ones. Here's why: There are 3 resistances your RF has to overcome to "launch" into the ether; feedpoint, coil, and radiation resistance. Can't be much done about radiation resistance, but something CAN be done about the other two. Say....you have 10 ohms of feedpoint (impedance) R, 30 ohms of coil resistance, and 8 ohms of rediation resistance. Totals up to right at 50 ohms, right? Trouble is, the major part of the total resistance is up in that "tiny" loading coil. The rig doesn't care WHERE it gets the 50 ohms from, but the fact is, in a hamstick, the largest resistance is up in the loading coil where it becomes an obstacle. Your RF is (a good bit) is wasted as heat! Since 1:1 is not that much different from 1:5, the coil in a hamstick is STILL inefficient--even at 1:1. Even a dummy load is often 1:1! LOL!

A high Q HF mobile antenna will exhibit low impedance (around 18 ohms or so), therefore they won't work without increasing the impedance at the feedpoint to match the load to the transmitter. Of course, the higher you go (the above example is at 75 meters), the less critical matching becomes. Generally speaking, a hamstick won't require matching. They usually will match, for the above reasons given.

The whole thing is really a question of how serious you are about mobiling. If it works fine for you, then it is fine. But if you ever test a hamstick against most other HF antennas, you can readily see how inefficient they are.

I have built quite a few screwdrivers-- which is a really great antenna for the serious mobile operator. The current one is a 3" version which approximates the old #66 Texas Bugcatcher coil. It is a fantastic per-

former. I get really good signal reports from stations all over. IMHO,
I would not consider a hamstick for a mobile antenna.

Best 73

Jerry
K4KWH

The above statement is not true. An impedance matching coil is
> available from the manufacturer and on 40 and 20 I can not get 1:1
> without it.
>
> 73, Bill W7TI

1939. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <pf0k0to086i95fe7n8jr4n6poivghodmhl@4ax.com>
Source record: 176896

On Wed, 08 Nov 2000 18:59:56 -0500, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>The whole thing is really a question of how serious you are about mobil-
>ing. If it works fine for you, then it is fine. But if you ever test
>a hamstick against most other HF antennas, you can readily see how in-
>efficient they are.

Agreed, but the original question was about finding an unobtrusive
antenna... not the most efficient. Everyone agrees that big and ugly
is most efficient. No question about it. Everyone who has used a
Hamstick also knows that they do work well enough to get out and make
contacts. It's a compromise, no argument there.

I have had a big, ugly, high-Q, homebrew antenna which worked VERY
well, and I have also had Hamsticks. I prefer the Hamsticks, but I
would never take one to a shootout. I'd get laughed out of town, but
on my way out I'd be working stations all over the country. I'm
happy.

73, Bill W7TI

1940. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <5t0k0tk1cdnshqqk9lfvdtf8kj3sjspn76@4ax.com>
Source record: 176897

On Wed, 08 Nov 2000 23:52:00 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>I missed the initial post and it is no longer on my server, but if you are
>talking about conduit, the PVC stuff works just fine.

PVC works fine UNLESS you have burrowing rodents. They'll chew right
through it.

73, Bill W7TI

1941. FS:CUSHCRAFT R7000 HF vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: john williams <ac6ts@n2.net>
Message-ID: <3A0A0782.9C027DE8@n2.net>
Source record: 176898

FS:CUSHCRAFT R7000 HF VERTICAL ANTENNA

Cushcraft 10, 12, 15, 17, 20, 30, 40 Meters HF antenna with
manual. Complete and in Good shape. Works great dx. This is a half wave
on
all above bands. 5 yrs old. Rated at 1500 watts. Has never had more than

100 watts run through it. Can roof mount etc. Has it's own radial system

built in with a small footprint. Already assembled, I broke it down into
3
sections for transport. Marked the joints with a felt marker for easy
setup.
This is a very GOOD antenna. I have too many overhead power lines to
safely
set up here at my home. Antenna is 24 ft. long.
Price is: $150.00 firm. Buyer must pick up in Escondido, Ca., North San
Diego
County. Sorry...I will not ship. Feel free to email any questions to me:

John Williams at ac6ts@n2.net or ac6ts@amsat.org

Thank you for reading.
--

PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

1942. OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Carl-Lisa Van Camp <thevancamps@interwebco.com>
Message-ID: <tKnO5.85$D_2.38955@news-east.usenetserver.com>
Source record: 176899

Sorry for the OT post, but I bet someone here knows: I'm trying to find a 50ohm-to-75ohm RF transformer that covers the FM broadcast band (88-108MHz). Ideally it would be BNC connectors in and out.

Goal: hook a 75 ohm antenna to a 50 ohm spectrum analyzer input. Anybody know where I can buy one of these?

TIA,
Carl Van Camp
Chicago

1943. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0A0F9C.1C5301FC@eznec.com>
Source record: 176900

I'd just put a 27 ohm resistor in series with the spectrum analyzer
input if I needed a matched termination, but I'd be surprised if that
would make any noticeable difference compared to just connecting it
directly (except a 3.7 dB reduction in signal strength).

Roy Lewallen, W7EL

Carl-Lisa Van Camp wrote:
>
> Sorry for the OT post, but I bet someone here knows: I'm trying to find a
> 50ohm-to-75ohm RF transformer that covers the FM broadcast band (88-108MHz).
> Ideally it would be BNC connectors in and out.
>
> Goal: hook a 75 ohm antenna to a 50 ohm spectrum analyzer input. Anybody
> know where I can buy one of these?
>
> TIA,
> Carl Van Camp
> Chicago

1944. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <qd6k0tguuv1993rp118rvd5gi0vt99iup6@4ax.com>
Source record: 176901

On or about 08 Nov 2000 23:45:00 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:
:This is a self-contradictory, personal attack by Jim Pennino against me
:
:Why do we tolerate this??
:
:On what basis , Jim, do you, or anyone else who claims I have some mental
:debility, feel that you have the right or expertise to make such assertions?
:
:Are you aware that I have stated many times--including just the other day--that
:if someone wants to arrange and pay for a shrink from Maclean Hospital to meet
:with me I've said 'no problem'? As long as you pay== and the report is made
:public?
:
:Why is this tactic of personal attack now concentrated on this fantasy of
:mental illness??
:
:Why this obsession with ME, even when I don't participate in discussions?
:
:NC

Because, NC, you bring up subjects, and when asked questions about
your vague points, you go ballistic and refuse to answer their
questions, instead pointing to a lame duck website that does not
contain the answers to the questions asked.

Through all this, you maintain an attitude of aloofness, superiority,
and cockiness which is, apparently, unwarranted.

From what I can tell these "attacks" didn't start happening until you
started baiting the NG, then refusing to answer questions..

Are we starting to see a trend here?

Just my two cents. Your mileage may vary.

-SSB

1945. Re: 10 Meter beam antennas!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: mdonovn <mdovovn2@bellsouth.net>
Message-ID: <S4pO5.8955$P85.42711@news3.atl>
Source record: 176902
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Paul,

You are exactly right about the vert portion. The reason I mentioned it is we set my Dad up with a Ten meter mobile. Besides his mobile, I noticed a lot of mobile stations with considerable better reception on the vert. This also helped in local FM modes. I never tried it DX on AM or FM though. It would be interesting.

It was a long time ago and I remember it was fun and challeging to mod this ant.

Mike

"Paul" <pvanasse@mail.direcpc.com> wrote in message
news:1NfO5.3614$925.119614@news.direcpc.com...
> Hello Mike:
>
> I agree with you about these antennas because I too had one in the
early70's
> and all that has to be done to modify them is to cut about about 4" off of
> each stainless steel radial end in addition to shrinking the circumference
> of the reflector loop by about 1'.
>
> However if one is to use the Moonraker 4 for 10 meter ham use, the
vertical
> half of the antenna is wasted because it doesnt get used (unless
contacting
> local 10 meter mobiles is considered). If one takes away the vertical use
of
> this antenna, all one has left is a 4 element horizontal quagi which can
be
> bought or homemade for alot less than $169. I agree that if one of these
> antennas were a freebee or a gift for someone that it would definately be
> worth the time installing, but not if one has to buy it new for $169.
>
> The PDL II (AV-122) on the otherhand is definately worth buying for $89
(if
> this is the correct price) and converting it to10 meters because the
> fiberglass spreader arms and the orbital gamma matching sections alone are
> probably worth $30-$40. Not to mention the mounting hardware, the #14 bare
> copper wire, and the boom itself.
>
>
>

1946. Re: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8ud6q6$6ma$1@iac5.navix.net>
Source record: 176903

If you are feeding a spectrum analyzer, just connect it up. The mismatch will be insignificant if you are looking at the FM band.

"Carl-Lisa Van Camp" <thevancamps@interwebco.com> wrote in message news:tKnO5.85$D_2.38955@news-east.usenetserver.com...
> Sorry for the OT post, but I bet someone here knows: I'm trying to find a
> 50ohm-to-75ohm RF transformer that covers the FM broadcast band (88-108MHz).
> Ideally it would be BNC connectors in and out.
>
> Goal: hook a 75 ohm antenna to a 50 ohm spectrum analyzer input. Anybody
> know where I can buy one of these?
>
> TIA,
> Carl Van Camp
> Chicago
>
>

1947. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0A2E66.444C737C@bigfoot.com>
Source record: 176904

Fractenna wrote:
> Why do we tolerate this??

Cuz we don't have any choice?
--
http://www.mindspring.com/~w6rca

1948. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0A2F75.6E316453@bigfoot.com>
Source record: 176905

Jerry Oxendine wrote:
> I would not consider a hamstick for a mobile antenna.

To be fair, they work pretty well 20m-10m. Check out the
bugstick on my web page.
--
http://www.mindspring.com/~w6rca

1949. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0A36EA.6F42@wt.net>
Source record: 176906

Bill Turner wrote:
>
> On Tue, 07 Nov 2000 13:54:40 -0600, CAM <cam2338@bigfoot.com> wrote:
>
> >Yep, that just means the 75m Hamstick is a lousy receiving antenna. :-)
> ----------
>
> Ok, you got me there. I've never used the 75 meter hamstick, only
> 40-10. It's probably a dummy load, but you have me curious. I think
> I'll get one and see what happens. 75 can surprise you sometimes when
> QRM is low.
>
> 73, Bill W7TI
You can always make a bigger coil for it. Thats what I did on one of
the sticks I have. "5 ft helical whip with a large coil halfway up, and
a 3 ft stinger". I'll take on any 8 ft bugcatcher or screwdriver with
it. I doubt you could see any difference. I've beat a few bugcatchers
that were not set up for maximum performance. Also a 75 meter hamstick
should be just as good at receiving as any other small vertical. The s/n
ratio should be about the same as a high q coil antenna. Now transmit
with the narrow helical windings, thats a different story. MK
--
http://web.wt.net/~nm5k

1950. want Antenna tuner Legal Limit+

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: w4th@webtv.net
Message-ID: <14588-3A0A3B13-59@storefull-107.iap.bryant.webtv.net>
Source record: 176907

I am looking for one of the following antenna tuners.
1. Dentron MT-3000a or 2000a
2. Heathkit 2060
3. Nye Viking
4. X Match
5. Harris
6. Ameritron ATR-30
7. Pal Star AT-4k
The tuner I am looking for must be able to withstand at least 2kw CW on 160 meters.
It must be able to tune balanced and unbalanced lines, and have a switch for selecting between the balanced or unbalanced antenna to be tuned.
I am not interested in any MFJ junk, or anything along those lines. I am not interested in any tuner that wont tune 160 meters. I am not interested in a tuner that has been hit by lightning or has signs of flashover inside the cabinet.
The tuner must be clean and in good working condition.
Thanks for your time and 73
Tom
W4TH

==========
Be sure to visit my web sites.
Tom's Tubes, Svetlana Amateur Radio Amp Tubes.
http://msnhomepages.talkcity.com/ClassifiedsCt/tomstubes/index.html

Ham Radio Homepage.
http://www.geocities.com/bamagramps/

1951. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Keith McQueen <kb7m@arrl.net>
Message-ID: <3a0a46e5_2@news.sisna.com>
Source record: 176908

They do exist, but probably not in the form that you are expecting. To do in-band duplex in the 2m band requires large tuned cavities. This is what we use to duplex a receiver and a transmitter to make a 2m repeater. This is the only common use in the ham bands. At commercial sites, they are occasionally used to duplex multiple transceivers onto a common antenna. Unfortunately, to buy these new, they are prohibitively expensive (for common use). For example, the 4 cavity duplexer on our club repeater cost over $1000!

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com...
> I have two, VHF radios. One for voice and one for packet cluster. I
> would like them to be able to share the same 2-meter antenna without
> manual switching. A 2-meter/2-meter duplexer would be nice, but I
> have never seen such an animal. Any ideas?
>
> Dick Hughes - W6CCD

1952. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8ub5k5$p29$0@208.207.71.152>
Source record: 176965

Fractenna wrote:
>
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001107060412.15485.00000159@ng-mj1.aol.com...
> >> >Mark,
> >> >How long have you been subscribed?? I have been watching with interest
> >the
> >> >parry and thrust of the Fractenna honcho and the rest of the thinking
> >group,
> >> >and its my opinion that Mr Cohen has been deliberately evasive in order
> >to
> >> >stir up interest in his airy fairy idea, maybe you should look back and
> >read
> >> >the postings, and then make you comment.
> >> >John McLean VK2KCE
> >> >
> >> >> > > Congratulations you turkeys. You've taken someone whose done
> >something
> >> >positive
> >> >> > > and through jeaolusy and hatred changed his life. You are to be
> >> >pitied.
> >> >> > >
> >> >> > > Nathan Cohen has his position terminated on 1 Nov.
> >> >> >
> >> >> > Looks like the neo-Luddites won this round. It doesn't come out of
> >a
> >> >> > box ready to run, so kill it. So much for experimentation.
> >> >> >
> >> >> > I subscribed to this NG in hopes of seeing information on advances
> >> >> > in antennas, because Hams are historically famous for thinking
> >outside
> >> >> > the box.
> >> >> >
> >> >> > Instead I find a bunch of people who give rednecks a bad name.
> >> >> >
> >> >> > Bye.
> >> >> >
> >> >> > Mark L. Fergerson
> >> >>
> >> Hi Harry--
> >>
> >> On the contrary: I am unwilling to answer fractal antenna questions HERE

> >by
> >> design. However, as I have stated AT LEAST 12 times in the last year, I am
> >> happy to answer questions on the fractal antenna reflector:
> >>
> >> fractalantenna-subscribe@egroups.com.
> >> Thus I AM accessible on the web.
> >>
> >> The extraordinary abuse and hate filled atmosphere create here by a few
> >> individuals does not make it conducive to discuss anything creative or
> >> innovative.
> >>
> >> Harry, perhaps sincerely, you have a better suggestion which:
> >>
> >> 1) makes a scientist accessible;
> >> 2) prevents this abuse?
> >>
> >> Cordially,
> >>
> >> NC
> >If you are unwilling to answer questions HERE then don't bring the subject
> >up HERE. Bringing up a subject you are unwilling to discuss is just dumb
> >and literally invites abuse. Now you will probably give the reply, "How is
> >it my fault that others choose to insult me? Here is another case of the
> >innocent being blamed for others actions." That is BS and you know it, and
> >if you don't you need to grow up and figure out how the world works before
> >you interact with it any further or you are in for a lot of heart ache..
>
> From 1996-1999 I did just that. I answered questions on this NG. But I see no
> reason to continue to allow ANYONE to hold me up as a target. It is beyond
> human decency, as readily seen in recent weeks.
>
> No sir; I see no problem whatsoever making relevant info available on this
> forum, and guiding to another link to assure that objective and relevant
> discussions may continue.
>
> Thus although I am aware of your opinion and respect it, I cannot take your
> suggestion, as I have historically found it untenable.
>
> This concludes my discussion on my availability on the internet.
>
> Cordially,
>
> NC

You are a lying SOB, "doc".

1953. Re: Need a Rotor or service?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001108052357.06909.00000302@ng-fy1.aol.com>
Source record: 176966

There is also Craig, N8DJB.

www.rotordoc.com

He also warranties his work and has ben in business for about 22 years.

73 Doug

1954. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001108062548.19436.00000308@ng-ba1.aol.com>
Source record: 176967

>Last time I operated an HF rig mobile was back in the late '70's with an
>FT-101e sitting in the backseat of my Monte Carlo using a 20mtr Hustler on
>the bumper. I was very popular with the County Hunters back then as I drove
>through the hills of eastern Kentucky.
>
>Now, I have a fairly small vehicle (Honda Accord coupe) but I'm bound and
>determined to put an HF rig in it (probably the Icom 706mk2g). I spend
>several hours a day driving around and would love to have a rig to listen
>to. I've been looking at all the choices for HF antennas and can't get a
>grip on what will work the best for me. Obviously the big screwdriver ones
>will perform well, but can you picture one of these on my Accord? I can't.
>What do you recommend? An antenna that will work *and* look ok on my car?
>And, if it matters, I'm willing to spend the big bucks for what will do the
>job.
>
>Thanks for your advice,
>David, K4ZZR
>
>p.s. Just fyi, I've got a 1 1/4" ball hitch on the back of the car if that
>will help.
>
>
>
>
>
David,
I know you mentioned the IC 706MK2G, but the Yaesu FT 100 and the ATAS 100
would be an excellent combination for you. The ATAS 100 covers 70 cm/ 40 mtrs
with a diplexer. It if fully auto tunable with the rig. the antenna is only 48
inches retracted and I believe 62 inches fully extended at 40 meters. I
managed 60 contacts in 1 1/2 hours out of the mobile 2 weekends ago during the
contest on all of the HF bands, and contacts on 6/2/70 cm. Despite all of the
bad things you hear on the FT 100 ther are as many or more people that are
extremely happy with the FT 100. Great Rig and with the ATAS 100 it is one
fantastic mobile rig.
73 and Good Luck
de KG4FET Sandor Proud FT 100 User

1955. Such bitterness

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 00:00:00 UTC
From: A <euro1539@hotmail.com>
Message-ID: <escO5.41945$Iq3.378006@e420r-sjo2.usenetserver.com>
Source record: 176968

This is the first time I pay close attention to the postings in the group and... WOW! There seems to be a few individuals who have chosen this newsgroup as a platform to grace us with their personal inadequacies.

Hopefully, some of these profusely penned individuals will read this and decide to move on in life without further ado.

We will all learn from open, honest disagreement. From insults and degrading comments, we learn only about the author.

Please do not bother to contact me on the subject as I will not grace the naysayers with replies.

Best...

Michael

1956. FS: new roller inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 01:17:28 UTC
From: k9sqg@aol.com
Message-ID: <20001107201728.18669.00000252@ng-fk1.aol.com>
Source record: 176961

Circumstances make available a roller inductor listed previously. It is brand new, edgewound, silver plated, 24 uH, 20 Amps, 3 KW ++. Sells for $240 at Surplus Sales of Nebraska. Has a shaft at both ends. Double wiper so there are no "skips" causing the swr meter to spike while the inductor is being rotated. Has a geared potentiometer for a position indicator if you remote tune the coil. Has an end of rotation limit switch if you choose to remote control the coil. Price is $75 plus UPS, will not ship overseas.

Thanks for reading the posting.

73s,

Evan

1957. Re: Self Supporting Rohn 25G/Attn Doc!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 01:30:02 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <8uaaakham1@nnrp1.deja.com>
Source record: 176962

In article <3A089B02.2189@bellsouth.net>,
joxendi@bellsouth.net wrote:
> Doc,
>
> This thread brings up a question for me. My 25G is 60', non-guyed, 5
> feet in the ground, concrete, corner braced at 2 points to the house.
> It sits in a "L" shaped part of the house and braced on 2 sides. At
> 50', before I extended it, it stood thru Hurricane Hugo in '89. Do I
> have safety issues here? (Winds in that Hurricane were 96+ gusts).
>
> TNX,
>
> Jerry
> K4KWH
>

I'll dig out my Rohn spec book but I'll bet that a 60' tower in 5' of
concrete (how many yards?), with house brackets at two points is rated
for very high winds.

I had a 40' 25G with NO concrete -- it was on a base staked into the
ground -- eave bracket at 30' and it was rated at a lot of MPH with the
10 sq ft of antennas I had on it.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com http://www.deja.com/
Before you buy.

1958. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 01:51:54 UTC
From: n4jvp@ix.netcom.com
Message-ID: <3a09b0ce.21388426@ENEWS.NEWSGUY.COM>
Source record: 176963

On Tue, 07 Nov 2000 13:44:56 -0600, CAM <cam2338@bigfoot.com> wrote:

>Floyd Sense wrote:
>> If Mike claims that some users have reported a 10 dB gain compared to a
>> dipole, I take that to mean that users have told him they have seen that
>> gain figure in relation to dipoles installed at their location. What's
>> wrong with passing that information along?
>
>What's wrong, indeed. It simply is NOT TRUE. I assume that Mike knows it is
>not true, yet he passes it along anyway. IMO, that's snake oil marketing.
>"I didn't say it, they said it." Give us a break, Floyd. If someone says
>they can catch a .357m bullet in their teeth, are you going to pass that
>on as the truth? Mike should drop the "super-gain" stuff and admit that
>the highest possible gain of a two element beam over a dipole at the same
>height is about 5dB. IMO, he is simply trying to make a buck at the expense
>of ignorant hams. The Hexbeam is an excellent antenna that can stand on its
>own merits. Why must snake oil marketing techniques be employed?

Why not work smart instead of hard and take this up with Mike
directly?

1959. Looking for Force 12 & KLM 80M3 manuals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-08 07:00:11 UTC
From: Bryan <radio_club@usa.com>
Message-ID: <8uatimtbm1@news.omnitel.net>
Source record: 176964

I'm looking for the Force 12 & KLM 80M3 antennas manuals or detail
description (dimensions).
Best regards, Bryan.

1960. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <JbGO5.325$Qk2.46987@newsread1.prod.itd.earthlink.net>
Source record: 176769

I'll end this thread here. You're ignoring the facts entirely. As you can see in my quote which you included below, the gentleman said that "some users have reported a 10 dB gain.....". He did not say: "This antenna will give you a 10 dB gain compared to a dipole." Do you not see the difference ?? I know for a fact that his statement is absolutely true because I called many of the hams on his list of reference sales and they told me the same thing. I didn't take their claims literally, but understood that they saw "pretty good" gain in relation to their other antennas. If I were to follow your modeling derived rules, I would come to the conclusion that EVERYTIME I measured a two element beam compared to a dipole, I would see a 5 dB difference, assuming I accurately measured the difference. On a test range, you could undoubtedly measure the result you claim, but, in a real station, you'd be hard pressed to see that exact difference on even one single contact.

I don't know where you've been for the last 20 years, but marketing in America is based on the ignorance of the prospective customers. The difference between you and I is this: You read the claims, declare them to be impossible or untrue, and brand the seller a liar and snake-oil salesman. How in the hell do you ever buy anything these days? I read the claims, make an intelligent judgement as to the degree of truth after subtracting the marketing hype, and then buy or don't buy. I don't take the time to tell everyone else that the seller is a liar.

We are in agreement on the "super-gain" business.

K8AC
Floyd Sense - Angier, NC
"CAM" <cam2338@bigfoot.com> wrote in message
news:3A085BB8.7BE9714E@bigfoot.com...
> Floyd Sense wrote:
> > If Mike claims that some users have reported a 10 dB gain compared to a
> > dipole, I take that to mean that users have told him they have seen that
> > gain figure in relation to dipoles installed at their location. What's
> > wrong with passing that information along?
>
> What's wrong, indeed. It simply is NOT TRUE. I assume that Mike knows it
is
> not true, yet he passes it along anyway. IMO, that's snake oil marketing.
> "I didn't say it, they said it." Give us a break, Floyd. If someone says
> they can catch a .357m bullet in their teeth, are you going to pass that
> on as the truth? Mike should drop the "super-gain" stuff and admit that
> the highest possible gain of a two element beam over a dipole at the same
> height is about 5dB. IMO, he is simply trying to make a buck at the
expense

> of ignorant hams. The Hexbeam is an excellent antenna that can stand on
its
> own merits. Why must snake oil marketing techniques be employed?
> --
> http://www.mindspring.com/~w6rca

1961. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8ufb02$p2p$1@bob.news.rcn.net>
Source record: 176770

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:n4GO5.392$s83.38974@monger.newsread.com...
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Bill Turner" <w7ti@jps.net> wrote in message
> news:5t0k0tk1cdnshqqk9lfvdtf8kj3sjspn76@4ax.com...
> > On Wed, 08 Nov 2000 23:52:00 GMT, "Roger Halstead" <rdhalste@tm.net>
> > wrote:
> >
> > >I missed the initial post and it is no longer on my server, but if you
> are
> > >talking about conduit, the PVC stuff works just fine.
> > ----------
> > PVC works fine UNLESS you have burrowing rodents. They'll chew right
> > through it.
>
snip

> Particulary here in the north, with stony soil and the freeze and thaw
> cycles, PVC is likely to get a nick in the jacket which will allow water
to
> migrate along the braid. That will eventually destroy the braid.
>
> Having said all that, I've used straight PVC in direct burial for years
> (with no problem), but as of late I've been installing it in conduit. > >
73, Bill W7TI
>
>
I mentioned using PVC several posts back, but, that was in reference to the
gray electrical PVC conduit sold at Graybar and other electrical
distributors,
which is designed for protecting direct burial electrical cables. The PVC
reference I had made was to the conduit material, not the coaxial jacket..

73

Pete

1962. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001109181913.23040.00000690@ng-cr1.aol.com>
Source record: 176771

>....or it is a cynical offer that could never be met.<

THE most fundamental value within the mental health field is confidentiality. A rare naughty psychiatrist may cross the line and sleep with an especially needy (and delicious) client, but none would ever publically disclose anything concerning a "psych eval" without handfulls of court papers and drawn guns pointed at their heads! The offer exceeds absurdity. You can't buy what's not for sale.

RIck K!BQT

1963. WTB: military antennas and related equipment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: steve4621@aol.com
Message-ID: <20001109182424.04021.00000035@ng-fn1.aol.com>
Source record: 176772

Got any antennas or green bag stuff? I collect and use the portable antennas in the field. Let me know what you have and how much, by email only. Thanx Steve

1964. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0B31E0.E1AA4EC6@bigfoot.com>
Source record: 176773

Floyd Sense wrote:
> I'll end this thread here. You're ignoring the facts entirely. As you can
> see in my quote which you included below, the gentleman said that "some
> users have reported a 10 dB gain.....". He did not say: "This antenna will
> give you a 10 dB gain compared to a dipole." Do you not see the difference?

There's a slight difference. Instead of being a man and claiming 10dB gain,
he blaims it on "users" when he knows those users don't know what they are talking
about. If a "user" reported being able to fly to the moon in a Piper Cub, would
he also publish that as the truth?

> ?? I know for a fact that his statement is absolutely true because I called
> many of the hams on his list of reference sales and they told me the same
> thing.

And if you don't know they were either lying or ignorant, I feel really sorry
for you.

> I didn't take their claims literally, but understood that they saw
> "pretty good" gain in relation to their other antennas.

If their claims were not taken literally, why were they published literally?
It reminds me of the SGC ad where they claimed their mobile antenna system
would punch holes in the laws of physics.

> I were to
> follow your modeling derived rules, I would come to the conclusion that
> EVERYTIME I measured a two element beam compared to a dipole, I would see a
> 5 dB difference, assuming I accurately measured the difference.

5dB is approximate. But it is certainly not 5dB plus or minus 5dB.

> I don't know where you've been for the last 20 years, but marketing in
> America is based on the ignorance of the prospective customers.

Lying to ignorant prospective customers is not my idea of ethical treatment
of your fellow man. You must be a democrat. :-)
--
http://www.mindspring.com/~w6rca

1965. Re: MFJ 1910

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: jgboyles@aol.com
Message-ID: <20001109183507.28589.00000590@ng-bk1.aol.com>
Source record: 176774

Thanks Cecil,
Actually I was looking on the mfj web site and the online catalogs for the major Ham Radio outlets and could not find it. Just looked at my paper mfj catalog and no luck, but no" Amateur Radio Trader" either. Guess I should call mfj, but it is odd that no online references anywhere for what I consider a very desirable product. Assume 1910 is a valid part number. I want one!
73 Gary N4AST

1966. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001109185115.06618.00000437@ng-fz1.aol.com>
Source record: 176775

Troll, troll, trollllllllllll

1967. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109185030.27660.00000675@ng-cu1.aol.com>
Source record: 176776

>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001109142211.15882.00001304@ng-fi1.aol.com...
>> >
>>
>> Let me get this straight:
>>
>> I didn't ask you to respond--incorrectly--when I pointed out that the
>Puente
>> work is not the first with fractal elements.
>
>I don't recall asking you to make the following statements:
>
>> 3) The top manager of a competing antenna company--which has previously
>> demonstrating tangible and undesired interest in my affiliate-- has gone
>out of
>> his to exploit a point of trivial scientific interest into one that
>> deliberately tries to question my credibility and knowledge base.That
>person
>> uses words like "fractal"; "arbitrary"; "random"; "electrically small";
>and so
>> on, in incorrect and /or misleading contexts with the intent to discredit
>me.
>> It is noteworthy that this person has aided at least one individual in the
>> aforementioned copyright violation;
>
>
>>You volunteered to do so; I,
>> cordially, corrected and explained, and now you want to stop.
>>
>> Is that it?
>>
>> If so, the answer is obvious: sure!
>>
>> NC
>
>Given that your wording is a bit ambiguous, are you agreeing to the
>following:
>
>1) That you will not directly or indirectly respond to any of my posts.
>2) That you will not directly or indirectly mention or refer to me or my
>company (AGAIN)
>3) That you will stop the insults.
>
>In return, I will not respond to any of your posts and I will not discuss

>fractal antennas on this NG.
>
>Is the answer yes or no?
>
>Steve
>
>

I don't want you or ANY ONE ELSE to stop talking about fractal antennas. If you want to then go ahead! I WILL exhort you to be accurate and precise and not spread misinformation.

I will NOT accept harassing and libelous statements and personal attacks from anyone.

If your comments are motivated by business and NOT science, then I will continue to make this clear.

It seems to me if no problem is produced then no solution is necessary.

I don't mind or care what you say, as long as it is technically accurate (or attempts to be), relevant, not of a personal nature nor one targeted at a competing firm.

Doesn't this make sense?

Cordially,

NC

1968. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109185321.27660.00000677@ng-cu1.aol.com>
Source record: 176777

>THE most fundamental value within the mental health field is confidentiality.
>A
>rare naughty psychiatrist may cross the line and sleep with an especially
>needy
>(and delicious) client, but none would ever publically disclose anything
>concerning a "psych eval" without handfulls of court papers and drawn guns
>pointed at their heads! The offer exceeds absurdity. You can't buy what's
>not
>for sale.
>
>RIck K!BQT
>

I am not aware that a patient's medical records are meant to be confidential if the patient chooses them to be public. Can you explain this?

73
Chip N1IR

1969. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <k_GO5.53$g5.278799@news.ntplx.net>
Source record: 176778

Dennis Ferguson <dennis@wawa.juniper.net> wrote:

> Ah, average ground would do it. The ground absorption is greater at
> near-normal angles of incidence than at glancing angles, so the nulls would
> get shallower at higher elevation angles.

I had figured that if we are going to talk about antenna gain over ground, then real ground would be a better choice of modeling, especially after I had tossed out the figure of 4 dB for typical ground gain. I see why perfect ground was brought into the discussion when the discussion changed context a bit, but my example was not intended to be perfect ground.

73,
Ed Hare, W1RFI

1970. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <EXGO5.52$g5.278422@news.ntplx.net>
Source record: 176779

Fractenna <fractenna@aol.com> wrote:

> If your comments are motivated by business and NOT science, then I will
> continue to make this clear.

By what method will you determine that his comments are motivated by
business, other than the fact that they might be, so they must be...

73,
Ed Hare, W1RFI

1971. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <k%GO5.54$g5.278874@news.ntplx.net>
Source record: 176780

Dennis Ferguson <dennis@wawa.juniper.net> wrote:

> If R is very large compared to 2h, then 2h/R->0 and E1 is equal to
> Ei. If R->infinity, which is apparently where NEC computes its far-field
> patterns, then the ratio E1/Ei is always 1 and does not depend on the
> (finite) value of `h'.

There's that pesty near-field/far-field problem again. :-)

73,
Ed Hare, W1RFI

1972. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Y0HO5.55$g5.278908@news.ntplx.net>
Source record: 176781

Richard Harrison <richardharrison@webtv.net> wrote:

> If I pick a as 3 feet for my 3 GHz which was a little under 3 feet long,
> for grins, and plug it in the formula, (the lambda is 0.333 feet), I get
> about 86 feet. I think Ed`s 22,777 feet is excessive.

Perhaps you have lost sight of the original premise -- that if you want to measure the pattern of an antenna over ground, you need to be in the far field and the calculation of the far-field distance needs to take into account the height above ground of the antenna for D in the far-field formula.

73,
Ed Hare, W1RFI

1973. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8ufgpg$15me$1@news.gate.net>
Source record: 176782

Thanks everyone for your help.....I was sufficiently swayed by many of your replies and have ordered the IC-706MK2g and the HS-1500 (all black) to match my Honda Accord. Pretty expensive but it sure looks like a quality product.

I always get great advice in this newsgroup.

73,
David, K4ZZR

1974. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A0B4BCB.6DEF45EE@hiwaay.net>
Source record: 176783

Rick- It is impolite to talk in a language the person being referenced
does not understand. You are clearly talking about ETHICS, and , equally
clearly, from past performance, NC does not understand that concept.

(Besides, the Moon is almost full !)

Hope this helps.

Bill

Rick Littlefield wrote:
>
> >I am not aware that a patient's medical records are meant to be confidential
> if
> the patient chooses them to be public. Can you explain this?<
>
> You don't get full access either--only recommendations which you, and not the
> physician, may elect to disclose. If someone is really nutso, their doctor may
> be very careful and circumspect about what he or she discloses to the client.
>
> Your lack of awareness of this issue is...well...your lack of awareness of this
> issue.
>
> Rick K1BQT

1975. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0B4FC1.42C0@bellsouth.net>
Source record: 176784

Mark,

Just a few comments. I agree with you that you can't beat a bugcatcher
or large dia. loading coil for best performance. There are, however,
<<some>> disadvantages, and that primarily comes from the fact that
coil antennas are fixed-tuned. Due their high Q, they are more easily
affected by their surroundings. So as you move along past power lines,
water tanks, cell towers, and other vehicles, it may become detuned--
at least until you get away from the object that was causing the condi-
tion. The other thing is the "jumper" or tap that one has to use to
change bands. Even though the turns below the tap are bypassed, these
turns still exhibit <<some>> loading. This can cause trouble. Usually
it is a minor thing, but, in my case, I have had a bugcatcher that would
not resonate on a certain band because of the "backlash" (for lack of a
better term) caused by those "shorted" turns. Nothing I could do.
So, there ARE times when a screwdriver just "might" beat a bugcatcher
due to the agility of the thing. In other words, where the bugcatcher
might be rendered temporarily useless by its environment, the screw-
driver could continue on virtually unabated with a touch of the switch,
placing it back in resonance since it can compensate for changes. After
all, you can't exactly jump out onto the trunk and retune at 65 per!
LOL! I've had this very thing happen lots of times; in QSO and a big
truck pulls alongside detuning my antenna. Just a touch on the switch
and I'm right back in business! Love "dem" screwdrivers! LOL!

BTW, I made a screwdriver that is roughly the same size as the old Texas
Bugcatcher #66 coil. It is 3" in dia, giving me roughly the same high
Q as the BC, and the convenience of the SD. Works great! You know,
BIG'n'Ugly! LOL!

73

Jerry
K4KWH

Mark Keith wrote:
>
> Patrick Jankowiak wrote:
>
> >
> > Can anyone enlighten me about 'big ugly' antennas? Are these the ones
> > I see with a 4"-5" diameter by 12" tall center mounted loading coil
> > and a large top hat?
> >
> Thats a bug catcher. Been around for years, and I still think overall
> the best you can use. I prefer them over screwdrivers for outright brute

> performance. Usually the coil is a little better on the bugcatchers, and
> also you can add a capacity hat which will let you use less turns of the
> coil to tune. Less coil loss.
>
> > I know that in my CB radio days, the 108" whip was the best thing
> > going, if you didn't mind a big antenna.
>
> Sure, a loaded short vertical of any type will never be as good as the
> full 1/4 wave whip. Only in very rare cases might the loaded whip do
> better due to a better ground plane from being on top of the car.
> "Compared to a bumper mount 102 whip". MK
> --
> http://web.wt.net/~nm5k

1976. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13489-3A0B55AB-85@storefull-114.iap.bryant.webtv.net>
Source record: 176785

Dennis Ferguson wrote:
Actually, I think your way doesn`t compute with respect to conservation of energy.

I agree that confining the energy that would fill a sphere to a hemisphere doubles the energy density due to the confinement. A 3db gain is achieved over isotropic radiation.

But, the energy from an antenna 180 wavelengths above ground is spread far and wide before it reaches the ground. There is nothing to focus the energy on the ground space directly under the antenna, and the energy certainly is not columnated as is laser light. The volts per meter and the watts per square meter are greatly reduced at ground level. The energy available to an image antenna is significantly reduced.

Remember that the image antenna should behave exactly as an actual antenna would in the virtual position were that perfect ground removed and replaced with a real parasitic antenna. Scratch the parasitic if the antenna is driven against ground.

Why is a Yagi reflector placed 0.1 to 0.3 wavelength behind the driven element? Would it receive the same excitation at a distance of 180 wavelengths? You know the answers.

In arrays where all the elements are driven, we can adjust the current ratios to suit ourselves. That isn`t true in parasitic arrays without adjusting spacing between the elements.

Radiation from the image of a dipole 180 wavelengths above earth doesn`t begin to equal the radiation from the elevated dipole. No violation of energy conservation rules are in volved. Only geometrical spreading is involved.

I`ll give you a microwave example.
You may have seen what used to be a common sight. It is called a periscope antenna. A rather large dish on the ground, stub tower, or top of the radio shack, would be aimed at a reflector at the top of the tower, most often at about 45 degrees, to direct signals horizontally along the microwave path. Very large dishes were often needed to focus the microwaves so that the first Fresnel zone of energy would all hit the reflector. Without the focus of energy on the reflector most of the energy would be wasted in useless directions. Spreading of the energy is great at great distances such as 180 wavelengths unless rather heroic measures are taken to prevent wide dispersion.

Best regards, Richard Harrison, KB5WZI

1977. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <n6mfu8.544.ln@mail.specsol.com>
Source record: 176786

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
> Fractenna <fractenna@aol.com> wrote:

>> If your comments are motivated by business and NOT science, then I will
>> continue to make this clear.

> By what method will you determine that his comments are motivated by
> business, other than the fact that they might be, so they must be...

> 73,
> Ed Hare, W1RFI

You aren't seriously expecting a rational answer to this are you?

Jim Pennino

1978. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <FqJO5.60$g5.286961@news.ntplx.net>
Source record: 176787

Richard Harrison <richardharrison@webtv.net> wrote:

> My contention is that the gain and directivity of my 3 GHz rhombic at 60
> feet can be considered as an antenna in free space as microwave antennas
> normally are. At that elevation over smooth ground, the horizon is about
> 11 miles away. The "near field" extends only a small percentage of that
> distance.

I think I see the reason for some of the differences of opinion here, Richard. I am thinking antennas that are primarily used for ionospheric propagation and you are thinking of antennas that are primarily used for line of sight. In that case, one does need to think of ground differently. In the case of the ionospheric propagation, one is mainly concerned with radiation towards the ionosphere. This radiation is determined, for any specific propagation angle, by the direct ray from the antenna and a ground reflection that takes place at a specific point. If one is determining the antenna pattern of such an HF antenna over ground, one must consider the effect of that ground to obtain a realistic estimate of the actual gain of the antenna. That gain can be used in various propagation prediction methods to estimate signal strength to a distant point. One cannot measure the actual gain at any elevation angle without including the ground reflection and one must be in the far field to do it. Under those circumstances, my caution that one must include the antenna height above ground to determine the far-field distance is correct. The point where the signal will be received is >> 2D^2/lambda, where D is the height of the antenna above ground or the distance between the antenna and the reflection point.

Your example for a microwave antenna is somewhat different, with the direct ray from the antenna that is useful generally being toward the horizon, and the reflection point being, as a first approximation for antennas of equal height, midway on the path. In this case, however, the point where the signal is being received is NOT >> 2D^2/lambda from the distance between the antenna and reflection point, so one cannot really make measurements in the far field at all, at least not the far field of the interaction between the antenna and ground, so thinking in terms of the fresnel reflections makes a lot more engineering sense.

In either case, however, the gain of the antenna between the source antenna and the receptor antenna is generally going to be different than free space conditions. Using EZNEC, I modeled a 100 MHz half-wave dipole in free space and placed a half-wave dipole 1000 meters away, with a 72 ohm load resistor in the center. I used EZNEC to calculate the power that would be induced in the load resistor when 1000 watts was applied to the first dipole in free space, with both dipoles 1 wavelength above ground, with both dipoles 100

wavelengths above ground and with both dipoles 100.5 wavelenghts above ground. I found the following, expressed in dBkW:

free space 1 lambda 100 lambda 100.5 lambda
-77.7 dB -115.5 -76.99 -95.78

The last two are not errors. Running with smaller steps:

ht in wavelenghts
fs 100.0 100.1 100.2 100.3 100.4 100.5 100.6 100.7
100.8 100.9 101.0
-77.7 -76.99 -78.68 -80.98 -84.25 -89.43 -95.78 -89.21 -84.10 -80.8
7 -78.60 -76.98

The free-space path loss over a 100 wavelenght path is calculated to be -82.15 dB. Adding 4.30 dB (2.15 dBi * 2) gives a calculation of -77.85 dB -- quite close to the -77.7 dB predicted in this case by EZNEC. Clearly, too, even in this "line of sight path," the effect of ground gain can be seen as the loss drops to slightly less than the free-space path loss.

Note the close comparison between the 100.0 and 101.0 figures (not surprising, I would expect a similar repeating pattern at 1 wavelenght height intervals). I didn't have time to do this coupled energy calculation for all different heights, but at a number of heights I tried at random, I saw very different amounts of coupling.

I also kept the heights contant at 100 wavelenghts and moved the receptor antenna from 1000 to 1001 wavelenghts away in -2 wavelenght increments. I found:

distance in wavelengths
1000 1002 1004 1006 1008 1010 1012 1014 1016 1018 1020
-77.0 -75.7 -74.7 -73.9 -73.7 -72.9 -72.6 -72.4 -72.3 -72.5 -72.7

Yes, the attenuation between the two antennas does indeed decrease as the distance increases, at least over the range calculated, showing the effect of the ground reflection that is taking place at the point between the two antennas. Although the variatio is small enough that most folks would consider this to be "far field," as one got closer to the antenna, one would see wider and wider swings, until one would see a large enough deviation from far field conditions to consider the point to be within the radiating near field. (One is no longer equidistant from the various parts of the antenna influencing the pattern, including its ground reflection.)

In all cases, both the far-field pattern (as previously calculated) of the half-wave dipole at ~100 wavelengths above ground and the calculated coupling between two half-wave dipoles located ~1000 wavelengths apart at ~100 wavelenghts above ground very much varied with height -- even at this height, the antennas do not act as if they are in free space, other than the fact that the mutual coupling between the antenna and the ground, or its image antenna (depends on how you want to see it) is not sufficient to change the antenna impedance as the height is varied..

Now, the effect with a very high-gain array will be much less, because the high-gain array generally directs << energy downward to interact with the earth, so your original statement may be reasonably valid in that context.

Now, under what circumnstances does one consider the ground reflection in dertermining performance? If one is discussing the performance of an antenna, under some circumstances, it is more clear to discuss that antenna performance in terms of free-space gain (dBi or dBd -- either is fine by me; they are precisely related to each other.) Under other circumstances where one is more concerned with the performance of the antenna in situ, the interaction of the antenna with the ground should, IMHO, be part of the evalaution of the antenna system. In cases of evaluating a communications system, including antenna and propagation between the two points, ALL aspects of the system should be considered. The valid reason to include ground gain with the antenna system is that one can then specify power in terms of EIRP (which WOULD include the real gain given by the ground under an antenna system) and path loss (free space or ionoshperic) and thus obtain a valid answer for received signal strength. One cannot obtain that from a free-space antenna gain under any circumstances under which the presence of ground affects the peformance of the antenna. From the models I have run, it appears that such interaction is part of many antenna systems.

73,
Ed Hare, W1RFI

> I can measure the gain and directivity outside the near field and inside
> the path grazing distance. I will be susceptible to the ground
> reflection at my measurement location, but can screen it out. This is
> practical because I don`t have to move around my rhombic to measure, I
> can rotate the tiny rhombic. Or, I may choose some other technique to
> get rid of the reflected ray.
>
> But, measurement wasn`t my initial goal. I already knew what to expect
> from the rhombic if it were reasonably clear of the ground. That was
> specified by the designer. I advised the questioner that were he to
> build the 10-meter rhombic, the 11 db gain figure wouldn`t be accurate
> because of the influence of the ground. The same would be true of a yagi
> or most other antennas.
>
> Another questioner facetiously asked how he could fit a rhombic in a
> small space, and I responded he might scale it down by a factor of 100
> and operate it at 3 GHz. But by not reducing the height, he should get
> the advertized 11 db gain.
>
> At so many wavelengths above ground, the current and impedance into the
> rhombic will be very nearly the same as if the antenna were at any
> greater altitude, even way out in space.
>
> What happens between a direct ray and a reflected ray at a point 11
> miles away has nothing to do with the antenna`s characteristics, but
> with the characteristics of the path at the reflection point.

>
> What signal a receiver gets from the combined contributions of the
> direct and reflected signals depends on the difference in distances each
> has traveled and conditions at the reflection point where the signal
> grazes the earth.
>
> There are various opinions on the extent of the near field. There is no
> hard and fast definition because it ends where you decide it is no
> longer a problem to you.
>
> Best regards, Richard Harrison, KB5WZI
>

1979. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <qumfu8.544.ln@mail.specsol.com>
Source record: 176788

Rick Littlefield <k1bqt@aol.com> wrote:
>>....or it is a cynical offer that could never be met.<

> THE most fundamental value within the mental health field is confidentiality. A
> rare naughty psychiatrist may cross the line and sleep with an especially needy
> (and delicious) client, but none would ever publically disclose anything
> concerning a "psych eval" without handfulls of court papers and drawn guns
> pointed at their heads! The offer exceeds absurdity. You can't buy what's not
> for sale.

> RIck K!BQT

When the "offer" was first made I seriously considered taking him up on it
and establishing a formal fund (lawyer, trust account, the whole enchilada)
figuring if only a percentage of those that thought he needed it would kick
in $10 or so, we could get him an evaluation and at least a couple of months
treatment just about anywhere.

Then the reality of the impossibility of the second part of his "offer" sunk
in and I dropped the idea.

Seems there is yet another part of the real world the Chipster has no
knowledge of; probably thinks you can get 8X10s of your head x-ray to prove
you have a brain...

Jim Pennino

1980. Re: ARRL videotape course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <oKJO5.65$g5.287620@news.ntplx.net>
Source record: 176789

Charles Hunter <"crhunter"@(nospam)idirect.com> wrote:

> Disabled person wishes to purchase used ARRL videotape technician or
> General course to learn electronic theory for ham radio.

> The courses are currently not available from the ARRL.

> Please remove (nospam) from the address to reply by email.

Charles, I offered a few suggestions to you. Did they not pan out? If not, then I don't think that anyone has video tapes based on the present question pool. You may want to clarify that you are willing to use video courses based on the old question pools.

73,
Ed Hare, W1RFI

1981. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <CPJO5.66$g5.287883@news.ntplx.net>
Source record: 176790

Richard Harrison <richardharrison@webtv.net> wrote:

> But, the energy from an antenna 180 wavelengths above ground is spread
> far and wide before it reaches the ground. There is nothing to focus the
> energy on the ground space directly under the antenna, and the energy
> certainly is not columnated as is laser light. The volts per meter and
> the watts per square meter are greatly reduced at ground level. The
> energy available to an image antenna is significantly reduced.

Yes, but the reflection still takes place. Now, at significant height, the reflected energy will not affect the currents in the "driven element" antenna to any significant degree, but when you go arbitrarily far from the antenna >> the near field region, the reflected signal and the direct signal have traveled virtually the same distance, so they are attenuated by the same amount -- ie, they are at the same strength. Therefore, they can add up in or out of phase. The resultant "ground gain" would be 6 dB over perfect ground.

73,
Ed Hare, W1RFI

1982. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <FTJO5.67$g5.288074@news.ntplx.net>
Source record: 176791

Jim Pennino <jimp@mail.specsol.com> wrote:

> When the "offer" was first made I seriously considered taking him up on it
> and establishing a formal fund (lawyer, trust account, the whole
enchilada)
> figuring if only a percentage of those that thought he needed it would
kick
> in $10 or so, we could get him an evaluation and at least a couple of
months
> treatment just about anywhere.

> Then the reality of the impossibility of the second part of his "offer"
sunk
> in and I dropped the idea.

Are you saying that spending $10 to help someone get an evaluation and treatment is not a good thing unless you also get to share the results of that evaluation publically? It appears to me that the goal here is more focused on the sharing of the information publically. Let me ask you this, if you could get the evaluation and share it publically, but not offer any of the help and treatment you state is needed, would you still be "dropping the idea?" ...

73,
Ed Hare, W1RFI

1983. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4348-3A0B6785-79@storefull-111.iap.bryant.webtv.net>
Source record: 176792

Ed Hare, W1RFI wrote:
"Perhaps you have lost sight of the original premise--".

In my formula for the extent of the far field:
d = 3.18 a^2 / lambda.
a is the effective antenna area in square feet.
d is the extent of the near field in feet.

I calculated 86 feet for the extent of the near field for my rhombic at 3GHz. The wavelength is 1/3 foot.

My rhombic is on a 60-ft pole. This is about 180 wavelengths. There is no antenna height term in my formula because this is usually not relevant in microwaves. Relevant reflections usually come from miles away, well out of the near field.

What is the near field? It is a region near the antenna containing significant reactive energy in addition to radiant energy. The reactive energy returns to the antenna. The radiant energy does not return but continues on into the far field never to return. Strength of the reactive energy decays very rapidly. This means the near field can`t extend very far because it declines so rapidly by comparison with the radiation field that it soon pales by that comparison.

I think one would be hard pressed to detect any reactive energy from my little 3GHz rhombic at 22,777 feet (4.3 miles) in any direction.

My original premise was not to measure the pattern of an antenna over ground. It was almost the opposite. I had said that a 10-meter rhombic 60 feet over ground would have its gain affected by the ground. Then I said, that a scaled version for 3GHz would have nearly its 11 db free space gain at the same 60 foot altitude.

I think that statement is accurate. It agrees with my countless observations of microwave antennas on countless paths and antenna heights over the years.

Best regards, Richard Harrison, KB5WZI

1984. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <ajrm0t4j06odeh5mi88t22c5bainv5gn0f@4ax.com>
Source record: 176793

Hrm...

Since wel, the newsgroup, as a group, are the injured party, why don't we collectively hire Sam Bernstein, or some other lawyer who handles these types of cases, and sue NC, PhD in civil court for the damages caused by his purportedly fraudulent statements. We would, of course, have to prove fraud. We could devvy up the award based on how much each of us contributed monetarily to the effort. ::snicker::

But what do I know? I'm just a dumbass truck drivin CB'er, who doesn't know the first thing about antennas.

-SSB

On or about Thu, 09 Nov 2000 19:57:19 GMT, rwclark@seanet.com (Richard Clark), using the forum rec.radio.amateur.antenna did say:

:On Wed, 08 Nov 2000 22:31:04 -0500, sideband <sideband@cac.net> wrote:
:
:>
:>Because, NC, you bring up subjects, and when asked questions about
:>your vague points, you go ballistic and refuse to answer their
:>questions, instead pointing to a lame duck website that does not
:>contain the answers to the questions asked.
:>
:>Through all this, you maintain an attitude of aloofness, superiority,
:>and cockiness which is, apparently, unwarranted.
:>
:>From what I can tell these "attacks" didn't start happening until you
:>started baiting the NG, then refusing to answer questions..
:>
:>Are we starting to see a trend here?
:>
:>Just my two cents. Your mileage may vary.
:>
:>-SSB
:
:Hi OM,
:
:You are too kind.
:
:Let's all remember that time, oh so long ago (a month or two?) where
:numerous claims of technical issues protected by patent pending were
:being made?
:
:Talk about topics dropped like a hot potato.

:
:The patent process is one of full disclosure where no one can claim
:ignorance of the outcome. If the PTO sends you a letter of allowance,
:you know exactly what will be published, there is no justification for
:making claims that are unsupported by the process already fully
:revealed. The PTO expresses quite clearly that the usage of Patent
:Pending is a felony, a FRAUD, if no such coverage exists.
:
:To judge by the refusal to accept this as a mental aberration can only
:lead one to believe that these frauds were willful and deliberate -
:and they were, as part of an act of hostility and open contempt of our
:members here in this forum. If this practice were exposed to his
:peers, it would be professional suicide. But such will never happen
:unless fraudtenna makes a point of circulating this message to
:accumulate damages to then falsely claim the privilege of the injured
:party (it is our group who is the injured party and this manipulation
:of the status of "victim" by fraudtenna is self-debasement).
:
:Thus you see why some topics are never broached again.
:
:73's
:Richard Clark, KB7QHC

1985. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8uftd3$s3g$1@slb0.atl.mindspring.net>
Source record: 176794

Very well said.
--
CW
KC7NOD
"Glenn Cummings" <kg7il@foxinternet.netDELETE> wrote in message
news:3A0AD8B7.B62AC6C1@foxinternet.netDELETE...
> I am an avid outdoors man and enjoy many outdoor activities. I actually
spend
> time in the woods, not just the 'paved' hiking trails used by our liberal
> urbanites. America is still very conservative, yet the liberal big cities
seem
> to try to represent America. Just watch the nightly news to see that the
view
> of america comes from crowded cities plagued with crime, crowding and
> socialistic attitudes.
>
> Why should we listen to those big cities? Why should an encroaching urban
area,
> coerce the suburbanite to yield to restrictive antenna convenants,
complain of
> the gun range noise they moved next to, or complain that the dairy farm
stinks?
>
> Many urbanites have no clue what the real world is like. I see urbanites
> voting on hunting, gun, trapping, land-use issues and continuing to
restrict
> the rights of people who actually own, use and understand the outdoors.
Why
> should urbanites that have totally destroyed their local environment,
paving
> everything in site, congesting the streets with their busses have any say
about
> the farmer, gold miner, radio amateur outside their ruined cities. If
they
> could return their city to a condition that even came close to the
suburbanite,
> then I might consider their voting opinion more valid. In the mean time,
I
> think that we would have to agree that most liberal urbanites seem to want
us
> to 'clean up our act' while they continue living as they see fit in their
> rights restricted, environmentally damaged, bus clogged city. These
liberals
> seem to be the ones who don't want to let me vote, but want to vote for me

and
> tell me how I should run my life.
>
> Let's put it another way, do you think that either Dan Rather or Tom
Brocaw
> really understand the issues that they spout from the teleprompter while
> showing an edited newsclip. Their Democrat mouthpiece, unfortunately, is
> thought to be objective or truthful my the many Americans that spend their
day
> working to support their wonderful families and don't have the time to
research
> the truth.
>
> Although born and raised in the North, I trust that Texas farmer who owns
land
> and invests wisely. As far as 'no vote'... It truly is Bush who trusts
the
> American people, not a big government who divides the people, causing
racial
> and economic fighting, then while we are distracted bickering, take more
rights
> from us. I would ask you to think a bit more about your position. It may
have
> been formed, not by you, but by the liberal media.
>
> Now, let's work to keep our ham bands in the next WARC, to keep and
enhance
> PRB-1, keep our RF power capabilities and our right to mobile
communications.
>
> And a quick word of advice.... If you don't like some of the things Bush
has
> done, just use some of the same excuses that you used to defend
Clinton/Gore.
> At least you would appear consistent.
>
> Glenn
>

1986. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8ufu1acjc1@iac5.navix.net>
Source record: 176795

Well said Sir! However, You will probably be flamed by the city dwelling preteens as a redneck.
"Glenn Cummings" <kg7il@foxinternet.netDELETE> wrote in message news:3A0AD8B7.B62AC6C1@foxinternet.netDELETE...
> I am an avid outdoors man and enjoy many outdoor activities. I actually spend
> time in the woods, not just the 'paved' hiking trails used by our liberal
> urbanites. America is still very conservative, yet the liberal big cities seem
> to try to represent America. Just watch the nightly news to see that the view
> of america comes from crowded cities plagued with crime, crowding and
> socialistic attitudes.
>
> Why should we listen to those big cities? Why should an encroaching urban area,
> coerce the suburbanite to yield to restrictive antenna convenants, complain of
> the gun range noise they moved next to, or complain that the dairy farm stinks?
>
> Many urbanites have no clue what the real world is like. I see urbanites
> voting on hunting, gun, trapping, land-use issues and continuing to restrict
> the rights of people who actually own, use and understand the outdoors. Why
> should urbanites that have totally destroyed their local environment, paving
> everything in site, congesting the streets with their busses have any say about
> the farmer, gold miner, radio amateur outside their ruined cities. If they
> could return their city to a condition that even came close to the suburbanite,
> then I might consider their voting opinion more valid. In the mean time, I
> think that we would have to agree that most liberal urbanites seem to want us
> to 'clean up our act' while they continue living as they see fit in their
> rights restricted, environmentally damaged, bus clogged city. These liberals
> seem to be the ones who don't want to let me vote, but want to vote for me and
> tell me how I should run my life.

>
> Let's put it another way, do you think that either Dan Rather or Tom
Brocaw
> really understand the issues that they spout from the teleprompter while
> showing an edited newsclip. Their Democrat mouthpiece, unfortunately, is
> thought to be objective or truthful my the many Americans that spend their
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> working to support their wonderful families and don't have the time to
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> the truth.
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> Although born and raised in the North, I trust that Texas farmer who owns
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> and invests wisely. As far as 'no vote'... It truly is Bush who trusts
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> American people, not a big government who divides the people, causing
racial
> and economic fighting, then while we are distracted bickering, take more
rights
> from us. I would ask you to think a bit more about your position. It may
have
> been formed, not by you, but by the liberal media.
>
> Now, let's work to keep our ham bands in the next WARC, to keep and
enhance
> PRB-1, keep our RF power capabilities and our right to mobile
communications.
>
> And a quick word of advice.... If you don't like some of the things Bush
has
> done, just use some of the same excuses that you used to defend
Clinton/Gore.
> At least you would appear consistent.
>
> Glenn
>
> Rich Griffiths wrote:
>
> >
> > If Bush had his way, you would have no vote. His would be the only name
on
> > the ballot.
> >
> > And you think he's for personal freedoms?
> >
> > ... Rich
>

1987. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A0B8443.3626543D@hiwaay.net>
Source record: 176796

Ed, I think you missed the point- Chip has put a condition on the deal that cannot be met- therefore, the intent of the givers is not even a consideration. It is a very sly "catch 22" situation.

An ethical therapist cannot divulge the results of his evaluation in this manner- therefore the requirement of publication cannot be met- therefore no matter how many of us put up, and no matter what our motivation is, we cannot arrive at a contract. It is not in our power. However, he can now say that he made an offer that we would not meet. We cannot even ignore the publication condition, because we did not include it.

Hope this helps.- Bill

"Ed Hare, W1RFI" wrote:
>
> Jim Pennino <jimp@mail.specsol.com> wrote:
>
> > When the "offer" was first made I seriously considered taking him up on it
> > and establishing a formal fund (lawyer, trust account, the whole
> enchilada)
> > figuring if only a percentage of those that thought he needed it would
> kick
> > in $10 or so, we could get him an evaluation and at least a couple of
> months
> > treatment just about anywhere.
>
> > Then the reality of the impossibility of the second part of his "offer"
> sunk
> > in and I dropped the idea.
>
> Are you saying that spending $10 to help someone get an evaluation and
> treatment is not a good thing unless you also get to share the results of
> that evaluation publically? It appears to me that the goal here is more
> focused on the sharing of the information publically. Let me ask you this,
> if you could get the evaluation and share it publically, but not offer any
> of the help and treatment you state is needed, would you still be "dropping
> the idea?" ...
>
> 73,
> Ed Hare, W1RFI

1988. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <lf0gu8.23e.ln@mail.specsol.com>
Source record: 176797

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
> Jim Pennino <jimp@mail.specsol.com> wrote:

>> When the "offer" was first made I seriously considered taking him up on it
>> and establishing a formal fund (lawyer, trust account, the whole
> enchilada)
>> figuring if only a percentage of those that thought he needed it would
> kick
>> in $10 or so, we could get him an evaluation and at least a couple of
> months
>> treatment just about anywhere.

>> Then the reality of the impossibility of the second part of his "offer"
> sunk
>> in and I dropped the idea.

> Are you saying that spending $10 to help someone get an evaluation and
> treatment is not a good thing unless you also get to share the results of
> that evaluation publically? It appears to me that the goal here is more
> focused on the sharing of the information publically. Let me ask you this,
> if you could get the evaluation and share it publically, but not offer any
> of the help and treatment you state is needed, would you still be "dropping
> the idea?" ...

> 73,
> Ed Hare, W1RFI

No, I am saying that Chip attached a condition on his offer that is impossible
to be met. No reputable doctor would release such information to anyone.

I didn't initiate this, Chip did. I considered calling his bluff until
I realized it is impossible to meet his conditions.

Jim Pennino

1989. Re: Sharing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0B8C99.9B@wt.net>
Source record: 176798

OPSEC@opsyhopsy.com wrote:
>
> x-no-archive:yes
>
> The students at BU might be interested in this discussion. There
> was an article on the subject in the campus newspaper. It's in the
> archives at - -
>
> http://www.bu.edu/bridge/archive/1998/12-11/features3.html
>
> The campus newspaper is The Bridge. You can email them at <bridge.
> bu.edu>

Hummmmm, Looks like the beaver to me. I wonder what Ward and June would
think about all this. MK
--
http://web.wt.net/~nm5k

1990. Radials for mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Mike Zerbe <zerbe@pioneer-net.com>
Message-ID: <fnMO5.50570$mu4.94569@dfw-read.news.verio.net>
Source record: 176799

I have a mobile 20 meter antenna that I want to put on the roof of my house. Any suggestions for an inexpensive ground plane and best way to attach the antenna to the roof. Mike - KA7CGI

1991. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A0B983B.DB318B4@haertig.com>
Source record: 176800

As others have pointed out, it probably doesn't matter very much whether
you have a bit of mismatch.

Perhaps Roy could answer this question:
How good is the impedance match on a Tektronix SA over its rated
frequency range anyway? Is it any better than the minimal mismatch
between 75 and 50 ohms?

Another thing to consider is that if you are using a wideband antenna as
the source, it probably isn't exactly 50 ohms over its useful frequency
range either, so there is probably already a mismatch at the antenna terminals.

However, if you want to be exact, the easiest way to do the match would
be with a minimum loss resistive pad. In most applications using a
spectrum analyzer, additional loss is not a problem as long as you know
what that loss is.

Good luck!

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1992. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0BA1F3.718BD0C3@eznec.com>
Source record: 176801

Gray Frierson Haertig wrote:

> . . .
> Perhaps Roy could answer this question:
> How good is the impedance match on a Tektronix SA over its rated
> frequency range anyway? Is it any better than the minimal mismatch
> between 75 and 50 ohms?
>. . .

As of 1991, the latest Tek catalog I have, Tek's lowest priced spectrum analyzer (2710) has a maximum input VSWR of 1.5:1 (with 10 dB or more attenuation), exactly what you'd get with a 75 to 50 ohm mismatch. However, it's specified to be flat within +/- 1.5 dB when driven with a precisely 50 ohm source, regardless of its input Z. So a different source impedance would degrade its flatness. Most of the other SAs are specified at 1.3:1 max up to 2.5 GHz.

Roy Lewallen, W7EL

1993. seeking schematic for marantz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: louis <lou1@primenet.com>
Message-ID: <8uduan$q0l$1@nnrp2.phx.gblx.net>
Source record: 176819

hi

does anyone have a schematic of a marantz 2325 stereo?
if so please email me

thanks

louis

--
==========
email: lou1@primenet.com

1994. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109071729.23295.00000054@ng-ff1.aol.com>
Source record: 176820

>
>On or about 08 Nov 2000 23:45:00 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:
>:This is a self-contradictory, personal attack by Jim Pennino against me
>:
>:Why do we tolerate this??
>:
>:On what basis , Jim, do you, or anyone else who claims I have some mental
>:debility, feel that you have the right or expertise to make such assertions?
>:
>:Are you aware that I have stated many times--including just the other
>day--that
>:if someone wants to arrange and pay for a shrink from Maclean Hospital to
>meet
>:with me I've said 'no problem'? As long as you pay== and the report is made
>:public?
>:
>:Why is this tactic of personal attack now concentrated on this fantasy of
>:mental illness??
>:
>:Why this obsession with ME, even when I don't participate in discussions?
>:
>:NC
>
>Because, NC, you bring up subjects, and when asked questions about
>your vague points, you go ballistic and refuse to answer their
>questions, instead pointing to a lame duck website that does not
>contain the answers to the questions asked.
>
>Through all this, you maintain an attitude of aloofness, superiority,
>and cockiness which is, apparently, unwarranted.
>
>From what I can tell these "attacks" didn't start happening until you
>started baiting the NG, then refusing to answer questions..
>
>Are we starting to see a trend here?
>
>Just my two cents. Your mileage may vary.
>
>-SSB
>

I don't seem to recall going 'ballistic'. Its not part of who I am, so for you to characterize me in this way is more than a bit pejorative ,and over the top. In other words, here we go with yet more abuse.

Here are the facts, relative to events in recent weeks:

1) At least two individuals, who publicly post on this NG, have deliberately violated copyright law. This obligated me, as the injured party, to point out the trespass publicly, as their information on the availability was made publicly;

2) At least two other individuals have gone out of their way to make anti semitic-based comments and deliberately incite others, with false, misinformation-based comments. In fact, these 'blame the victim' tactics have had no small effect in inciting others. The bizarre and injurious trend of late has been to publicly label me as "mentally ill" and to go over the top by presenting this misinformation to those I work with; customers; and others. It has led to a change in my position ,which was a major change in my life, with very serious effects on my potential income and career progress. Basically it is a witch hunt.The objective is to alienate me , as well as 'label me'--falsely;

3) The top manager of a competing antenna company--which has previously demonstrating tangible and undesired interest in my affiliate-- has gone out of his to exploit a point of trivial scientific interest into one that deliberately tries to question my credibility and knowledge base.That person uses words like "fractal"; "arbitrary"; "random"; "electrically small"; and so on, in incorrect and /or misleading contexts with the intent to discredit me. It is noteworthy that this person has aided at least one individual in the aforementioned copyright violation;

4) The abuse goes on whether I am here or not. It is an obsession for some. I find it fundamnetally distasteful and beyond any acceptable level of human decency.

These, "SSB", are the facts. Nothing you can do or say can change them. The BEST you can do is be quiet and stop harassing me.

Cordially,

NC

1995. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109072048.23295.00000055@ng-ff1.aol.com>
Source record: 176821

>p.net>
>
>Nah, N for no, C for credibility' or is it 'No Cordiality:
>
>You have enough trouble with your own bs-cutting, such as describing '5
>years' and now '2 posts', as 'many', to concern yourself overly with others.
>Adding to what Rick Littlefield wrote, 'Peek-a-boo, eyes on you. Deja tells
>a tale or two.'
>
>Before your next sally into revisionist history, see:
>
>http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html
>
>Another thing: stop your gratuitously insulting attempt to think for 'all'.
>Cede us the right that you would undoubtedly claim for yourself.
>
>Just 'give it a try'.
>
>K3BHJ

Could you be so kind as to indicate the inaccuracy of these dates? They really say it all:

First public talk on fractal element antennas: Nathan Cohen --October 1994.

First publication on fractal element antennas: Nathan Cohen--August 1995.

What dates , so presented by Puente, supercede these?

With Best wishes,

Chip N1IR

1996. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <16cKOtRddcfTP72LDChwHNMhaRx0@4ax.com>
Source record: 176822

"Carl-Lisa Van Camp" <thevancamps@interwebco.com> wrote:

>Sorry for the OT post, but I bet someone here knows: I'm trying to find a
>50ohm-to-75ohm RF transformer that covers the FM broadcast band (88-108MHz).
>Ideally it would be BNC connectors in and out.
>
>Goal: hook a 75 ohm antenna to a 50 ohm spectrum analyzer input. Anybody
>know where I can buy one of these?
>
>TIA,
>Carl Van Camp
>Chicago
>

Radio Shack has all kinds of matching devices for FM and TV antennas.
They *might* have a 50-75 ohm matcher. Wouldn't hurt to call and ask.

Bob
k5qwg

1997. Re: want Antenna tuner Legal Limit+

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A0AD015.8A0A9CD4@qth.com>
Source record: 176823
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

HI Tom, just checking...have you come up with any 8874s? Let me know...73
murray

[One or more binary attachments are retained only in the source text.]

1998. It goes on and on and on ....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <dazO5.5402$mq1.375002@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176824

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109071729.23295.00000054@ng-ff1.aol.com...
> >
>
> <SNIP>
>
> 3) The top manager of a competing antenna company--which has previously
> demonstrating tangible and undesired interest in my affiliate-- has gone
out of
> his to exploit a point of trivial scientific interest into one that
> deliberately tries to question my credibility and knowledge base.That
person
> uses words like "fractal"; "arbitrary"; "random"; "electrically small";
and so
> on, in incorrect and /or misleading contexts with the intent to discredit
me.
> It is noteworthy that this person has aided at least one individual in the
> aforementioned copyright violation;
>
> <SNIP>
>
> Cordially,
>
> NC

NC:

I was really hoping that we had a deal. I was willing to live up to my word and not respond to your posts or bring up the subject of fractal antennas again. I assume that the terms of my deal were not acceptable to you.

You complain about people "attacking" you and then you turn around and do the same or worse to other people on the newsgroup. What happened in my case, did you just have to get in a few more jabs? A bit more libel and slander? Couldn't just let it end quietly?

Above, you claim that I try to question your credibility and knowledge base. I simply disagree with some of your technical statements. Here's what you actually say about me: "I am convinced that 99% of your arguments are predicated on incomplete understanding of some basic concepts."

Let's discuss some basic concepts and the technical knowledge base, of which you claim yourself to have superiority. In your previous post to me, you made the following technical claim regarding electrically small antennas:

>
"Wheeler defined electrically "small" for an antenna which fits within its radiansphere, which has diameter pi/2 radians. That is a 1/4 wavelength."
>

WRONG!!!

Harold Wheeler defines an electrically small antenna as one which occupies a volume of less than a radian sphere, i.e., a sphere of radius, r = wavelength / 2 pi. The diameter of this sphere would therefore be d = wavelength / pi, NOT, pi/2 radians. The radian sphere expressed in wavelengths r(wavelengths) = 1 / 2 pi (1 radian), NOT 1/8 wavelength. The diameter of the radian sphere is actually 2 radians (NOT pi/2 radians) if we consider that electrically, wavelength = 2 pi radians. It's called a radian sphere because it has a radius of 1 radian.

The radian sphere is actually a bit larger than you claim. However, there is more to the definition of electrically small antennas than just physical size or the radian sphere, i.e., current distribution in the case of electrically small loops. Most engineers assume that the radian sphere is an upper physical boundary and that an electrically small antenna is one such that 2 pi r << 1, where r is the radius of the antenna volume expressed in wavelengths.

Want to discuss knowledge base, technical credibility or understanding of basic concepts in more detail?

As suggested by others on the newsgroup, you should be more willing to engage in a discussion rather than dismissing others with claims of superior knowledge and understanding. It would also help if you didn't just dismiss others as being wrong simply because they disagree with you. Like ALL of US, you are sometimes wrong too.

Would you like to go back to the deal, or continue this foolishness?

Steve

1999. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <PczO5.5403$mq1.374271@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176825

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109071729.23295.00000054@ng-ff1.aol.com...
> >
>
> 3) The top manager of a competing antenna company--which has previously
> demonstrating tangible and undesired interest in my affiliate-- has gone
out of
> his to exploit a point of trivial scientific interest into one that
> deliberately tries to question my credibility and knowledge base.That
person
> uses words like "fractal"; "arbitrary"; "random"; "electrically small";
and so
> on, in incorrect and /or misleading contexts with the intent to discredit
me.
> It is noteworthy that this person has aided at least one individual in the
> aforementioned copyright violation;
>
>
> These, "SSB", are the facts. Nothing you can do or say can change them.
The
> BEST you can do is be quiet and stop harassing me.
>
> Cordially,
>
> NC

The BEST you can do is be quiet and stop harassing me.

2000. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <QhzO5.5407$mq1.374557@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176826

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109072048.23295.00000055@ng-ff1.aol.com...
> Could you be so kind as to indicate the inaccuracy of these dates? They
really
> say it all:
>
> First public talk on fractal element antennas: Nathan Cohen --October
1994.
>
> First publication on fractal element antennas: Nathan Cohen--August 1995.
>
> What dates , so presented by Puente, supercede these?
>
> With Best wishes,
>
> Chip N1IR

How about these ones:

C.Puente, "Fractal Design of Multiband Antenna Arrays", Elec. Eng. Dept.
Univ. Illinois, Urbana-Champaign, ECE 477 term project, Dec.1993.

1993, November. The potentiallity of fractal arrays to become multifrequency
arrays is introduced by C.Puente at the University of Illinois at
Urbana-Champaign during a graduate course discussion.

1994. Some prelimar ideas on multiband fractal arrays are presented by
C.Puente at an URSI meeting in Las Palmas, Gran Canaria, Spain. Further work
on such ideas gives place to a paper that is submitted to the IEEE
Transactions on Antennas and Propagation in May 1994, and published in May
1996.

1995, May. After several months working on the invention of the Sierpinski
antenna, the Universitat Polit&#65533;cnica de Catalunya finally applies for the
patent on Fractal and Multifractal Antennas . Such results proved the
feasibility of fractals to become multiband antennas (i.e., antennas that
keep the same parameters at several frequency bands). A paper reporting the
first results is submitted to IEE Electronics Letters.

C.Puente, R.Pous, J.Romeu, X.Garc&#65533;a, "Antenas Fractales o Multifractales",
Invention Patent, n&#65533;: P-9501019. Presented at the Oficina Espa&#65533;ola de
Patentes y Marcas. Owner: Universitat Polit&#65533;cnica de Catalunya, May 1995.

2001. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ujzO5.5409$mq1.375270@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176827

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109072048.23295.00000055@ng-ff1.aol.com...

Would you like to agree on the following deal:

.. I will not respond to any more of your posts on this topic nor will I
mention fractal antennas
again on this newsgroup under the following conditions:

1) You don't directly or indirectly respond to any of my posts.
2) You don't directly or indirectly mention or refer to me or my company.
3) You stop the insults.

Steve

2002. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uefjassj0@208.206.142.113>
Source record: 176828

Fractenna wrote:
>
> >p.net>
> >
> >Nah, N for no, C for credibility' or is it 'No Cordiality:
> >
> >You have enough trouble with your own bs-cutting, such as describing '5
> >years' and now '2 posts', as 'many', to concern yourself overly with others.
> >Adding to what Rick Littlefield wrote, 'Peek-a-boo, eyes on you. Deja tells
> >a tale or two.'
> >
> >Before your next sally into revisionist history, see:
> >
> >http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html
> >
> >Another thing: stop your gratuitously insulting attempt to think for 'all'.
> >Cede us the right that you would undoubtedly claim for yourself.
> >
> >Just 'give it a try'.
> >
> >K3BHJ
>
> Could you be so kind as to indicate the inaccuracy of these dates? They really
> say it all:
>
> First public talk on fractal element antennas: Nathan Cohen --October 1994.
>
> First publication on fractal element antennas: Nathan Cohen--August 1995.
>
> What dates , so presented by Puente, supercede these?
>
> With Best wishes,
>
> Chip N1IR

Here you go, Romeo. More "research" than you ever wanted to show up on
rrap....

Enjoy. Maybe you'll finally actually learn something about the subject
and everyone else will see what a fraud you actually are...

A Brief Historical Review

The fractal design of antennas and arrays results from the blend of two aparently disjoint disciplines: electromagnetic theory and geometry. From the early spiral and log-periodic antennas developed in the early sixties by Carrel, Mayes et al, and from the works of Benoit Mandelbrot on fractal geometry, the fractal design of antennas appears as a natural way to explore for a multifrequency operation and for an antenna size reduction. This document reviews the development of such a novel concept and gives the reader some references for further reading.

Background

40's. L.J.Chu and H.Wheeler stablish a fundamental limit on the performance of small antennas.

60's. Several research teams at the University of Illinois at Urbana-Champaign, University of California and Ohio State University introduce the concept of frequency-independent antennas. The self-scaling concept gives place to the log-periodic dipole array and to the spiral antennas.

70's. B. Mandelbrot coins the term 'Fractal'. Such a name is used to describe a family of geometrical objects that defy the traditional rules of the Euclidean geometry. Later on, Mandelbrot states that such a weird fractal shapes are, in fact, among the most common forms in nature.

80's. D.Jaggard et al. coin the term 'Fractal Electrodynamics'. Electromagnetics and Fractal Geometry blend into a novel discipline. The interaction of fractal bodies and electromagnetic waves are investigated and some relationships between common fractal properties and the scattered electromagnetic waves are stablished.

90's. The first reported fractal multiband antennas are introduced by C.Puente et al. from the Universitat Politï¿½cnica de Catalunya. Also, the potentiallity of fractals to become small antennas is introduced by the same research team and by N.Cohen from the University of Boston.

Some Significant Milestones

1986-1993. Several authors theoretically investigate the relationships between fractal arrays and their array factors. Some fractal and array properties such as Fractal Dimension and Secondary Lobe Ratio are linked for the first time.

1993, November. The potentiallity of fractal arrays to become multifrequency arrays is introduced by C.Puente at the University of Illinois at Urbana-Champaign during a graduate course discussion.

1994. Some prelimar ideas on multiband fractal arrays are presented by C.Puente at an URSI meeting in Las

Palmas, Gran Canaria, Spain. Further work on such ideas gives place to a paper that is submitted to the IEEE Transactions on Antennas and Propagation in May 1994, and published in May 1996.

1995, May. After several months working on the invention of the Sierpinski antenna, the Universitat Politï¿½cnica de Catalunya finally applies for the patent on Fractal and Multifractal Antennas . Such results proved the feasibility of fractals to become multiband antennas (i.e., antennas that keep the same parameters at several frequency bands). A paper reporting the first results is submitted to IEE Electronics Letters.

1995, Summer. Some preliminar ideas on fractal small antennas are suggested by N.Cohen from the Boston University.

1996-1998. The first reported experimental results on fractal multiband antennas are published by the Electromagnetics & Photonics Engineering research team from the Universitat Politï¿½cnica de Catalunya.

1998. The Koch monopole becomes the first reported fractal small antenna that improves the features of some classical antennas in terms of bandwidth, resonance frequency and radiation resistance. Whether such antennas are bounded to the fundamental limits on small antennas is still a topic under investigation.

1998. The Fractal Team from the Electromagnetics & Photonics Engineering group (UPC), in cooperation with FractusTM the Fractal AntennasTM company from the Sistemas Radiantes F.Moyano S.A. group, develope the first commercial multiband fractal shape antennas for GSM + DCS cellular phone systems.

References

Fractal Shape Antennas

1.C.Puente, R.Pous, J.Romeu, X.Garcï¿½a, "Antenas Fractales o Multifractales", Invention Patent, nï¿½: P-9501019. Presented at the Oficina Espaï¿½ola de Patentes y Marcas. Owner: Universitat Politï¿½cnica de Catalunya, May 1995.
2.C.Puente,J.Romeu,R.Pous,X.Garcia, F.Benï¿½tez, ï¿½Fractal Multiband Antenna Based on the Sierpinski Gasketï¿½, IEE Electronics Letters, vol.32, no.1, pp.1-2, January 1996.
3.C.Puente, R.Pous, "Fractal Design of Multiband and Low Side-Lobe Arrays", IEEE Transactions on Antennas and Propagation, vol.44, no.5, pp.730-739, May 1996.
4.C.Puente,J.Romeu, R.Bartolomï¿½, R.Pous, ï¿½Perturbation of the Sierpinski antenna to allocate the operating

bandsï¿½, IEE Electronics Letters, vol. 32, no.24, pp. 2186-2188,
November 1996.
5.C.Puente, J.Claret, F.Saguï¿½s,J.Romeu, M.Q.Lopez-Salvans, R.Pous,
ï¿½Multiband properties of a fractal tree
antenna generated by electrochemical deposition,ï¿½ IEE Electronics
Letters, vol.32, no.5, pp. 2298-2299,
December 1996.
6.C.Puente, J.Romeu, R.Pous, A.Cardama, ï¿½Multiband Fractal Antennas
and Arraysï¿½, in Fractals in Engineering,
J.L.Vï¿½hel, E.Lutton, C.Tricot editors, Springer, New York 1997.
7.C.Borja, C.Puente, A.Medina, J.Romeu, R.Pous, ï¿½Modelo Sencillo para
el Estudio de los Parï¿½metros de Entrada
de una Antena Fractal de Sierpinskiï¿½, XII Simposium Nacional URSI,
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2003. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <pAzO5.5419$mq1.375966@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176829

Just to be sure, this is addressed to:

Nathan Cohen, PhD
Chip, N1IR
NC

Hopefully that covers everyone:

Would you like to agree on the following deal:

.. I will not respond to any more of your posts on this topic nor will I
mention fractal antennas
again on this newsgroup under the following conditions:

1) You don't directly or indirectly respond to any of my posts.
2) You don't directly or indirectly mention or refer to me or my company.
3) You stop the insults.

Steve

2004. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109105710.10882.00001236@ng-md1.aol.com>
Source record: 176830

>> Could you be so kind as to indicate the inaccuracy of these dates? They
>really
>> say it all:
>>
>> First public talk on fractal element antennas: Nathan Cohen --October
>1994.
>>
>> First publication on fractal element antennas: Nathan Cohen--August 1995.
>>
>> What dates , so presented by Puente, supercede these?
>>
>> With Best wishes,
>>
>> Chip N1IR
>
>
>How about these ones:
>
>C.Puente, "Fractal Design of Multiband Antenna Arrays", Elec. Eng. Dept.
>Univ. Illinois, Urbana-Champaign, ECE 477 term project, Dec.1993.
>
>1993, November. The potentiallity of fractal arrays to become multifrequency
>arrays is introduced by C.Puente at the University of Illinois at
>Urbana-Champaign during a graduate course discussion.
>
>1994. Some prelimar ideas on multiband fractal arrays are presented by
>C.Puente at an URSI meeting in Las Palmas, Gran Canaria, Spain. Further work
>on such ideas gives place to a paper that is submitted to the IEEE
>Transactions on Antennas and Propagation in May 1994, and published in May
>1996.
>
>1995, May. After several months working on the invention of the Sierpinski
>antenna, the Universitat Politi¿½cnica de Catalunya finally applies for the
>patent on Fractal and Multifractal Antennas . Such results proved the
>feasibility of fractals to become multiband antennas (i.e., antennas that
>keep the same parameters at several frequency bands). A paper reporting the
>first results is submitted to IEE Electronics Letters.
>

Nope. The EL manuscript by Puente et al. was submitted in October 1995. It does
not reference the earlier Cohen article, published in August 1995.

>C.Puente, R.Pous, J.Romeu, X.Garcï¿½a, "Antenas Fractales o Multifractales",
>Invention Patent, nï¿½: P-9501019. Presented at the Oficina Espaï¿½ola de
>Patentes y Marcas. Owner: Universitat Politi¿½cnica de Catalunya, May 1995.

>
>
>

Thank you for confirming my statements. I think it is important that one not get the false impression that Mr. Puente either worked on fractal antenna elements before me, nor that he published, nor produced prior art before me.

Clearly his work was on arrays, which has prior art in Kim and Jaggard's work in the mid 1980's and that of others as well. Later he switched to fractal elements.

Appreciate that!

73
Chip N1IR

2005. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4349-3A0AC6B9-4@storefull-111.iap.bryant.webtv.net>
Source record: 176831

Wes, N7WS wrote:
"The depth of the null is most certainly dependent upon the ground characteristics, but not the number of wave lengths above ground."

A wire over ground has an image in the ground. This makes an array of radiator plus image.

The resultant field at a point (n) is (En) and is the sum of the field of the radiator (the wire over ground), call the field: E1, and the field of the image, call this field: Ei. If these differ in phase by 180 degrees at point n, we have:
En = E1 + Ei on an angle of 180 degrees.

or: En = E1 - Ei

For a complete null Ei must equal E1.

Ei results from excitation by the wire over ground. Its intensity is definitely a function of the number of wavelengths that wire is above ground. The higher the wire the shallower the null trends.

Best regards, Richard Harrison, KB5WZI

2006. $6 Deal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: djsims65@hotmail.COM
Message-ID: <OE54mcarcR4ZDgC81Tb000002d6@hotmail.com>
Source record: 176832
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

------=_NextPart_000_00D0_01C04A3E.72556240

charset="iso-8859-1"

Subject: $$$$$$$$$

Date: 10/12/00 3:22 PM Pacific Standard Time

From: GOATSrKOOL14369

Message-id: <20001012192250.28280.00001837@ng-fe1.aol.com>

Subject: $6 Deal=20

Date: 10-01-2000=20

Poster: Railsplitter

Message=20

A while back, I was browsing these newsgroups, just like you are now,=20
and came across an article similar to this that said you could make=20
thousands of CASH within weeks with only an initial investment of=20
$6.00 plus stamps! So I thought, "Yeah, right, this must be a scam!"=20
But like most of us I was curious and kept reading. It said that if=20
you send $1.00 to each of the 6 names and addresses listed in the=20
article, you could make thousands in a very short period of time. You=20
then place your own name and address at the bottom of the list at #6,=20
and post the article to at least 300 newsgroups. (There are about=20
32,000 of them out there and that's quite a large market pool). No=20
catch, that was it. Even though the investment was a measly $6, I had=20
three questions that needed to be answered before I could get involved=20
in this sort of thing.=20
1. IS THIS REALLY LEGAL?=20
I called a lawyer first. The lawyer was a little sceptical that I would=20

actually make any CASH but he said it WAS LEGAL if I wanted to try it.=20
I told him it sounded a lot like a chain letter but the details of the=20
system (SEE BELOW) actually made it a legitimate legal business.=20
2. IS OK WITH THE POST OFFICE OR IS IT MAIL FRAUD? I called them:=20
1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See 18,=20
h sections1302 NS 1341 of Postal Lottery Laws). This clarifies the=20
program of collecting names and addresses for a mailing list.=20
3. IS IT RIGHT? Well, everyone who sends me a buck has a good chance of=20
getting A LOT of CASH ... a much better chance than buying a lottery=20
ticket!!!=20
So, having these questions answered, I invested EXACTLY $7.92 ... six=20
$1.00 bills and six 32 cent postage stamps ... and boy am I glad I did!=20
Within 7 days, I started getting CASH in the mail! I was shocked! I=20
figured it would end soon and didn't give it another thought. But the=20
CASH continued coming in. In my first week I made between $20 to $30.=20
By the end of the second week I had a made a total of $1,000.00. In the=20
third week I had over $10,000.00 and it was still growing. This is now=20
my fourth week and I have made a total of just over $42,000 and it's=20
still coming in ..... It's certainly worth $6.00 and 6 stamps !!!=20
Also, make sure you print a copy of this article NOW, so you can get=20
the information off of it as you need it. I promise you that if you=20
follow the directions exactly, that you will start making more CASH=20
than you thought possible by doing something so easy!=20
Suggestion: Read this entire message carefully! (print it out or=20
download it.) Follow the simple directions and watch the CASH come in!=20
It's easy. It's legal. And your investment is only $6.00 (plus postage)=20
IMPORTANT: This is NOT a rip-off; it is NOT indecent; it is NOT=20
illegal; and it is virtually no risk - it really works!!!! If all of=20
the following instructions are adhered to, you will receive=20
extraordinary dividends.=20
PLEASE NOTE:=20

Please follow these directions EXACTLY, and $50,000 or more can be=20
yours in 20 to 60 days. This program remains successful because of the=20
honesty and integrity of the participants. Please continue its success=20
by carefully adhering to the instructions. You will now become part of=20
the Mail Order business. In this business your product is not solid and=20
tangible, it's a service. You are in the business of developing Mailing=20
Lists. Many large corporations are happy to pay big bucks for quality=20
lists. However, the CASH made from the mailing lists is secondary to=20
the income which is made from people like you and me asking to be=20
included in that list.=20
Here are the 4 easy steps to success:=20
STEP 1: Get 6 separate pieces of paper and write the following on each=20
piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00=20
bills and place ONE inside EACH of the 6 pieces of paper so the bill=20
will not be seen through the envelope (to prevent thievery). Place one=20
paper in each of the 6 envelopes and seal them. You should now have 6=20
sealed envelopes, each with a piece of paper stating the above phrase,=20
your name and address, and a $1.00 bill. What you are doing is creating=20
a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate=20
service and you are paying for it! Like most of us I was a little=20
skeptical and a little worried about the legal aspects of it all. So I
checked it out with the U.S. Post Office (1-800-725-2161) and they
confirmed that it is indeed legal! Mail the 6 envelopes to the
following addresses:
#1) M. Weber=20
801 Oaklands Dr=20
Round Rock, TX 78681=20
#2) S. Patti=20
1808 Ponderosa St.
Cocoa, Fl.,32926
#3) Gill=20

58 Moross

Mt. Clemens Mi. 48043=20

#4) Ryan Dick

7603 Canyon Dr.

Meridian, ID 83642

#5) Y.S.

2702 A Jenner Dr.

Baltimore, MD 21209

#6) D. Sims

905 Burning Bush Drive

Loganville, GA 30052

step 2: Now take the #1 name off the list that you see above, move the =
other=20

names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number =
6 on=20

the list.

STEP 3: Change anything you need to, but try to keep this article as=20

close to original as possible. Now, post your amended article to at=20

least 300 newsgroups. (I think there are close to 32,000 groups) All=20

you need is 300, but remember, the more you post, the more CASH you=20

make! This is perfectly legal! If you have any doubts, refer to 18=20

Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these=20

steps for yourself and, whenever you need CASH, you can use it again,=20

and again.=20

PLEASE REMEMBER that this program remains successful because of the=20

honesty and integrity of the participants and by their carefully=20

adhering to the directions. Look at it this way. If you are a person=20

of integrity, the program will continue and the CASH that so many=20

others have received will come your way.=20

NOTE: You may want to retain every name and address sent to you,=20

either on a computer or hard copy and keep the notes people send you.=20

This VERIFIES that you are truly providing a service. (Also, it might=20
be a good idea to wrap the $1 bill in dark paper to reduce the risk of=20
mail theft.) So, as each post is downloaded and the directions=20
carefully followed, six members will be reimbursed for their=20
participation as a List Developer with one dollar each. Your name will=20
move up the list geometrically so that when your name reaches the #1=20
position you will be receiving thousands of CASH in CASH!!! What an=20
opportunity for only $6.00 ($1.00 for each of the first six people=20
listed above) Send it now, add your own name to the list and you're in=20
business!=20
---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS=20
Step 1) You do not need to re-type this entire letter to do your own=20
posting. Simply put your cursor at the beginning of this letter and=20
drag your cursor to the bottom of this letter, and select 'copy' from=20
the edit menu. This will copy the entire letter into the computer's=20
memory.=20
Step 2) Open a blank 'notepad' file and place your cursor at the top=20
of the blank page. From the 'edit' menu select 'paste'. This will paste=20
a copy of the letter into notepad so that you can add your name to the=20
list.=20
Step 3) Save your new notepad file as a .txt file. If you want to do=20
your postings in different settings, you'll always have this file to=20
go back to.=20
Step 4) Use Netscape or Internet explorer and try searching for=20
various newsgroups (on-line forums, message boards, chat sites,=20
discussions.)=20
Step 5) Visit these message boards and post this article as a new=20
message by highlighting the text of this letter and selecting paste=20
from the edit menu. Fill in the Subject, this will be the header=20
that everyone sees as they scroll through the list of postings in a=20
particular group, click the post message button.=20

You're done with your first one! Congratulations...THAT'S IT! All you=20
have to do is jump to different newsgroups and post away, after you=20
get the hang of it, it will take about 30 seconds for each newsgroup!=20
**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE=20
MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A=20
minimum of 300**
That's it! You will begin receiving CASH from around the world within=20
days! You may eventually want to rent a P.O.Box due to the large=20
amount of mail you will receive. If you wish to stay anonymous, you=20
can invent a name to use, as long as the postman will deliver it.=20
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.=20
Now the WHY part:=20
Out of 300 postings, say I receive only 7 replies (a very low example).=20
So then I made $7.00 with my name at #6 on the letter. Now, each of the=20
7 persons who just sent me $1.00 make the MINIMUM 300 postings, each=20
with my name at #5 and only 7 persons respond to each of the 7 original=20
7, that is another $49.00 for me, now those 49 each make 300 MINIMUM=20
posts with my name at #4 and only 7 replies each, I will bring in an=20
additional $343.00! Now, those 343 persons turn around and post the=20
MINIMUM 300 with my name at #3 and only receive 7 replies each, I will=20
make an additional $2401.00! OK, now here is the fun part, each of=20
those 2401 persons post a MINIMUM 300 letters with my name at #2 and=20
they each only receive 7 replies, that just made me $16,807.00!!!=20
Those 16807 persons will all deliver this message to 300 newsgroups=20
with my name at #1 and if still 7 persons per 300 Newsgroups react I=20
will receive $117,649.00! With an original investment of only $6.00!=20
And some stamps. AMAZING! When your name is no longer on the list, you=20
just take the latest posting in the newsgroups, and send out another=20
$6.00 to names on the list, putting your name at number 6 again. And=20
start posting again. The thing to remember is: do you realize that=20
thousands of people all over the world are joining the internet and=20

reading these articles everyday? JUST LIKE YOU are now!! So, can you=20
afford $6.00 and see if it really works?? I think so...=20
People have said, "what if the plan is played out and no one sends you=20
the CASH? So what! What are the chances of that happening when there=20
are tons of new honest users and new honest people who are joining the=20
internet and newsgroups everyday and are willing to give it a try?=20
Estimates are at 20,000 to 50,000 new users, every day, with thousands=20
of those joining the actual internet.=20
Remember, play FAIRLY and HONESTLY and this will really work.=20
** By the way, if you try to deceive people by posting the messages=20
with your name in the list and not sending the CASH to the rest of the=20
people already on the list, you will NOT get as much. Someone I talked=20
to knew someone who did that and he only made about $150.00, and that's=20
after seven or eight weeks! Then he sent the 6 $1.00 bills, people=20
added him to their lists, and in 4-5 weeks he had over $10k.=20
This is the fairest and most honest way I have ever seen to share the=20
wealth of the world without costing anything but our time!!! You also=20
may want to buy mailing and e-mail lists for future CASH. Make sure=20
you print this article out RIGHT NOW! Also, try to keep a list of every=20
one that sends you CASH and always keep an eye on the newsgroups to=20
make sure everyone is playing fairly. Remember, HONESTY IS THE BEST=20
POLICY. You don't need to cheat the basic idea to make the CASH!! GOOD=20
LUCK to all and please play fairly and reap the huge rewards from this,=20
which is tons of extra CASH.=20
Please remember to declare your extra income. Thanks once again...=20
"People have asked me if this is really legal. Well, it is! You are=20
using the Internet to advertise your business. What is that business?=20
You are creating a mailing list of people who are interested in home=20
based computer and online business and methods of generating income at=20
home. Remember, people send you a small fee to be added to your mailing=20
list. It is legal. what will you do with your list of thousands of=20

names?=20

That's up to you." So, build your mailing list, keep good accounts,=20

declare the income and pay your taxes. By doing this you prove your=20

business intentions. Keep an eye on the newsgroups and when the cash=20

has stopped coming (that means your name is no longer on the list),=20

you just take the latest posting at the newsgroups, send another $6.00=20

to the names stated on the list, make your corrections (put your name=20

at #6) and start posting again.=20

NOTES:=20

*1. In some countries, the export of the country's exchange is illegal.=20

But you can get the license to do this from the post office, explaining=20

the above statements (that you have an online business, etc. You may=20

have to pay an extra tax, but that's OK, the amount of the incoming=20

CASH is HUGE! And as I said, a few countries have that restriction.=20

*2. You may want to buy mailing and e-mail lists for future CASH. (Or=20

Database or Spreadsheet software.)=20

*3. If you're really not sure or still think this can't be for real,=20

please print a copy of this article and give it to someone who really=20

needs the CASH, and see what happens.=20

*4. You will start getting responses within 1-2 weeks, it depends.=20

ALSO REMEMBER=20

SEND YOUR $1 OUT TO EVERYONE ON THE LIST,=20

EVEN IF THEY ARE NOT FROM THE U.S.=20

WHAT ARE YOU WAITING FOR???=20

$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!=20

GOOD LUCK!!!=20

------=_NextPart_000_00D0_01C04A3E.72556240

charset="iso-8859-1"

Subject: $$$$$$$$$

Date: 10/12/00 3:22 PM Pacific Standard Time

From: GOATSrKOOL14369

Message-id: <20001012192250.28280.00001837@ng-fe1.aol.com>

Subject: $6 Deal

Date: 10-01-2000

Poster: Railsplitter

Message

A while back, I was browsing these newsgroups, just like you are now, =

and came across an article similar to this that said you could make =

thousands of CASH within weeks with only an initial investment of =

$6.00 plus stamps! So I thought, "Yeah, right, this must be a scam!" =

But like most of us I was curious and kept reading. It said that if =

you send $1.00 to each of the 6 names and addresses listed in the =

article, you could make thousands in a very short period of time. You =

then place your own name and address at the bottom of the list at #6, =

and post the article to at least 300 newsgroups. (There are about =

32,000 of them out there and that's quite a large market pool). No =

catch, that was it. Even though the investment was a measly $6, I had =

three questions that needed to be answered before I could get =
involved

in this sort of thing.

1. IS THIS REALLY LEGAL?

I called a lawyer first. The lawyer was a little sceptical that I =
would

actually make any CASH but he said it WAS LEGAL if I wanted to try =
it.

I told him it sounded a lot like a chain letter but the details of =
the

system (SEE BELOW) actually made it a legitimate legal business.

2. IS OK WITH THE POST OFFICE OR IS IT MAIL FRAUD? I called them: =

1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See 18, =

h sections1302 NS 1341 of Postal Lottery Laws). This clarifies the =

program of collecting names and addresses for a mailing list.

3. IS IT RIGHT? Well, everyone who sends me a buck has a good chance =
of

getting A LOT of CASH ... a much better chance than buying a lottery =

ticket!!!

So, having these questions answered, I invested EXACTLY $7.92 ... six =

$1.00 bills and six 32 cent postage stamps ... and boy am I glad I =
did!

Within 7 days, I started getting CASH in the mail! I was shocked! I =

figured it would end soon and didn't give it another thought. But the =

CASH continued coming in. In my first week I made between $20 to $30. =

By the end of the second week I had a made a total of $1,000.00. In =
the

third week I had over $10,000.00 and it was still growing. This is =
now

my fourth week and I have made a total of just over $42,000 and it's =

still coming in ..... It's certainly worth $6.00 and 6 stamps !!! =

Also, make sure you print a copy of this article NOW, so you can get =

the information off of it as you need it. I promise you that if you =

follow the directions exactly, that you will start making more CASH =

than you thought possible by doing something so easy!

Suggestion: Read this entire message carefully! (print it out or

download it.) Follow the simple directions and watch the CASH come =
in!

It's easy. It's legal. And your investment is only $6.00 (plus =
postage)

IMPORTANT: This is NOT a rip-off; it is NOT indecent; it is NOT

illegal; and it is virtually no risk - it really works!!!! If all of =

the following instructions are adhered to, you will receive

extraordinary dividends.

PLEASE NOTE:

Please follow these directions EXACTLY, and $50,000 or more can be =

yours in 20 to 60 days. This program remains successful because of =
the

honesty and integrity of the participants. Please continue its =
success

by carefully adhering to the instructions. You will now become part =
of

the Mail Order business. In this business your product is not solid =
and

tangible, it's a service. You are in the business of developing =
Mailing

Lists. Many large corporations are happy to pay big bucks for quality =

lists. However, the CASH made from the mailing lists is secondary to =

the income which is made from people like you and me asking to be =

included in that list.

Here are the 4 easy steps to success:

STEP 1: Get 6 separate pieces of paper and write the following on =
each

piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US =
$1.00

bills and place ONE inside EACH of the 6 pieces of paper so the bill =

will not be seen through the envelope (to prevent thievery). Place =
one

paper in each of the 6 envelopes and seal them. You should now have 6 =

sealed envelopes, each with a piece of paper stating the above =
phrase,

your name and address, and a $1.00 bill. What you are doing is =
creating

a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate =

service and you are paying for it! Like most of us I was a little =

skeptical and a little worried about the legal aspects of it all. So =
I

checked it out with the U.S. Post Office (1-800-725-2161) and =
they

confirmed that it is indeed legal! Mail the 6 envelopes to the

following addresses:

#1) M. Weber

801 Oaklands Dr

Round Rock, TX 78681

#2) S. Patti

1808 Ponderosa St.

Cocoa, Fl.,32926

#3) Gill

58 Moross

Mt. Clemens Mi. 48043

#4) Ryan Dick

7603 Canyon Dr.

Meridian, ID 83642

#5) Y.S.

2702 A Jenner Dr.

Baltimore, MD 21209

#6) D. Sims

905 Burning Bush Drive

Loganville, GA 30052

step 2: Now take the #1 name off the list that you see above, move =
the other=20

names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as =
number 6 on=20

the list.

STEP 3: Change anything you need to, but try to keep this article as =

close to original as possible. Now, post your amended article to at =

least 300 newsgroups. (I think there are close to 32,000 groups) All =

you need is 300, but remember, the more you post, the more CASH you =

make! This is perfectly legal! If you have any doubts, refer to 18 =

Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these =

steps for yourself and, whenever you need CASH, you can use it again, =

and again.

PLEASE REMEMBER that this program remains successful because of the =

honesty and integrity of the participants and by their carefully

adhering to the directions. Look at it this way. If you are a person =

of integrity, the program will continue and the CASH that so many =

others have received will come your way.

NOTE: You may want to retain every name and address sent to you,

either on a computer or hard copy and keep the notes people send you. =

This VERIFIES that you are truly providing a service. (Also, it might =

be a good idea to wrap the $1 bill in dark paper to reduce the risk =
of

mail theft.) So, as each post is downloaded and the directions

carefully followed, six members will be reimbursed for their

participation as a List Developer with one dollar each. Your name =
will

move up the list geometrically so that when your name reaches the #1 =

position you will be receiving thousands of CASH in CASH!!! What an =

opportunity for only $6.00 ($1.00 for each of the first six people =

listed above) Send it now, add your own name to the list and you're =
in

business!

---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS

Step 1) You do not need to re-type this entire letter to do your own =

posting. Simply put your cursor at the beginning of this letter and =

drag your cursor to the bottom of this letter, and select 'copy' from =

the edit menu. This will copy the entire letter into the computer's =

memory.

Step 2) Open a blank 'notepad' file and place your cursor at the top =

of the blank page. From the 'edit' menu select 'paste'. This will =
paste

a copy of the letter into notepad so that you can add your name to =
the

list.

Step 3) Save your new notepad file as a .txt file. If you want to do =

your postings in different settings, you'll always have this file to =

go back to.

Step 4) Use Netscape or Internet explorer and try searching for

various newsgroups (on-line forums, message boards, chat sites,

discussions.)

Step 5) Visit these message boards and post this article as a new =

message by highlighting the text of this letter and selecting paste =

from the edit menu. Fill in the Subject, this will be the header

that everyone sees as they scroll through the list of postings in a =

particular group, click the post message button.

You're done with your first one! Congratulations...THAT'S IT! All you =

have to do is jump to different newsgroups and post away, after you =

get the hang of it, it will take about 30 seconds for each newsgroup! =

**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE

MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A

minimum of 300**

That's it! You will begin receiving CASH from around the world within =

days! You may eventually want to rent a P.O.Box due to the large

amount of mail you will receive. If you wish to stay anonymous, you =

can invent a name to use, as long as the postman will deliver it. =

JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.

Now the WHY part:

Out of 300 postings, say I receive only 7 replies (a very low =
example).

So then I made $7.00 with my name at #6 on the letter. Now, each of =
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7 persons who just sent me $1.00 make the MINIMUM 300 postings, each =

with my name at #5 and only 7 persons respond to each of the 7 =
original

7, that is another $49.00 for me, now those 49 each make 300 MINIMUM =

posts with my name at #4 and only 7 replies each, I will bring in an =

additional $343.00! Now, those 343 persons turn around and post the =

MINIMUM 300 with my name at #3 and only receive 7 replies each, I =
will

make an additional $2401.00! OK, now here is the fun part, each of =

those 2401 persons post a MINIMUM 300 letters with my name at #2 and =

they each only receive 7 replies, that just made me $16,807.00!!! =

Those 16807 persons will all deliver this message to 300 newsgroups =

with my name at #1 and if still 7 persons per 300 Newsgroups react I =

will receive $117,649.00! With an original investment of only $6.00! =

And some stamps. AMAZING! When your name is no longer on the list, =
you

just take the latest posting in the newsgroups, and send out another =

$6.00 to names on the list, putting your name at number 6 again. And =

start posting again. The thing to remember is: do you realize that =

thousands of people all over the world are joining the internet and =

reading these articles everyday? JUST LIKE YOU are now!! So, can you =

afford $6.00 and see if it really works?? I think so...

People have said, "what if the plan is played out and no one sends =
you

the CASH? So what! What are the chances of that happening when there =

are tons of new honest users and new honest people who are joining =
the

internet and newsgroups everyday and are willing to give it a try? =

Estimates are at 20,000 to 50,000 new users, every day, with =
thousands

of those joining the actual internet.

Remember, play FAIRLY and HONESTLY and this will really work.

** By the way, if you try to deceive people by posting the messages =

with your name in the list and not sending the CASH to the rest of =
the

people already on the list, you will NOT get as much. Someone I =
talked

to knew someone who did that and he only made about $150.00, and =
that's

after seven or eight weeks! Then he sent the 6 $1.00 bills, people =

added him to their lists, and in 4-5 weeks he had over $10k.

This is the fairest and most honest way I have ever seen to share the =

wealth of the world without costing anything but our time!!! You also =

may want to buy mailing and e-mail lists for future CASH. Make sure =

you print this article out RIGHT NOW! Also, try to keep a list of =
every

one that sends you CASH and always keep an eye on the newsgroups to =

make sure everyone is playing fairly. Remember, HONESTY IS THE BEST =

POLICY. You don't need to cheat the basic idea to make the CASH!! =
GOOD

LUCK to all and please play fairly and reap the huge rewards from =
this,

which is tons of extra CASH.

Please remember to declare your extra income. Thanks once again... =

"People have asked me if this is really legal. Well, it is! You are =

using the Internet to advertise your business. What is that business? =

You are creating a mailing list of people who are interested in home =

based computer and online business and methods of generating income =
at

home. Remember, people send you a small fee to be added to your =
mailing

list. It is legal. what will you do with your list of thousands of =

names?

That's up to you." So, build your mailing list, keep good accounts, =

declare the income and pay your taxes. By doing this you prove your =

business intentions. Keep an eye on the newsgroups and when the cash =

has stopped coming (that means your name is no longer on the list), =

you just take the latest posting at the newsgroups, send another =
$6.00

to the names stated on the list, make your corrections (put your name =

at #6) and start posting again.

NOTES:

*1. In some countries, the export of the country's exchange is =
illegal.

But you can get the license to do this from the post office, =
explaining

the above statements (that you have an online business, etc. You may =

have to pay an extra tax, but that's OK, the amount of the incoming =

CASH is HUGE! And as I said, a few countries have that restriction. =

*2. You may want to buy mailing and e-mail lists for future CASH. (Or =

Database or Spreadsheet software.)

*3. If you're really not sure or still think this can't be for real, =

please print a copy of this article and give it to someone who really =

needs the CASH, and see what happens.

*4. You will start getting responses within 1-2 weeks, it depends. =

ALSO REMEMBER

SEND YOUR $1 OUT TO EVERYONE ON THE LIST,

EVEN IF THEY ARE NOT FROM THE U.S.

WHAT ARE YOU WAITING FOR???

$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!

GOOD LUCK!!!

------=_NextPart_000_00D0_01C04A3E.72556240--

2007. Re: parasitic vertical array

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <scieu8.4kp.ln@mail.specsol.com>
Source record: 176833

ARDUJENSKI <ardujenski@aol.com> wrote:
> You may want to try this site for the OFFSET MULTIBAND TRAPLESS VERTICAL
> usingone driven element on 40m and auto switching to 20 and either 17 or 15m.
> It appeared in Oct 1995 QST and a correction appeared in Dec 1995.

> http://www.qsl.net/zr1dq/antennas.htm

> Alan KB7MBI in Woodinville, WA

I tried modeling it with EZNEC. The bottom two bands modeled per the article,
but the top band modeled with an impedance (at resonance) of about 100 Ohms
instead of the claimed nominal 50 Ohms.

Anyone else try modeling this and get similar results, or did I host the
model?

Jim Pennino

2008. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <3qAO5.5659$%%1.374060@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176834

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109105710.10882.00001236@ng-md1.aol.com...
> >
> >1995, May. After several months working on the invention of the
Sierpinski
> >antenna, the Universitat Polit�cnica de Catalunya finally applies for the
> >patent on Fractal and Multifractal Antennas . Such results proved the
> >feasibility of fractals to become multiband antennas (i.e., antennas that
> >keep the same parameters at several frequency bands). A paper reporting
the
> >first results is submitted to IEE Electronics Letters.
> >
>
> Nope. The EL manuscript by Puente et al. was submitted in October 1995. It
does
> not reference the earlier Cohen article, published in August 1995.
>

I thought May (patent app) was earlier than August.

>
> Thank you for confirming my statements. I think it is important that one
not
> get the false impression that Mr. Puente either worked on fractal antenna
> elements before me, nor that he published, nor produced prior art before
me.
>
> Clearly his work was on arrays, which has prior art in Kim and Jaggard's
work
> in the mid 1980's and that of others as well. Later he switched to fractal
> elements.
>
> Appreciate that!
>
>
> 73
> Chip N1IR

If I understand you, was Puente's earlier work on a fractal arrays simply a
fractal array geometry of non-fractal elements? I.E. fractal in terms of
element positioning and location? I would need to see the references to
appreciate the distinction. Aside from the log-periodic antennas, then
perhaps your work was the first published article presentation of fractal
"elements". I have no problem agreeing with you when you are correct nor
do I have any problem giving credit where credit is due. There is one more

reference I have to track down - it may or may not refer to your work.

I still disagree with some of your claims on the unique properties of fractal antennas (simply because of geometry) versus non-fractal geometries. I also think your claim of having "invented the field" is a bit of a stretch given the extensive prior work and references quoted at the web link.

Civilized discussions always welcome,

Steve

2009. ArrowAntenna.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20001109114118.12982.00000515@ng-da1.aol.com>
Source record: 176835

The forwarding from ArrowAntenna.com to the web page on AOL
(http://Members.aol.com/Arrow146/index.html)
has been down for awhile.
Finely got it back up yesterday.

In a few months I hope to do some up grading to the site.
Some new products.......

A new wide band OSJ Antenna for VHF & Marine band.
Covers 150 MHz. to 162 MHz.

A New ADF Antenna, Adjustable 3 element handheld Yagi for DF.
Adjustable from 110 MHz. to 510 MHz.

73 Al Lowe N0IMW
ArrowAntenna.com

2010. Re: tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0AD6E3.F5DA99DC@bellatlantic.net>
Source record: 176836

Dimensions (element length, diameter and spacing) all affect the
performance characteristics of a beam - F/B ratio, F/Side ratio,
Gain, bandwidth. For 2M repeaters, the antenna should be vertically
polarized, and you want all the elements in front of the mast.

harryvetch@my-deja.com wrote:

> I have a modified 2 meter beam that was previos to last summers qst
> article converting a fm antenna to two meters. It has been gama bridge
> matched and is nearly right on at 1:1 in the center freq. When i have
> it 15 feet in air and aim it and steer awayat from repeaters i dont
> hear the directionality i like to see. Is it critical that the elements
> need to be of proper length?
>
> Harry
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2011. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109115533.11178.00001790@ng-cg1.aol.com>
Source record: 176837

```
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001109105710.10882.00001236@ng-md1.aol.com...
>> >
>> >1995, May. After several months working on the invention of the
>Sierpinski
>> >antenna, the Universitat Politi¿½cnica de Catalunya finally applies for the
>> >patent on Fractal and Multifractal Antennas . Such results proved the
>> >feasibility of fractals to become multiband antennas (i.e., antennas that
>> >keep the same parameters at several frequency bands). A paper reporting
>the
>> >first results is submitted to IEE Electronics Letters.
>> >
>>
>> Nope. The EL manuscript by Puente et al. was submitted in October 1995. It
>does
>> not reference the earlier Cohen article, published in August 1995.
>>
>
>I thought May (patent app) was earlier than August.
>

There was no "existing or prior art" on fractal elements from Carles Puente
until he first published on that subject. That was January, 1996.

>>
>> Thank you for confirming my statements. I think it is important that one
>not
>> get the false impression that Mr. Puente either worked on fractal antenna
>> elements before me, nor that he published, nor produced prior art before
>me.
>>
>> Clearly his work was on arrays, which has prior art in Kim and Jaggard's
>work
>> in the mid 1980's and that of others as well. Later he switched to fractal
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>> Appreciate that!
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>If I understand you, was Puente's earlier work on a fractal arrays simply a
>fractal array geometry of non-fractal elements?
```

Yes.

I.E. fractal in terms of
>element positioning and location? I would need to see the references to
>appreciate the distinction. Aside from the log-periodic antennas, then
>perhaps your work was the first published article presentation of fractal
>"elements".

I have not seen anything that pre-dates it--for deterministic or substantially deterministic elements. As I have clearly stated, RANDOM fractal elements had been around since Landstorfer's work. However, from a --science--as opposed to inventive viewpoint, I was also the first to recognize and articulate those RANDOM forms as fractal element antennas.

Concurrent with that, Valdivia did work on lightning as random fractal antennae.

I have no problem agreeing with you when you are correct nor
>do I have any problem giving credit where credit is due. There is one more
>reference I have to track down - it may or may not refer to your work.
>
>I still disagree with some of your claims on the unique properties of
>fractal antennas (simply because of geometry) versus non-fractal geometries.

Yes; and as I have stated, the 'issue' appears to be on key words such as "fractal"; "electrically small"; " random"; ad nauseum.

>I also think your claim of having "invented the field" is a bit of a stretch
>given the extensive prior work and references quoted at the web link.
>

Then kindly gives us a reference to prior art for fractal elements. None of the early references you mention refer to fractal elements in any way.

>Civilized discussions always welcome,
>
>Steve
>

Cordially,

Chip

2012. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Glenn Cummings <kg7il@foxinternet.netDELETE>
Message-ID: <3A0AD8B7.B62AC6C1@foxinternet.netDELETE>
Source record: 176838

I am an avid outdoors man and enjoy many outdoor activities. I actually spend time in the woods, not just the 'paved' hiking trails used by our liberal urbanites. America is still very conservative, yet the liberal big cities seem to try to represent America. Just watch the nightly news to see that the view of america comes from crowded cities plagued with crime, crowding and socialistic attitudes.

Why should we listen to those big cities? Why should an encroaching urban area, coerce the suburbanite to yield to restrictive antenna convenants, complain of the gun range noise they moved next to, or complain that the dairy farm stinks?

Many urbanites have no clue what the real world is like. I see urbanites voting on hunting, gun, trapping, land-use issues and continuing to restrict the rights of people who actually own, use and understand the outdoors. Why should urbanites that have totally destroyed their local environment, paving everything in site, congesting the streets with their busses have any say about the farmer, gold miner, radio amateur outside their ruined cities. If they could return their city to a condition that even came close to the suburbanite, then I might consider their voting opinion more valid. In the mean time, I think that we would have to agree that most liberal urbanites seem to want us to 'clean up our act' while they continue living as they see fit in their rights restricted, environmentally damaged, bus clogged city. These liberals seem to be the ones who don't want to let me vote, but want to vote for me and tell me how I should run my life.

Let's put it another way, do you think that either Dan Rather or Tom Brocaw really understand the issues that they spout from the teleprompter while showing an edited newsclip. Their Democrat mouthpiece, unfortunately, is thought to be objective or truthful my the many Americans that spend their day working to support their wonderful families and don't have the time to research the truth.

Although born and raised in the North, I trust that Texas farmer who owns land and invests wisely. As far as 'no vote'... It truly is Bush who trusts the American people, not a big government who divides the people, causing racial and economic fighting, then while we are distracted bickering, take more rights from us. I would ask you to think a bit more about your position. It may have been formed, not by you, but by the liberal media.

Now, let's work to keep our ham bands in the next WARC, to keep and enhance PRB-1, keep our RF power capabilities and our right to mobile communications.

And a quick word of advice.... If you don't like some of the things Bush has done, just use some of the same excuses that you used to defend Clinton/Gore. At least you would appear consistent.

Glenn

Rich Griffiths wrote:

>
> If Bush had his way, you would have no vote. His would be the only name on
> the ballot.
>
> And you think he's for personal freedoms?
>
> ... Rich

2013. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <J%AO5.5752$%%1.375479@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176839

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109115533.11178.00001790@ng-cg1.aol.com...
>
> Then kindly gives us a reference to prior art for fractal elements. None
of
> the early references you mention refer to fractal elements in any way.
>
> Cordially,
>
> Chip

That's quite fine from my perspective. If your papers were the first to discuss fractal elements as antennas, fine by me. Kudos to you. This was never the original point of our disagreement.

Our disagreements on the *unique* benefits of fractal geometry (self-similar structures as you defined in a recent post) versus non-fractal geometry, Kraus's definition of electrically small and Wheeler's definition of electrically small, remain unaffected at this point. Quite honestly, its pointless to discuss here any further, so I would like to end the discussion and will do so if you respect my wishes and do not discuss or refer to me or my company publicly in anyway.

Can you respect these wishes?

Steve, VE9SRB

2014. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: nannycam@iwvisp.com
Message-ID: <3a0adda4.8331563@news.iwvisp.com>
Source record: 176840

Thanx for all the inputs, , , , , very interetsing.

I forgot to mention that my G5RV is the G5RV JR.
IOW, I'ts the short version that only tunes to forty meters.
I have a ten meter dipole that I'm going to put up, and I also run my
735 through a MFJ versa tuner II.

==========

On Wed, 08 Nov 2000 20:03:50 GMT, nannycam@iwvisp.com wrote:

>This is a very intersetin thread.
>I have been off of the low bands for a long time, and recently got a
>IC-735. I'm using a G5RV in a vee configuration, and even pinched in a
>horizontal vee facing East. I use it mostly on ten and forty, and get
>excellent rteports. Low noise is a plus. I have a limited space, and
>the rear of my residential property has high voltage lines, but it
>still seems to work great. I don't know what I can do to improve on
>it, but I'm listening, , , :-}~
>
>==========
>
>
>On Sat, 28 Oct 2000 16:13:45 -0500, Mark Keith <nm5k@wt.net> wrote:
>
>>K4IA wrote:
>>>
>>> The auto tuner in my Icom 746 handles the G5RV just fine on all bands including
>>> 30 meters where it isn't "supposed" to work. Your results may vary.
>>
>>You could be having cases where it could run awful hot though. And you
>>can't really tell if it is or not.
>>That would make me very nervous. The built in tuners pretty
>>lightweight. And if it went south it would cost half a mint to fix.
>>But... it's your radio..:/
>>>
>>> According to the folks at Radio Works, a G5RV is not very good in an inverted V
>>> configuration when the angle of the legs is less than 140 degrees. Too much
>>> radiation straight up. Check out www.radioworks.com Of course, if that is
>>> all you can do, it is better than nothing. My G5RV is an inverted V and it
>>> works OK but is being replaced this weekend with a ladder line fed
>>> dipole.
>>
>>Hummm, I would think the height above ground would have more of an
>>effect on the radiation. Even a flat top dipole will shoot straight up

>>if low to the ground in WL. In a case like that the angle of the legs
>>has little difference. And even an inv Vee with a 90 angle will show
>>good low angle radiation if over 1/2 Wl high. MK
>>--
>>http://web.wt.net/~nm5k
>

2015. Re: parasitic vertical array

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: ardujenski@aol.com
Message-ID: <20001109131434.03696.00000636@ng-fq1.aol.com>
Source record: 176841

Jim,
I am not sure the website includes the changes in dimensions contained in the Dec 95 QST. Maybe this could be part of the problem? Alan KB7MBI

>I tried modeling it with EZNEC. The bottom two bands modeled per the article,
>but the top band modeled with an impedance (at resonance) of about 100 Ohmsvinstead of the claimed nominal 50 Ohms.Anyone else try modeling this and get similar results, or did I host the
>model?
>
>Jim Pennino
>
>
>
>
>

2016. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8uepvm$2mtg$1@heap.juniper.net>
Source record: 176842

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>The model is not wrong. The effect of a reflection off of perfect ground is
>exactly the same as the effect of feeding another antenna, located 2H below
>the first antenna in free space, where H is the height of the antenna over
>perfect ground. In the far field, the patterns should be exactly as you
>describe, with exactly the 3 dB difference you describe. The far-field
>pattern is beign calculated at infinite distance, and the ground plane is
>infinite, so the antenna is always "near" ground as far as the far-field
>pattern is concerned.

It seems to me that the pattern EZNEC has computed is not consistent with
a far-field pattern at infinite distance. At infinity, with a perfectly
reflecting ground, you would expect to see a peak intensity which is
constant with respect to elevation angle, with perfect nulls at all
elevations. Instead the peaks decrease with increasing elevation angle,
and the nulls get shallower. At 90 degrees (i.e. straight up) the
null looks like it is only 11 or 12 dB (?) down from the peak, which
strongly suggests that the pattern measurement distance is not all that
large compared to the height of the antenna above the reflecting ground.

In fact, if I'm doing the math right (unlikely), an 11 or 12 dB difference
between the peaks and null at 90 degrees suggests the pattern is being
measured at somewhere on the order of 4350 or 5500 wavelengths from the
antenna. At 14.1 MHz this would be about 100 kilometers, which is not
that large compared to the 3.8 km height of the antenna. While this may
be off, you can also test the hypothesis by moving the antenna up and
down and observing changes in the pattern. There shouldn't be any if
the pattern is being evaluated at infinity (assuming you keep the
antenna high enough that the ground is still in its far-field, and
move it up or down by wavelength multiples), but at a finite distance
the vertical null should get deeper as you move closer to ground and
shallower as you move away.

My NEC documentation is at home, but if NEC is really computing the
far-field pattern at infinity I'd very much like to understand how
it gets the pattern it does in this case.

Dennis Ferguson

2017. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001109142211.15882.00001304@ng-fi1.aol.com>
Source record: 176843

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001109115533.11178.00001790@ng-cg1.aol.com...
>>
>> Then kindly gives us a reference to prior art for fractal elements. None
>of
>> the early references you mention refer to fractal elements in any way.
>>
>> Cordially,
>>
>> Chip
>
>That's quite fine from my perspective. If your papers were the first to
>discuss fractal elements as antennas, fine by me. Kudos to you. This was
>never the original point of our disagreement.
>
>Our disagreements on the *unique* benefits of fractal geometry (self-similar
>structures as you defined in a recent post) versus non-fractal geometry,
>Kraus's definition of electrically small and Wheeler's definition of
>electrically small, remain unaffected at this point. Quite honestly, its
>pointless to discuss here any further, so I would like to end the discussion
>and will do so if you respect my wishes and do not discuss or refer to me or
>my company publicly in anyway.
>
>Can you respect these wishes?
>
>Steve, VE9SRB

Let me get this straight:

I didn't ask you to respond--incorrectly--when I pointed out that the Puente work is not the first with fractal elements. You volunteered to do so; I, cordially, corrected and explained, and now you want to stop.

Is that it?

If so, the answer is obvious: sure!

NC

2018. Anyone heard of Commscope coaxial cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <OGULRCBzuuC6Ewhe@invest.fsbusiness.co.uk>
Source record: 176844

Cannot find any reference on the web for a roll of Commscope S59 HEC cable.

Does anyone happen to have the spec's handy?

Many thanks.

Phil G4ZOW

2019. Re: Anyone heard of Commscope coaxial cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8ueucf$h2$1@news.tribune.com>
Source record: 176845

I tried http://www.commscope.com/productinfo.htm

Product Class CATV-Drop
Product Type HEC
Product Group
Part Number S59 HEC VV HEADEND CABLE
Description BONDED LAMINATED ALUMINUM TAPE, 95% BRAID, 95% BRAID, FLAME
RETARDANT PVC JACKET
Attachment

KA9CAR

Philip de Cadanet <phil@invest.fsbusiness.co.uk> wrote in message
news:OGULRCBzuuC6Ewhe@invest.fsbusiness.co.uk...
> Cannot find any reference on the web for a roll of Commscope S59 HEC
> cable.
>
> Does anyone happen to have the spec's handy?
>
> Many thanks.
>
> Phil G4ZOW
>

2020. Re: Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Larry Gauthier <larryg_AT_ismi.net>
Message-ID: <3a0b032a$1@news.ismi.net>
Source record: 176846

Chuck,

Regarding antenna height and your 1 wavelength recommendation: I'm about to erect a 5 band, 2 element quad... which is essentially an 18 foot square, 3 dimensional box. Should I be placing the bottom, center, or top of this box at 64 feet -- or just take an "as high as possible" attitude?

-larry
K8UT
"Chuck O'Neal" <coneal@ultranet.com> wrote in message
news:8u80s9$al5$1@bob.news.rcn.net...
> It depends upon what you want to do. For US
> only QSO's, perhaps 35 ft would be OK, giving you
> a radiation anlge of 28 deg or so. For any reasonable DX,
> you will want a radiation angle of 15 deg or lower, which means
> 1 wavelength above ground, 70 ft or higher.
>
> As you go higher in freq., the angle drops for the same path length,
> giving about the same requirement for 10M in terms of absolute height
above
> as for 20M. With a yagi or other end fire array like a log periodic, one
> must multiply
> the array factor against the ground reflection factor, giving you
> the total pattern. At heights over 1/2 wave above ground, the array
factor
> for any endfire antenna with reasonable gain will surpress higher
> radiation angles, less useful for for DX. Stacking is even better, that's
> why we do it.
>
> Bottom line, "It's the angle of radiation for a desired path" that
> determines the ideal height.
> This will vary, dependent upon time of day, solar flux, time of year, K
> index, ect....
> But...the good news is that on the average, I would say that 70 ft is
about
> the best compromise,
> unless you are in the middle of the US and then I'd say at least 90 ft.,
for
> DX that is....
>
>
>
>
>

2021. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a40f4fa.1289557195@news.seanet.com>
Source record: 176847

On 09 Nov 2000 00:37:45 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>Hi Chip--
>
>Peekaboo, eyes are on you! I'd forego the revisionist history, cut the BS,
>turn the pc off, and go read a book.
>
>Rick K1BQT

Hi Rick,

Wouldn't it have been more useful, as a professional, to point out
that the presumption
>I've said 'no problem'? As long as you pay==
> and the report is made public?
is nothing a health care professional would agree to?

Let the contradiction between this expectation and reality speak for
itself. It exposes either a disconnect in understanding with yet
another social process - or it is a cynical offer that could never be
met.

73's
Richard Clark, KB7QHC

2022. Re: Increasing Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8464-3A0B0065-14@storefull-115.iap.bryant.webtv.net>
Source record: 176848

Chris Vancil wrote:
"I have a Nutex Communications Video Set with a range of about 700 feet and need to increase the receiving range by about 150 times that."

Path loss at 700 feet is about 87 db. Path loss at 29 miles is about 130 db. You need to make up about 43 db of loss due to lengthening the path.

Suppose you already have 3.5 db gain over an isotropic at each. You then need antennas on each end of the longer path which have about 25 db gain over an isotropic.

3.3-ft minimum diameter dishes are required (55% dish efficiency is assumed).

The 700-ft range you quote may give only -90 dbm at the receiver input. That would probably include a lot of snow.

A 20-mi path will also have fades.

So, you really need a lot more dish than 3.3 ft dia on each end.

You also need a lot of antenna height on each end, even if there are no obstructions, because the earth`s surface is curved. About 50 feet of elevation on each end will give line of sight clearance with no allowance for Fresnel zone clearance. Adjacent Fresnel zones produce some wave cancellation unless additional clearance is provided on the path.

A 6-ft dish has about 30 db gain over an isotropic at 2.4 GHz. A 10-ft dish has about 35 db gain over an isotropic at 2.4 GHz.

Microwave relay of television signals requires a license in the USA. The frequencies allocated for this are several times the catch-all 2.4 GHz frequencies used for all maner of appliances. TV relay frequencies get more gain wtih smaller dishes but suffer more propagation problems.

Best regards, Richard Harrison, KB5WZI

2023. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0B066A.6D1DB03C@eznec.com>
Source record: 176849

I'm not sure what parameters were used in calculating the pattern Ed shows. I ran a 20 meter dipole up 12,656 feet (180 wavelengths) over perfect ground, and got much deeper nulls -- around 35 dB relative to the peaks. This was using the minimum step size of 0.1 deg. I'm not surprised to see imperfect nulls, since even with 0.1 degree step size, the precise angle necessary for a perfect null may seldom or never be used by the program. In addition, the limitations of numerical precision limit the program's ability to calculate perfect zeros at precise angles. However, nulls should be deeper than shown in Ed's plot. DOS versions of EZNEC show the same result as EZNEC 3.0. The peculiar nulls in Ed's pattern might possibly be due to the jpg file conversion.

This calculation can easily be made with the EZNEC demo program, as well as the standard version. Start with the BYDipole.ez model. Change Ground Type to Perfect. Click Step Size and change to 0.1. Then click Wires to open the Wires Window, and change the Z coordinate of each wire to 12656. Finally, click FF Plot to see the pattern. You might want to maximize the plot display window (by clicking the button with the square symbol in the upper right corner) in order to see the details better. The variation in null depth is, I believe, mostly due to the step size limitation of 0.1 degree. The free demo program is available at http://eznec.com.

If anyone sees a plot with the limited depth nulls as in Ed's plot, please attach the .EZ file to an email message to me -- I'd be interested in seeing how it can happen.

Roy Lewallen, W7EL

Dennis Ferguson wrote:
>
> Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
> >The model is not wrong. The effect of a reflection off of perfect ground is
> >exactly the same as the effect of feeding another antenna, located 2H below
> >the first antenna in free space, where H is the height of the antenna over
> >perfect ground. In the far field, the patterns should be exactly as you
> >describe, with exactly the 3 dB difference you describe. The far-field
> >pattern is beign calculated at infinite distance, and the ground plane is
> >infinite, so the antenna is always "near" ground as far as the far-field
> >pattern is concerned.
>
> It seems to me that the pattern EZNEC has computed is not consistent with
> a far-field pattern at infinite distance. At infinity, with a perfectly
> reflecting ground, you would expect to see a peak intensity which is
> constant with respect to elevation angle, with perfect nulls at all

> elevations. Instead the peaks decrease with increasing elevation angle,
> and the nulls get shallower. At 90 degrees (i.e. straight up) the
> null looks like it is only 11 or 12 dB (?) down from the peak, which
> strongly suggests that the pattern measurement distance is not all that
> large compared to the height of the antenna above the reflecting ground.
>
> In fact, if I'm doing the math right (unlikely), an 11 or 12 dB difference
> between the peaks and null at 90 degrees suggests the pattern is being
> measured at somewhere on the order of 4350 or 5500 wavelengths from the
> antenna. At 14.1 MHz this would be about 100 kilometers, which is not
> that large compared to the 3.8 km height of the antenna. While this may
> be off, you can also test the hypothesis by moving the antenna up and
> down and observing changes in the pattern. There shouldn't be any if
> the pattern is being evaluated at infinity (assuming you keep the
> antenna high enough that the ground is still in its far-field, and
> move it up or down by wavelength multiples), but at a finite distance
> the vertical null should get deeper as you move closer to ground and
> shallower as you move away.
>
> My NEC documentation is at home, but if NEC is really computing the
> far-field pattern at infinity I'd very much like to understand how
> it gets the pattern it does in this case.
>
> Dennis Ferguson

2024. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0B0901.F7EFBAC1@eznec.com>
Source record: 176850

Roy Lewallen wrote:
>
> I'd just put a 27 ohm resistor in series with the spectrum analyzer
> input if I needed a matched termination, but I'd be surprised if that
> would make any noticeable difference compared to just connecting it
> directly (except a 3.7 dB reduction in signal strength).

Correction. That should be a 1.7, not 3.7 dB reduction, assuming a 75 ohm source impedance. I neglected to take the source impedance into account in doing the calculation.

Thanks to Bart Rowlett, WB6HQK, for pointing out the error.

Roy Lewallen, W7EL

2025. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0B0A39.25532FC0@eznec.com>
Source record: 176851

Roy Lewallen wrote:
> . . .

> This calculation can easily be made with the EZNEC demo program, as well
> as the standard version. Start with the BYDipole.ez model. Change Ground
> Type to Perfect. Click Step Size and change to 0.1. Then click Wires to
> open the Wires Window, and change the Z coordinate of each wire to
> 12656. . .

The last sentence should read "Then click Wires to
open the Wires Window, and change the Z coordinate of each wire END to
12656."

It's just one of those days. . .

Roy Lewallen, W7EL

2026. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001109153749.06873.00000597@ng-fy1.aol.com>
Source record: 176852

>The abuse goes on whether I am here or not.<

You have it within your power to test that proposition. I do recall the week you were ill and didn't post anything it was real quiet on here. But don't take my word for it--check the archive.

Rick K1BQT

2027. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8463-3A0B0628-51@storefull-115.iap.bryant.webtv.net>
Source record: 176853

Ed Hare, W1RFI wrote:
"The model is not wrong. The effect of a reflection off perfect earth is exactly the same as the effect of feeding another antenna, located 2H below the first antenna in free space, where H is the height of the antenna over ground."

With equal power to both antennas?

That doesn`t compute. You are directly feeding the actual balanced radiator 180 wavelengths above ground. The earth image is parasitically excited with only tiny coupling between the two antennas.

Best regards, Richard Harrison, KB5WZI

2028. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a41f9f8.1290835252@news.seanet.com>
Source record: 176854

On Wed, 08 Nov 2000 22:31:04 -0500, sideband <sideband@cac.net> wrote:

>
>Because, NC, you bring up subjects, and when asked questions about
>your vague points, you go ballistic and refuse to answer their
>questions, instead pointing to a lame duck website that does not
>contain the answers to the questions asked.
>
>Through all this, you maintain an attitude of aloofness, superiority,
>and cockiness which is, apparently, unwarranted.
>
>From what I can tell these "attacks" didn't start happening until you
>started baiting the NG, then refusing to answer questions..
>
>Are we starting to see a trend here?
>
>Just my two cents. Your mileage may vary.
>
>-SSB

Hi OM,

You are too kind.

Let's all remember that time, oh so long ago (a month or two?) where numerous claims of technical issues protected by patent pending were being made?

Talk about topics dropped like a hot potato.

The patent process is one of full disclosure where no one can claim ignorance of the outcome. If the PTO sends you a letter of allowance, you know exactly what will be published, there is no justification for making claims that are unsupported by the process already fully revealed. The PTO expresses quite clearly that the usage of Patent Pending is a felony, a FRAUD, if no such coverage exists.

To judge by the refusal to accept this as a mental aberration can only lead one to believe that these frauds were willful and deliberate - and they were, as part of an act of hostility and open contempt of our members here in this forum. If this practice were exposed to his peers, it would be professional suicide. But such will never happen unless fraudtenna makes a point of circulating this message to accumulate damages to then falsely claim the privilege of the injured party (it is our group who is the injured party and this manipulation of the status of "victim" by fraudtenna is self-debasement).

Thus you see why some topics are never broached again.

73's
Richard Clark, KB7QHC

2029. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8uf49hggt1@nnrp1.deja.com>
Source record: 176855

You might have a look at Harry's Homebrew page:

http://hem2.passagen.se/sm0vpo/

he has some small antenna ideas there for 20M. I operate out of an apartment myself. The balcony here is large enough to fit up to a 15M dipole (with some bending) and I have used a 20M dipole drooped over the sides like a double inverted 'L'. After dark I toss out a wire dipole for the lower bands into the trees below. Your height will be a benefit and will compensate for a compromise antenna. What band(s) are you planning on operating on? Hope that provides some help or inspiration.

In article <3A038637.FA531E42@erols.com>,
ik7565@erols.com wrote:
> Looking for a HF antenna for QRP but I live in a 5th floor apartment -
> no antennas allowed. Need something I can put up temporarily on the
> balcony. Are Isotrons a good choice? The web site makes them sound
> like the greatest thing since sliced bread -
> http://www.rayfield.net/isotron/
>
> 73,
> Ian, KG4JLK
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2030. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <kk4m0t0urmj4ltvrh8q6v178c0f01g4k7v@4ax.com>
Source record: 176856

Actually, Chip, Nathan, NC, whatever you're calling yourself at the present time, you have gone "ballistic" on me in a post a couple months ago. I asked a direct question about the side and rear rejection of one of your fractal beams, and you went so far as to call me a bliterhing idiot (paraphrasing here), and that if I couldn't figure that out from the information on fractenna.com, specifically the dbi, I was such an idiot that I wasn't worth your time... I'd call that verbally ballisitic.

It's taken over two months for you to respond to a post of mine directly addressing you.... Wonder what the reasoning behind that is...

Hit dejanews and look it up. I don't have the time to prove to you what I and the other members of this newsgroup already know to be true.

-SSB

On or about 09 Nov 2000 12:17:29 GMT, fractenna@aol.com (Fractenna), using the forum rec.radio.amateur.antenna did say:

:>
:>On or about 08 Nov 2000 23:45:00 GMT, fractenna@aol.com (Fractenna),
:>using the forum rec.radio.amateur.antenna did say:
:>:
:>:
:>:This is a self-contradictory, personal attack by Jim Pennino against me
:>:
:>:Why do we tolerate this??
:>:
:>:On what basis , Jim, do you, or anyone else who claims I have some mental
:>:debility, feel that you have the right or expertise to make such assertions?
:>:
:>:Are you aware that I have stated many times--including just the other
:>day--that
:>:if someone wants to arrange and pay for a shrink from Maclean Hospital to
:>meet
:>:with me I've said 'no problem'? As long as you pay== and the report is made
:>:public?
:>:
:>:Why is this tactic of personal attack now concentrated on this fantasy of
:>:mental illness??
:>:
:>:Why this obsession with ME, even when I don't participate in discussions?
:>:

:>:NC
:>
:>Because, NC, you bring up subjects, and when asked questions about
:>your vague points, you go ballistic and refuse to answer their
:>questions, instead pointing to a lame duck website that does not
:>contain the answers to the questions asked.
:>
:>Through all this, you maintain an attitude of aloofness, superiority,
:>and cockiness which is, apparently, unwarranted.
:>
:>From what I can tell these "attacks" didn't start happening until you
:>started baiting the NG, then refusing to answer questions..
:>
:>Are we starting to see a trend here?
:>
:>Just my two cents. Your mileage may vary.
:>
:>-SSB
:>
:
:
:I don't seem to recall going 'ballistic'. Its not part of who I am, so for you
:to characterize me in this way is more than a bit pejorative ,and over the top.
:In other words, here we go with yet more abuse.
:
:Here are the facts, relative to events in recent weeks:
:
:1) At least two individuals, who publicly post on this NG, have deliberately
:violated copyright law. This obligated me, as the injured party, to point out
:the trespass publicly, as their information on the availability was made
:publicly;
:
:2) At least two other individuals have gone out of their way to make anti
:semitic-based comments and deliberately incite others, with false,
:misinformation-based comments. In fact, these 'blame the victim' tactics have
:had no small effect in inciting others. The bizarre and injurious trend of late
:has been to publicly label me as "mentally ill" and to go over the top by
:presenting this misinformation to those I work with; customers; and others. It
:has led to a change in my position ,which was a major change in my life, with
:very serious effects on my potential income and career progress. Basically it
:is a witch hunt.The objective is to alienate me , as well as 'label
:me'--falsely;
:
:3) The top manager of a competing antenna company--which has previously
:demonstrating tangible and undesired interest in my affiliate-- has gone out of
:his to exploit a point of trivial scientific interest into one that
:deliberately tries to question my credibility and knowledge base.That person
:uses words like "fractal"; "arbitrary"; "random"; "electrically small"; and so
:on, in incorrect and /or misleading contexts with the intent to discredit me.
:It is noteworthy that this person has aided at least one individual in the

:aforementioned copyright violation;
:
:4) The abuse goes on whether I am here or not. It is an obsession for some. I
:find it fundamnetally distasteful and beyond any acceptable level of human
:decency.
:
:These, "SSB", are the facts. Nothing you can do or say can change them. The
:BEST you can do is be quiet and stop harassing me.
:
:Cordially,
:
:NC

2031. Re: Increasing Range

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8463-3A0B0CA0-54@storefull-115.iap.bryant.webtv.net>
Source record: 176857

I wrote:
Path loss at 29 miles is about 130 db, That was a fat-fingered mistake.
It should have been: 20 miles, which is 150 times 700 feet.

Best rtegards, Richard Harrison, KB5WZI

2032. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0B16A0.2CA@wt.net>
Source record: 176858

Patrick Jankowiak wrote:

>
> Can anyone enlighten me about 'big ugly' antennas? Are these the ones
> I see with a 4"-5" diameter by 12" tall center mounted loading coil
> and a large top hat?
>
Thats a bug catcher. Been around for years, and I still think overall
the best you can use. I prefer them over screwdrivers for outright brute
performance. Usually the coil is a little better on the bugcatchers, and
also you can add a capacity hat which will let you use less turns of the
coil to tune. Less coil loss.

> I know that in my CB radio days, the 108" whip was the best thing
> going, if you didn't mind a big antenna.

Sure, a loaded short vertical of any type will never be as good as the
full 1/4 wave whip. Only in very rare cases might the loaded whip do
better due to a better ground plane from being on top of the car.
"Compared to a bumper mount 102 whip". MK
--
http://web.wt.net/~nm5k

2033. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <%NEO5.50$g5.272462@news.ntplx.net>
Source record: 176859

Roy Lewallen <w7el@eznec.com> wrote:

> I'm not sure what parameters were used in calculating the pattern Ed
> shows. I ran a 20 meter dipole up 12,656 feet (180 wavelengths) over
> perfect ground, and got much deeper nulls -- around 35 dB relative to
> the peaks.

I believe that I used average ground and a 0.1 degree step size, but at this point, I really don't recall.

73,
Ed, W1RFI

2034. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8uf5ctqke1@bob.news.rcn.net>
Source record: 176860

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8ucsdg$l6l$1@nnrp1.deja.com...
> In article <6Vl05.52$s83.5872@monger.newsread.com>,
> "Roger Halstead" <rdhalste@tm.net> wrote:
> >
> > And why would using both at the same time be bad??
> > We do it all the time with repeaters.
> >
> > If the 2-meter frequencies are at least 600 KHz apart, 4 cans will
> work, but
> > 6 will give better isolation.
> >
> > Unfortunately using cans willrequire that both radios be kept on a
> specific
> > frequency. In other owrds, only one packet frequency and only one FM
> > frequency.
> >
> > Not to mention the skill required to tune up a set of bad pass/band
> reject
> > cavaties.
> >
> > Roger (K8RI)
>
> Roger, try to keep it in the context of the original message. I know
> that repeaters do it all the time, but as you say, 4 cans may be
> necessary. The gentleman was asking about a VHF-VHF duplexer. Are YOU
> saying that you could run one antenna with two rigs with a simple
> duplexer?
>
> --

Define a "simple" duplexer.. A duplexer allows a receiver and transmitter
to share
a common system. A good duplexer will allow to as low as 400KHz
separation on two meters.

I think there is some confusion here regarding the defination of what a
duplexer
is. In my mind, VHF/VHF duplexer is a BP/BR or hybrid ring system using
four to six cavities to achieve 90 dB of port to port isolation.

Pete

2035. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8uf65ekqa1@heap.juniper.net>
Source record: 176861

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>Roy Lewallen <w7el@eznec.com> wrote:
>
>> I'm not sure what parameters were used in calculating the pattern Ed
>> shows. I ran a 20 meter dipole up 12,656 feet (180 wavelengths) over
>> perfect ground, and got much deeper nulls -- around 35 dB relative to
>> the peaks.
>
>I believe that I used average ground and a 0.1 degree step size, but at this
>point, I really don't recall.

Ah, average ground would do it. The ground absorption is greater at
near-normal angles of incidence than at glancing angles, so the nulls would
get shallower at higher elevation angles.

Thanks,
Dennis Ferguson

2036. MFJ 1910

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: jgboyles@aol.com
Message-ID: <20001109171428.00578.00000555@ng-fx1.aol.com>
Source record: 176862

Hi,
I read in a post the other day that MFJ sold a 33' telescoping fiberglass mast model MFJ 1910 (I think) for around $80. Can't find it in the catalog, mfj web site or anywhere else. Saw one at Dayton that a German was selling, and I think Kanga handles them in The US, but they are around $100. I think this would be great for field day or putting up a quickie "stealth" antenna under cover of darkness that could be taken down real quick. Anybody point me to a source?
73 Gary N4AST

2037. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8uf7diocv1@heap.juniper.net>
Source record: 176863

Richard Harrison <richardharrison@webtv.net> wrote:
>Wes, N7WS wrote:
>"The depth of the null is most certainly dependent upon the ground
>characteristics, but not the number of wave lengths above ground."
>
>A wire over ground has an image in the ground. This makes an array of
>radiator plus image.
>
>The resultant field at a point (n) is (En) and is the sum of the field
>of the radiator (the wire over ground), call the field: E1, and the
>field of the image, call this field: Ei. If these differ in phase by 180
>degrees at point n, we have:
> En = E1 + Ei on an angle of 180 degrees.
>
>or: En = E1 - Ei
>
>For a complete null Ei must equal E1.
>
>Ei results from excitation by the wire over ground. Its intensity is
>definitely a function of the number of wavelengths that wire is above
>ground. The higher the wire the shallower the null trends.

No, not "definitely". This also depends on where you measure the
combined radiation pattern. If `h' is the height of the wire above
perfect ground, and `R' is the distance from the wire at which you are
measuring the radiation pattern, then in the (worst case) vertical
direction from the wire we have

E1/Ei = (R + 2h) / R = 1 + (2h / R)

If R is very large compared to 2h, then 2h/R->0 and E1 is equal to
Ei. If R->infinity, which is apparently where NEC computes its far-field
patterns, then the ratio E1/Ei is always 1 and does not depend on the
(finite) value of `h'.

Dennis Ferguson

2038. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <HWFO5.5921$%%1.384978@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176864

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109142211.15882.00001304@ng-fi1.aol.com...
> >
>
> Let me get this straight:
>
> I didn't ask you to respond--incorrectly--when I pointed out that the
Puente
> work is not the first with fractal elements.

I don't recall asking you to make the following statements:

> 3) The top manager of a competing antenna company--which has previously
> demonstrating tangible and undesired interest in my affiliate-- has gone
out of
> his to exploit a point of trivial scientific interest into one that
> deliberately tries to question my credibility and knowledge base.That
person
> uses words like "fractal"; "arbitrary"; "random"; "electrically small";
and so
> on, in incorrect and /or misleading contexts with the intent to discredit
me.
> It is noteworthy that this person has aided at least one individual in the
> aforementioned copyright violation;

>You volunteered to do so; I,
> cordially, corrected and explained, and now you want to stop.
>
> Is that it?
>
> If so, the answer is obvious: sure!
>
> NC

Given that your wording is a bit ambiguous, are you agreeing to the
following:

1) That you will not directly or indirectly respond to any of my posts.
2) That you will not directly or indirectly mention or refer to me or my
company (AGAIN)
3) That you will stop the insults.

In return, I will not respond to any of your posts and I will not discuss
fractal antennas on this NG.

Is the answer yes or no?

Steve

2039. Re: MFJ 1910

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0B29A3.6F6B9F81@bigfoot.com>
Source record: 176865

JGBOYLES wrote:

> I read in a post the other day that MFJ sold a 33' telescoping fiberglass
> mast model MFJ 1910 (I think) for around $80. Can't find it in the catalog,
> mfj web site or anywhere else.

It's in my MFJ catalog combined with "Amateur Radio Trader". The part
number is the title of this thread. What more do you need?
--
http://www.mindspring.com/~w6rca

2040. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8uf8ie$rh1$1@heap.juniper.net>
Source record: 176866

Richard Harrison <richardharrison@webtv.net> wrote:
>Ed Hare, W1RFI wrote:
>"The model is not wrong. The effect of a reflection off perfect earth is
>exactly the same as the effect of feeding another antenna, located 2H
>below the first antenna in free space, where H is the height of the
>antenna over ground."
>
>With equal power to both antennas?
>
>That doesn`t compute. You are directly feeding the actual balanced
>radiator 180 wavelengths above ground. The earth image is parasitically
>excited with only tiny coupling between the two antennas.

Actually, I think your way doesn't compute with respect to conservation
of energy. With one antenna and perfect ground, all energy radiated
by the antenna ends up in one hemisphere, with the energy radiated
downward being reflected back up by the ground.

With two antennas in free space one gets the same pattern, but in both
hemispheres. This requires exactly twice the power, so the second antenna
that replaced the ground had better have the same power input as the original
antenna.

This should suggest that ground reflection doesn't depend much on
parasitic coupling (though parasitic coupling may affect the resulting
pattern if the first antenna is close enough to the ground).

Dennis Ferguson

2041. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <n4GO5.392$s83.38974@monger.newsread.com>
Source record: 176867

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bill Turner" <w7ti@jps.net> wrote in message
news:5t0k0tk1cdnshqqk9lfvdtf8kj3sjspn76@4ax.com...
> On Wed, 08 Nov 2000 23:52:00 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
>
> >I missed the initial post and it is no longer on my server, but if you
are
> >talking about conduit, the PVC stuff works just fine.
> --
> PVC works fine UNLESS you have burrowing rodents. They'll chew right
> through it.

Wellllll...Yes and no.
If nothing bothers it, and there are no stones to nick the jacket in the dirt then straight PVC works fine, but in stonly soil it pay to use cable designed for direct burial which has a filler in the braid to prevent the migration of water.

Particulary here in the north, with stony soil and the freeze and thaw cycles, PVC is likely to get a nick in the jacket which will allow water to migrate along the braid. That will eventually destroy the braid.

Having said all that, I've used straight PVC in direct burial for years (with no problem), but as of late I've been installing it in conduit. Lots easier if you want to change, add, or what ever. And ... you can even make changes while the ground is frozen, flooded, covered with snow, or whatever. Also, the plastic conduit is relatively cheap even for 3". Normally 2" would be plenty sufficient.

Actually I prefer metal conduit, but it tends to get a bit more expensive some where above 1 1/4 inch.

Just remember to have the outer end pointed down by at least 45 degrees to keep water out.

73,

Roger

>
> 73, Bill W7TI

2042. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <pbGO5.395$s83.39196@monger.newsread.com>
Source record: 176868

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8ucsdg$l6l$1@nnrp1.deja.com...
> In article <6VlO5.52$s83.5872@monger.newsread.com>,
> "Roger Halstead" <rdhalste@tm.net> wrote:
> >
> > And why would using both at the same time be bad??
> > We do it all the time with repeaters.
> >
> > If the 2-meter frequencies are at least 600 KHz apart, 4 cans will
> work, but
> > 6 will give better isolation.
> >
<snip>
>
> Roger, try to keep it in the context of the original message. I know
> that repeaters do it all the time, but as you say, 4 cans may be
> necessary. The gentleman was asking about a VHF-VHF duplexer. Are YOU
> saying that you could run one antenna with two rigs with a simple
> duplexer?

To me the cans are a simple duplexer.
I prefer the same definition as Peter used in another post in this thread.

Roger

>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2043. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20001109030907.01823.00000180@nso-cb.aol.com>
Source record: 176916

In article <20001108062548.19436.00000308@ng-ba1.aol.com>,
kg4fet@aol.combadspam (KG4FET) writes:

>I know you mentioned the IC 706MK2G, but the Yaesu FT 100 and the ATAS 100
>would be an excellent combination for you. The ATAS 100 covers 70 cm/ 40
>mtrs
>with a diplexer. It if fully auto tunable with the rig. the antenna is only
>48
>inches retracted and I believe 62 inches fully extended at 40 meters. I
>managed 60 contacts in 1 1/2 hours out of the mobile 2 weekends ago during
>the
>contest on all of the HF bands, and contacts on 6/2/70 cm. Despite all of
>the
>bad things you hear on the FT 100 ther are as many or more people that are
>extremely happy with the FT 100. Great Rig and with the ATAS 100 it is one
>fantastic mobile rig.

The problem with the antenna/rig combination you suggest is that first, the
ATAS 100 is a small diameter antenna even though it's apparently based on Don
Johnson's screwdriver, and the small diameter means that on 40 meters down, its
performance will be well down compared to more "normal" sized screwdrivers or a
bugcatcher. I personally don't think an Accord looks bad with a regular sized
screwdriver, but then again, I have call letter plates already too.
-art clemons-

2044. Follow simple instructions for YOUR 31k

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: jefferythebeast@yahoo.COM
Message-ID: <000501c04a28$7be18b60$80b18ed1@beast>
Source record: 176917

Easy Money for just one $10.00 bill and one stamp !!!!$$$$
WHAT HAVE YOU GOT TO LOSE???

BY READING THIS YOU COULD CHANGE YOUR ENTIRE LIFE FOREVER!!!
[now you will find US $10.00 bills in your mailbox !!!!! (NOT JUST 1$ BILLS)

! $31,250.00 in 4 weeks!!!!!!!!!

I found this on a bulletin board and decided to try it. A little while back,
I was browsing through newsgroups and came across an article similar to this
that said: you could make thousands of dollars within weeks with only an
initial investment of one $10.00 bill!!!!
So I thought, "Yeah right, this must be a scam", but Like most of us,
I was curious, so I kept reading. Anyway, it said that you send only
one US $10.00 bill to the first address in the list below
You then place your name and address in the bottom of the list at #3,
and post the article in at least 200 newsgroups. (There are thousands)
No catch, that was it.
So after thinking it over, and talking to a few people first, I thought
about trying it. I figured: "what have I got to lose except only
one stamp (not six) and only one $10.00 bill (us fund), right?"
Then I invested the measly $10.00 .

Well !!.GUESS WHAT.. within 7 days, I started getting money in the mail!
I was shocked! I figured it would end soon, but the money just kept
coming in. In my first week, I made about $250.00. By the end of the second
week I had made a total of over $1,000.00! In the third week I had over
$10,000.00 and it's still growing.
It's certainly worth a $10.00 used bill, and only one stamp,
I have spent more than that on the lottery!!

Let me tell you how this works and most importantly, why it works...
Also, make sure you PRINT a copy of this article NOW, so you can get the
information off of it as you need it. I promise you that if you follow the
directions exactly, that you will start making more money that you thought
possible by doing something so easy!

Suggestion: Read this entire message carefully!
(print it out or download it to your hard disk.)
Follow the simple directions and watch the money come in!
It's easy. It's legal. And, your investment is only one $10.00 US bill
(plus postage, only one stamp (not 6 , so the global cost will be a bit more
than 6 letters with $1 in each , but the amount of money you win
will be much more... and your wealth will be all made with thousands of
$10.00 bills ..... not $1 bills as other programs).

IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal;
and it is virtually no risk - it really works!!!
If all of the following instructions are adhered to, you will receive
extraordinary dividends.

PLEASE NOTE: Please follow these directions EXACTLY, and $30,000 or
more can be yours in 20 to 60 days. This program remains successful because
of the honesty and integrity of the participants.
Please continue its success by carefully adhering to the instructions.
You will now become part of the Mail Order business. In this business your
product is not solid and tangible, it's a service. You are in the business
of developing Mailing Lists. Many large corporations are happy to pay big
bucks for quality lists. However, the money made from the mailing lists
is secondary to the income which is made from people like you and me asking
to be included in that list.

Here are the 4 easy steps to success:
STEP 1: Get a piece of paper or a postcard and write the following on it
"PLEASE PUT ME ON YOUR MAILING LIST." , your name and address.
Now get one US $10.00 bill and place it into a dark paper(opaque)
so the bill will not be seen through the envelope (to prevent thievery) .
Next, place the paper or the postcard and the dark paper with the $10.00
bill
in it into the envelope and seal it (please seal it very well).
What you are doing is creating a service.
This is absolutely legal. You are requesting a legitimate service and you
are paying for it! Like most of us I was a little skeptical and a little
worried about the legal aspects of it all. So I checked it out with the U.S.
Post Office (1-800-725-2161) and they confirmed that it is indeed legal!
Mail the envelope to the first address in the list below:
(you send one $10 bill to the first name only)

1.)Oueslati abdellatif
B.P. 86/B , 3100 kairouan,
Tunisia

2.)David Camillier
B5-6900 crabapple drive
Whistler, B.C. V0N 1B6
Canada

3.)Jeffery Vincent
P.O. Box 46
Mittie, LA 70654

STEP 2: Now take the #1 name off the list that you see above, move the
other names up (3 becomes 2, 2 becomes 1,) and add YOUR name as
number 3 on the list.

STEP 3: Change anything you need to, but try to keep this article as close
to the original as possible. Now, post your amended article to at least 200
newsgroups. (I think there are close to 24,000 groups.) All you need is 200,
but remember, the more you post, the more money you make!

This is perfectly legal! If you have any doubts,
refer to Title 18 Sec. 1302 & 1241 of the Postal lottery laws.
Keep a copy of these steps for yourself and, whenever you need money,
you can use it again, and again.
PLEASE REMEMBER that this program remains successful because of the honesty
and integrity of the participants and by their carefully adhering to the
directions. Look at it this way, if you are of integrity, the program will
continue and the money that so many others have received will come your way,
too.

NOTE: You may want to retain every name and address sent to you, either on
a computer or hard copy and keep the notes people send you. This VERIFIES
that you are truly providing a service.
(Also, it might be a good idea to wrap the $10 bill in dark paper to reduce
the risk of mail theft. You can send a postcard with the dark paper and use
a thick envelope)

Your name will move up the list geometrically so that when your name
reaches the #1 position you will be receiving thousands of dollars
in CASH!!!

What an opportunity for only one $10.00 bill!

Send it now, add your own name to the list and you're in business!

---DIRECTIONS----FOR POSTING TO NEWSGROUPS------------------

STEP 1: You do not need to re-type this entire letter to do your own
posting. Simply put your cursor at the beginning of this letter and drag
your cursor to the bottom of this document, and select 'copy' from the edit
menu. This will copy the entire letter into the computer's memory. If you
are having trouble then start by clicking your cursor on the beginning of
this letter while continuing to hold down the click button of your cursor.
As you do this drag the cursor "all the way down to the bar" and past if
need be at the bottom of your viewing screen. Try it and you'll see .

STEP 2: Open a blank 'notepad' file and place your cursor at the top of
the blank page. From the 'edit' menu select 'PASTE'. This will paste a copy
of the letter into notepad so that you can add your name to the bottom of
the list and to change the the numbers of the list.

STEP 3: Save your new notepad file as a '.txt' file. If you want to do
your postings in different settings, you'll always have this file to go
back to.

STEP 4: Use multiple search engines like
www.dogpile.com/ or www.metafind.com/ to search for various usenet
newsgroups (on-line forums, message boards, chat sites, discussions).
If you are having trouble finding any then go on and try www.reference.com/
or www.liszt.com/ or www.forumone.com/ as examples to look in.
You may also wish to tell future readers from around the world that they can
read this letter in another language if they visit
http://babelfish.altavista.com/cgi-bin/translate or by going to

www.altavista.com/ and clicking on "AV Tools & Gadgets" and then click on
"AV Translation Service".

STEP 5: Visit these message boards and newsgroups and post this article as
a new message by highlighting the text of this letter and selecting 'PASTE'
from the edit menu. Fill in the Subject, this will be the header that
everyone sees as they scroll through the list of postings in a particular
group, click the post message button. You're done with
your first one! Congratulations... That is it! All you have to do is jump
to different newsgroups and post away. After you get the hang of it,
it will take about 30 seconds for each newsgroup!

** REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!!
BUT YOU HAVE TO POST A MINIMUM OF 200** That is it!
You will begin receiving money from around the world within days!
You may eventually want to rent a P.O. Box due to the large amount of
mail you will receive. If you wish to stay anonymous, you can invent a name
to use, as long as the postman will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.

Now the WHY part:
.Out of 200 postings, every letter will be seen by hundreds of people but
say that only 5 will participate (a very low example).

So then your name will be posted :
by 5 people at the #3 position
(if every one sending 200 postings refers 5 persons)
your name will be posted by
(5*5) = 25 people at the #3 position
(25*5) = 125 people at the #2 position
(125*5) = 625 people at the #1 position

When your name reaches the first position in a few days, it will be your
turn to collect your $10.00 bills
Now you will receive mooooooooney!!!!!!!

and if just only 5 persons per 200 reply, your name will be out of the list
by
625 * 5 = 3125 persons and everyone will send to you a $10.00 bill,
so you will get

3125 envelopes * $10 = $31,250.00 !!!!!

(10 times more than other $1 programs with
the same number of letters in your mailbox).
AMAZING !!!!!!

$31,250.00!! With an investment of only $10.00!

**You may want to save this page to your hard drive for future use.
The More Times You Re-start THIS group, with your name added last
sending $ 10.00 to the first address and posting again
- everyone listed in THIS group is also started over.

This is why this program is better than others - it never stops!!!!

The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday? JUST LIKE YOU are now!!
So, can you afford a US $10.00 bill and see if it really works?? I think so...
People have said, "what if the plan is played out and no one sends you the money?
So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Anyway,
it is only $10.00 for a chance at thousands.
Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet.
Remember, play FAIRLY and HONESTLY and this will really work.
You wouldn't want someone to cheat you the same way you may be cheating!
Yours sincerely,

Jeffery Vincent

_____
Do You Yahoo!?
Get your free @yahoo.com address at http://mail.yahoo.com

2045. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <5VtO5.13$2d1.303@newsfeed.slurp.net>
Source record: 176918

Nah, N for no, C for credibility' or is it 'No Cordiality:

You have enough trouble with your own bs-cutting, such as describing '5 years' and now '2 posts', as 'many', to concern yourself overly with others. Adding to what Rick Littlefield wrote, 'Peek-a-boo, eyes on you. Deja tells a tale or two.'

Before your next sally into revisionist history, see:

http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html

Another thing: stop your gratuitously insulting attempt to think for 'all'. Cede us the right that you would undoubtedly claim for yourself.

Just 'give it a try'.

K3BHJ

2046. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:00:33 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <BOlO5.48$s83.5649@monger.newsread.com>
Source record: 176909

Quoting from the ROHN catalog and engineering book...The figures for a properly installed self supporting 25 G are: 70 MPH wind survival and *NO* ice...At a 40 foot maximum for a 25 G the maximum allowable wind load is 1.5 sq. ft of antennas consisting of "round" tubing.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"B Nehl" <k0emt@dbbear.com> wrote in message news:o1nd0toa0v6rqtmfc1andnej1iijt3e2md@4ax.com...
> This seemed like the best newsgroup for this.
> I am interested in others experience in putting up a
> Self Supporting Rohn 25G tower.
>
> How high did you go?
> How much antenna load do you have on it?
> Are you using a rotor?
> Problems?
> How large a base did you pour?
>
> Thanks & 73,
>
> Bryan - k0emt
>

2047. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:07:30 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <6VIO5.52$s83.5872@monger.newsread.com>
Source record: 176910

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8u9gtgqhd1@nnrp1.deja.com...
> I don't think you have seen one because a Duplexer will allow you to
> use both radios at the same time which would be bad. Why wouldn't a
> simple antenna switch work?

And why would using both at the same time be bad??
We do it all the time with repeaters.

If the 2-meter frequencies are at least 600 KHz apart, 4 cans will work, but
6 will give better isolation.

Unfortunately using cans willrequire that both radios be kept on a specific
frequency. In other owrds, only one packet frequency and only one FM
frequency.

Not to mention the skill required to tune up a set of bad pass/band reject
cavaties.

Roger (K8RI)

>
> In article <tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com>,
> Dick Hughes <rhughes33@cableone.net> wrote:
> > I have two, VHF radios. One for voice and one for packet cluster. I
> > would like them to be able to share the same 2-meter antenna without
> > manual switching. A 2-meter/2-meter duplexer would be nice, but I
> > have never seen such an animal. Any ideas?
> >
> > Dick Hughes - W6CCD
> >
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2048. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:37:45 UTC
From: k1bqt@aol.com
Message-ID: <20001108193745.24507.00000553@ng-cd1.aol.com>
Source record: 176911

Hi Chip--

Peekaboo, eyes are on you! I'd forego the revisionist history, cut the BS, turn the pc off, and go read a book.

Rick K1BQT

2049. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 00:50:58 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ucsdg$l6l$1@nnrp1.deja.com>
Source record: 176912

In article <6Vl05.52$s83.5872@monger.newsread.com>,
"Roger Halstead" <rdhalste@tm.net> wrote:
>
> And why would using both at the same time be bad??
> We do it all the time with repeaters.
>
> If the 2-meter frequencies are at least 600 KHz apart, 4 cans will
work, but
> 6 will give better isolation.
>
> Unfortunately using cans willrequire that both radios be kept on a
specific
> frequency. In other owrds, only one packet frequency and only one FM
> frequency.
>
> Not to mention the skill required to tune up a set of bad pass/band
reject
> cavaties.
>
> Roger (K8RI)

Roger, try to keep it in the context of the original message. I know that repeaters do it all the time, but as you say, 4 cans may be necessary. The gentleman was asking about a VHF-VHF duplexer. Are YOU saying that you could run one antenna with two rigs with a simple duplexer?

--
"There ought to be limits on freedom." G.W. Bush,Jr. 1999
G.W. Bush...Not a crackhead anymore!
http://www.gwbush.com

Sent via Deja.com http://www.deja.com/
Before you buy.

2050. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 03:17:26 UTC
From: fractenna@aol.com
Message-ID: <20001108221726.23218.00000502@ng-cr1.aol.com>
Source record: 176913

>ng-cd1.aol.com>
>
>Hi Chip--
>
>Peekaboo, eyes are on you! I'd forego the revisionist history, cut the BS,
>turn the pc off, and go read a book.
>
>Rick K1BQT
>

Hi Rick--

I think we would all benefit if you cut the 'BS'.

Just give it a try.

Cordially,

NC

2051. tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 07:04:09 UTC
From: harryvetch@my-deja.com
Message-ID: <8udi98$5vo$1@nnrp1.deja.com>
Source record: 176914

I have a modified 2 meter beam that was previos to last summers qst article converting a fm antenna to two meters. It has been gama bridge matched and is nearly right on at 1:1 in the center freq. When i have it 15 feet in air and aim it and steer awayat from repeaters i dont hear the directionality i like to see. Is it critical that the elements need to be of proper length?

Harry

Sent via Deja.com http://www.deja.com/
Before you buy.

2052. Re: hexbeam?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 07:37:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0A5429.113D@wt.net>
Source record: 176915

CAM wrote:
>
> Floyd Sense wrote:
> > If Mike claims that some users have reported a 10 dB gain compared to a
> > dipole, I take that to mean that users have told him they have seen that
> > gain figure in relation to dipoles installed at their location. What's
> > wrong with passing that information along?
>
> What's wrong, indeed. It simply is NOT TRUE. I assume that Mike knows it is
> not true, yet he passes it along anyway. IMO, that's snake oil marketing.
> "I didn't say it, they said it." Give us a break, Floyd. If someone says
> they can catch a .357m bullet in their teeth, are you going to pass that
> on as the truth? Mike should drop the "super-gain" stuff and admit that
> the highest possible gain of a two element beam over a dipole at the same
> height is about 5dB. IMO, he is simply trying to make a buck at the expense
> of ignorant hams. The Hexbeam is an excellent antenna that can stand on its
> own merits. Why must snake oil marketing techniques be employed?
> --
> http://www.mindspring.com/~w6rca

I gotta side with you on this one. I'm sure it's a good antenna as I've heard many favorable reports on it, but 10 dbd gain? The unwary would think it's equal to a full size 4 el yagi. I really doubt it's quite that good. My cushcraft A4 is only rated 8.9 db. "Not sure over what". But the A4 is a pretty good sized beam. Which do you think would win, the A4 or the hexbeam? I'm afraid I'd have to put my money on the A4, and it's a compromise tri bander to boot. One example of using anecdotal reports to state gain would be to compare my 40m ground plane to my dipole. I could work 200 miles away, and the dipole would be better. I could work 2000 miles away and the ground plane would be better. Does it have gain over the dipole? Of course not. The dipole has gain over the GP. It's just spraying it in different directions and angles. My GP would be 4 s units better to VK land. That would equate to about 6x4=24 db gain!!! NOT!!!!If I were to state my GP having 24 db gain over my dipole I would get laughed off the net. This is another reason I frown on stating antenna gain in any other way other than free space when advertising or even just stating antenna performance in general. I may say my GP is 4 s units better to a certain place at a certain time, but I would never equate that to a given db gain as far as the antenna. Also I'm sure he has really seen 10 db over the dipole he compares to, so I'm not saying he's fibbing, but again that doesn't always mean the antenna really has that much gain. There could be other factors involved. Sorry folks, but to me it is a little snake oilish. I've tried optimizing full sized 2 el yagis and never got that much gain. And lucky to do better

than 10 db f/b. And thats a full size antenna. Heck, a full size 3 el NBS yagi, only does about 9.5 DBI or 7.4 DBD, with a appx 10.5 db f/b ratio. Will the hexbeam beat a full size 3 el yagi? I'll be eagerly awaiting replies...MK
--
http://web.wt.net/~nm5k

2053. HELP!! Folded Dipole model wanted for NEC4WIN

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 14:56:57 UTC
From: Robin Young <robin_young@optusnet.com.au>
Message-ID: <3a0ab8c0$0$19421$7f31c96c@news01.syd.optusnet.com.au>
Source record: 176802

I have to model a Folded Dipole in NEC4WIN for school. I should have turned up to my lectures. Can anyone please post me a center fed folded dipole model for any frequnecy !! PLEASE HELP

robin_young@optusnet.com.au

2054. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-09 22:17:42 UTC
From: John Edwards <johnedw@powerup.com.au>
Message-ID: <01c04a92$88963580$5faa93cb@default>
Source record: 176803

I got a couple from wideband engineering inc some time ago. forget where they were or how much, but they seem to work very well with only .1 or .2 db loss, along with the 50/75 conversion loss.

look them up on the web!

2055. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001110064106.20530.00000649@ng-bj1.aol.com>
Source record: 176719

>
>Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>> Jim Pennino <jimp@mail.specsol.com> wrote:
>
>>> When the "offer" was first made I seriously considered taking him up on it
>>> and establishing a formal fund (lawyer, trust account, the whole
>> enchilada)
>>> figuring if only a percentage of those that thought he needed it would
>> kick
>>> in $10 or so, we could get him an evaluation and at least a couple of
>> months
>>> treatment just about anywhere.
>
>>> Then the reality of the impossibility of the second part of his "offer"
>> sunk
>>> in and I dropped the idea.
>
>> Are you saying that spending $10 to help someone get an evaluation and
>> treatment is not a good thing unless you also get to share the results of
>> that evaluation publically? It appears to me that the goal here is more
>> focused on the sharing of the information publically. Let me ask you this,
>> if you could get the evaluation and share it publically, but not offer any
>> of the help and treatment you state is needed, would you still be "dropping
>> the idea?" ...
>
>> 73,
>> Ed Hare, W1RFI
>
>No, I am saying that Chip attached a condition on his offer that is
>impossible
>to be met. No reputable doctor would release such information to anyone.
>
>I didn't initiate this, Chip did. I considered calling his bluff until
>I realized it is impossible to meet his conditions.
>
>Jim Pennino
>

Well, Jim, present an alternative. How is anyone to know? If my suggestion is not a good one, then kindly present an alternative--which allows the public to know that I am mentally sound.

Such info can then be used in a court of law in libel cases.

Regrads,

Chip N1IR

2056. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001110064234.20530.00000650@ng-bj1.aol.com>
Source record: 176720

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001109185030.27660.00000675@ng-cu1.aol.com...
>>
>> I don't want you or ANY ONE ELSE to stop talking about fractal antennas.
>If you
>> want to then go ahead! I WILL exhort you to be accurate and precise and
>not
>> spread misinformation.
>>
>> I will NOT accept harassing and libelous statements and personal attacks
>from
>> anyone.
>>
>> If your comments are motivated by business and NOT science, then I will
>> continue to make this clear.
>>
>> It seems to me if no problem is produced then no solution is necessary.
>>
>> I don't mind or care what you say, as long as it is technically accurate
>(or
>> attempts to be), relevant, not of a personal nature nor one targeted at a
>> competing firm.
>>
>> Doesn't this make sense?
>>
>> Cordially,
>>
>> NC
>>
>
>It all makes perfect sence. It would be appreciated if you treated me and
>others the way you expect us to treat you. This has been my point for some
>time. I don't like your harassment or libelous statements about me. Nor do
>I appreciate your comments directed at my employment. If you simply stop,
>then there should be no further problems at all.
>
>Steve

Hi Steve,

I have always treated you with exactly the measure of respect that your given post warranted.

And will continue to do so.

With Best Regards,

Chip N1IR

2057. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001110064415.20530.00000651@ng-bj1.aol.com>
Source record: 176721

>Fractenna <fractenna@aol.com> wrote:
>
>> If your comments are motivated by business and NOT science, then I will
>> continue to make this clear.
>
>By what method will you determine that his comments are motivated by
>business, other than the fact that they might be, so they must be...
>
>73,
>Ed Hare, W1RFI

Based on the history of the situation, the bature of the comment, and that Mr. Best is using a PUBLIC forum.

73
Chip N1IR

2058. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001110070917.07954.00000513@ng-ff1.aol.com>
Source record: 176722

> I don't believe what you are saying is entirely correct.<

You may believe what you like--and like what you believe. But, it's easy enough to check, if you're really interested.

Rick K1BQT

2059. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <sWSO5.23191$UL.1405823@bgtnsc07-news.ops.worldnet.att.net>
Source record: 176723

"Fractenna" <fractenna@aol.com> wrote in message
news:20001110064415.20530.00000651@ng-bj1.aol.com...
> >Fractenna <fractenna@aol.com> wrote:
> >
> >> If your comments are motivated by business and NOT science, then I will
> >> continue to make this clear.
> >
> >By what method will you determine that his comments are motivated by
> >business, other than the fact that they might be, so they must be...
> >
> >73,
> >Ed Hare, W1RFI
>
>
> Based on the history of the situation, the bature of the comment, and that
Mr.
> Best is using a PUBLIC forum.
>
> 73
> Chip N1IR
>
>

Are you not using a PUBLIC forum as well? Why does my disagreeing with you in a PUBLIC forum have anything to do with business?

From another perspective, why is it acceptable for you to publicly state your technical and non-technical opinions but when I state mine, you conclude that I must have ulterior motives? It is ethically and morally acceptable for me to disagree with you and state that agreement in response to your public posts on this newsgroup. The real issue for you is that you find it untenable that anyone disagrees with you publicly. When my disagreemts have been stated, your only defense of your position has been claims that I don't understand basic concepts or that I am out to get you. I am not out to get you, I disagree with some of your technical comments. Its really that simple.

Steve VE9SRB

2060. Re: Anyone heard of Commscope coaxial cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <3nIVZFAAG$C6Ew0D@invest.fsbusiness.co.uk>
Source record: 176724

Many thanks John,

Phil G4ZOW
>I tried http://www.commscope.com/productinfo.htm
>
>Product Class CATV-Drop
>Product Type HEC
>Product Group
>Part Number S59 HEC VV HEADEND CABLE
>Description BONDED LAMINATED ALUMINUM TAPE, 95% BRAID, 95% BRAID, FLAME
>RETARDANT PVC JACKET
>Attachment
>
>KA9CAR
>
>
>Philip de Cadanet <phil@invest.fsbusiness.co.uk> wrote in message
>news:OGULRCBzuuC6Ewhe@invest.fsbusiness.co.uk...
>> Cannot find any reference on the web for a roll of Commscope S59 HEC
>> cable.
>>
>> Does anyone happen to have the spec's handy?
>>
>> Many thanks.
>>
>> Phil G4ZOW
>>
>
>

2061. Re: ICOM AH-4 antenna tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0BFF50.D9E6BA0F@bigfoot.com>
Source record: 176725

Phil wrote:
> I have a balcony (metal and extends via
> neigbours) that I want to use as counterpoids.

It is a very bad idea to use a balcony shared with neighbors
as a counterpoise. The voltage at the end of a floating
counterpoise can be very high, high enough to get you sued.
--
http://www.mindspring.com/~w6rca

2062. Re: Radials for mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0C0012.1339EE8C@bigfoot.com>
Source record: 176726

Mike Zerbe wrote:
> I have a mobile 20 meter antenna that I want to put on the roof of my house.

A full-sized 20m 1/4WL monopole is only 16.5ft.

> Any suggestions for an inexpensive ground plane ...

Four 16.5ft radials should do an adequate job.
--
http://www.mindspring.com/~w6rca

2063. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <8uh20p$6d6$1@nnrp2.phx.gblx.net>
Source record: 176727

To: Fractenna <fractenna@aol.com>
Subject: Re: bringing up topics you are unwilling to discuss DID THIS....
From: Christopher Trask <ctrask@primenet.com>
In-reply-to: Your article dated "10 Nov 2000 11:41:06 GMT"
<20001110064106.20530.00000649@ng-bj1.aol.com>
Newsgroups: rec.radio.amateur.antenna
Organization: Primenet (602)416-7000

In article <20001110064106.20530.00000649@ng-bj1.aol.com> you wrote:

: Such info can then be used in a court of law in libel cases.

: Regrads,

: Chip N1IR

And yet another empty, pointless threat of litigation. Tell us,
Chip: Exactly how many other people threaten lawsuits on this PUBLIC
forum? Give complete details instead of telling us that it can be
verified by alternate means.

How does it feel now that you've been discharged from the antenna
mail list four times, the NEC mail list once, and AntenneX twice? Are
you beginning to get the message that your malicious misconduct is simply
not welcome anywhere?

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

2064. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001110093806.28165.00000853@ng-fp1.aol.com>
Source record: 176728

TROLL, TROLL, TROLLLLLL
continues with new suckerees.....

2065. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <zUTO5.6376$mq1.435550@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176729

"Yuri Blanarovich" <k3bu@aol.com> wrote in message
news:20001110093806.28165.00000853@ng-fp1.aol.com...
> TROLL, TROLL, TROLLLLLL
> continues with new suckerees.....

I didn't think my post was trolling ... Oh well.

2066. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <s0UO5.68$g5.312031@news.ntplx.net>
Source record: 176730

Richard Harrison <richardharrison@webtv.net> wrote:

> The point is that the near field which contains significant amounts of
> reactive components doesn`t extend very far for practical purposes.

Absolutely agreed; I can imagine no antenna where the radiating near field would would extend even a tiny fraction of a mile. If the reactive near field is varying as 1/D^2 and the radiating field is varying as 1/D, even though the reactive component of the field is >> the radiating component, it does not take a mile for the reactive field to decay to < the radiating.

> It now appears to me that Ed is using the classic "near field" term to
> mean something entirely different from a region containing significant
> quantities of reactive energy. He seems to be defining it as a region in
> which direct and reflected waves come together to produce a radiation
> pattern. That definition is completely alien to me.

The ARRL Antenna Book discusses the differences between the reactive near field (the one you discussed in your post) and the radiating near field. The former is pretty well defined; the latter is more a convention. The term radiating near field has meaning when a point being evaluated is physically near an antenna such that it is not approximately equidistant from all parts of the antenna, as one would be in the extreme far field. At this point, the E and H fields may not be at right angles, may have an E/H ratio of 377 ohms and may not vary as 1/D. In this region, it is entirely possible for one field to be varying such that it actually increases with incresing distance from the antenna. The reason I call it a convention is because this is the phenomenon that both you and characterized as being related to just how close one feels one needs to be to far field to be able to make use of the calculated or measured results.

One of the reasons that I keep bringing ground into near-field/far-field conversations is that when one is near the ground, the ground also exhibits near-field phenomena. On a perfectly conducting plane, the E field is zero, for example. That, coupled with the fact that one must be very far away from an antenna that exhibits a ground reflection in order to see the far-field pattenr predicted by programs like NEC, indicates that ground is indeed an integral part of the performance of most antenna systems, in sundry ways, each of which may need to be considered when considering the performance of a specific antenna.

73,
Ed Hare, W1RFI

2067. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <u6UO5.69$g5.312408@news.ntplx.net>
Source record: 176731

Richard Harrison <richardharrison@webtv.net> wrote:

> "The effect of a reflection off of perfect ground is exactly the same as
> the effect of feeding another antenna, located 2H below the first
> antenna in free space, where H is the height of the antenna over perfect
> ground."

> It is hard for me to see how you get enough current in that virtual
> image antenna for big radiation from it when it is very far away.

There is no current in a virtual antenna below the ground; the performance of an antenna over ground is as if there were a virtual antenna. It is sort of like how gravity and acceleration both produce the same effect. Shine a light at a mirror. The result is 100% a reflection phenomenon, but the effect appears for all practical purposes as if there were a second light located behind the mirror, at a distance from the mirror exactly equal to the distance from the real light to the virtual light.

> Terman has Table 1 in his chapter on antennas and it shows the resistive
> component of mutual impedance between two parallel half-wave-length
> radiators. Values run from 73 ohms at zero spacing down to 0.06 ohms at
> 7 wavelengths spacing. There was no use to extend the table to greater
> spacing as 0.06 ohms is already insignificant for most purposes.

Terman is completely correct; there is little mutual coupling between an antenna and ground when the antenna is at significant heights. The effect of ground reflection is no more affected by mutual coupling than is the light from the flashlight affected by the reflection. Trying to say that the reflection does not exist because there is no mutual coupling between the flashlight and the mirror is incorrect.

73,
Ed Hare, W1RFI

2068. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <n9UO5.70$g5.312282@news.ntplx.net>
Source record: 176732

Richard Harrison <richardharrison@webtv.net> wrote:

> In my formula for the extent of the far field:
> d = 3.18 a^2 / lambda.
> a is the effective antenna area in square feet.
> d is the extent of the near field in feet.

> What is the near field? It is a region near the antenna containing
> significant reactive energy in addition to radiant energy. The reactive
> energy returns to the antenna. The radiant energy does not return but
> continues on into the far field never to return. Strength of the
> reactive energy decays very rapidly. This means the near field can`t
> extend very far because it declines so rapidly by comparison with the
> radiation field that it soon pales by that comparison.

> I think one would be hard pressed to detect any reactive energy from my
> little 3GHz rhombic at 22,777 feet (4.3 miles) in any direction.

One would be equally hard pressed to detect any reactive energy at D=3.18a^2/lambda. The reactive near field decreases very rapidly with distance. The formula you cited gives approximately the same answer as NF=2D^2/lambda and both are estimating the distance of the radiating near field. (Discussed in another post this AM.)

73,
Ed Hare, W1RFI

2069. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0C1176.A9637C84@eznec.com>
Source record: 176733

The "virtual" or "image" antenna is a conceptual aid which might actually create more confusion than enlightenment. Its current doesn't arise due to any effect akin to mutual coupling, but is purely fictional. Consider the ray emanating from an antenna placed over perfect ground, striking the ground, and reflecting from it. Now remove the ground and add to the model an "image" antenna which is identical to the real antenna and driven with the same magnitude current but out of phase with the real antenna. (Remember, this current doesn't come from mutual coupling with the real antenna, but is supplied as necessary to make the model work. Both the antenna and its current spring from our imagination.) The "image" antenna location is directly below the real one, spaced twice the real antenna's original distance from the ground. With a bit of reflection (pun intended) you'll see that the field from the image antenna is exactly the same as the one which was produced by the reflection of the real antenna's field from the ground. The sum of the fields from the real and image antennas is exactly the same as the sum of the direct field rays from the real antenna and the rays reflecting from the perfect ground of the original model. So the pattern is exactly the same for either model. We've simply substituted the image antenna for the ground and gotten the same result. When the ground isn't perfect, this substitution is still reasonably accurate for horizontally polarized waves, but the accuracy degrades at higher angles because the quality of a real antenna's reflection deteriorates at those angles.

Now, it turns out that you can also account for mutual coupling with the "image" concept. Note the feedpoint impedance of the real antenna when placed over perfect ground. Remove the ground and substitute the image antenna as before. Calculate the feedpoint impedance of the real antenna as modified by mutual coupling to the image antenna. You'll find that the feedpoint impedance of the real antenna is the same as it was over real ground. But again, the image antenna doesn't depend on mutual coupling for its current; we impose its current. After all, we conjured the image antenna, so we can conjure its current just as handily.

These phenomena can be easily shown with the EZNEC demo program. (I apologize if my frequent mentioning of this is getting tiresome. But I really feel that it's very useful in illustrating many of the concepts mentioned in this newsgroup. Nearly any other modeling program will do as well, but one good feature of the EZNEC demo is that it's free.)

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Ed Hare, W1RFI wrote:

> "The effect of a reflection off of perfect ground is exactly the same as
> the effect of feeding another antenna, located 2H below the first
> antenna in free space, where H is the height of the antenna over perfect
> ground."
>
> It is hard for me to see how you get enough current in that virtual
> image antenna for big radiation from it when it is very far away.
>
> Terman has Table 1 in his chapter on antennas and it shows the resistive
> component of mutual impedance between two parallel half-wave-length
> radiators. Values run from 73 ohms at zero spacing down to 0.06 ohms at
> 7 wavelengths spacing. There was no use to extend the table to greater
> spacing as 0.06 ohms is already insignificant for most purposes.
>
> Best regards, Richard Harrison, KB5WZI

2070. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A0C16EF.FB2200C6@haertig.com>
Source record: 176734

As with Christians, there are considerable theological differences among Jews.

Using a computer on Shabbat would not be condoned in most orthodox communities; allowed in some conservative communities and not allowed in others; and not be a problem in most reform communities.

Gray

"David J. Windisch" wrote:
>
> .. mentioned by several post-ers.
>
> Is posting to a NG on the Sabbath permitted to an observant Jew?
>
> Servile labor on Sunday is proscribed to Roman Catholics.
>
> K3BHJ

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

2071. Is there a kit for converting an SB-220 for 6 meter use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <xLUO5.3675$925.127274@news.direcpc.com>
Source record: 176735
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ive recently heard that a company was packaging a kit for converting the 10 meter tank circuit of a Heathkit SB-220 for 6 meter use. Does anyone know where this kit can be acquired and what the cost is? Is this modification a difficult task without purchasing a kit?

Thanks and 73

PS: Happy Veterans Day to all who served. Your efforts will never be forgotten.

2072. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11713-3A0C176F-27@storefull-111.iap.bryant.webtv.net>
Source record: 176736

I don`t know how we all suddenly came to an agreement, but I`m glad we did.

Best regards, Richard Harrison, KB5WZI

2073. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3A0C21E5.B074AB7F@wb6hqk.ampr.org>
Source record: 176737

Richard Harrison wrote:
>
[snip]
>
> But, the energy from an antenna 180 wavelengths above ground is spread
> far and wide before it reaches the ground.

That doesn't matter. The energy is either reflected, or absorbed. The context of this thread has been that the reflection is near perfect specular (mirror like) at near grazing angles. The assumption of perfect specular reflection can be significantly in error due to ground absorption and surface roughness except at near grazing angles. As long as the reflection is specular, it doesn't matter that the rays are 'spread far and wide'.

Take out a piece of paper and draw a horizontal line corresponding to the reflection plane. Now draw an isotropic point source somewhere above the plane and trace a few rays remembering that parallel rays appear to come from a point source when viewed from somewhere in the far field region. Include a few reflected rays.

Now take out a colored pencil and draw another point source located symmetrically below the reflection plane and trace out a few rays _ignoring_ the reflection plane. In other words, a ray coming from below just keeps going straight when it encounters the boundary. You will see that the rays coming from the 'image' source below the reflecting plane are indistinguishable from those reflected from above. Geometrical spreading is not an issue.

> There is nothing to focus the
> energy on the ground space directly under the antenna, and the energy
> certainly is not columnated as is laser light.

Each 'ray' leaving the antenna may be considered collimated. As long as it doesn't lose it's collimation, which is a common working definition of specular reflection, it doesn't need refocusing.

> The volts per meter and
> the watts per square meter are greatly reduced at ground level.

That's correct, the energy density is low but there's a large area involved. If it isn't absorbed, it must be reflected.

> Remember that the image antenna should behave exactly as an actual
> antenna would in the virtual position were that perfect ground removed
> and replaced with a real parasitic antenna.

The image antenna abstraction requires the image antenna be excited with a particular current and phase. The current and phase are chosen in order to achieve the boundary conditions which would be imposed by the ground.

For example, if the ground is perfectly reflecting, then ohms law requires the tangential electric field at the ground surface be zero. The image model is derived from the fact that it is possible to chose an 'image' location such that if it's fed with the correct current and phase, the summation of the fields of the real, and image antenna are consistent with the boundary condition enforced by the laws of physics. It turns out that in the particular case of the perfectly conducting planar ground, the image antenna is located symmetrically with respect to the 'real' antenna and ground plane, hence the term 'image'. The excitation of the image is required to be of opposite phase and identical current as the real antenna in order for the fields to be consistent with the boundary conditions imposed by the ground. e.g. the electric field parallel to the ground will vanish at the boundary.

The image antenna is not in any way assumed to be parasitically excited.

> Scratch the parasitic if the
> antenna is driven against ground.

The image antenna necessarily has the same current distribution as the 'real' antenna. Since the image is a mathematical convenience and does not truly exist, there is no concern about how it may be fed. It is simply assigned a current distribution identical the the real antenna.

> Why is a Yagi reflector placed 0.1 to 0.3 wavelength behind the driven
> element? Would it receive the same excitation at a distance of 180
> wavelengths? You know the answers.

The so called 'reflection' which occurs in Yagi antennas is something of a misnomer and in my opinion, has very little to do with the topic of this thread.

> Radiation from the image of a dipole 180 wavelengths above earth doesn`t
> begin to equal the radiation from the elevated dipole. No violation of
> energy conservation rules are in volved. Only geometrical spreading is
> involved.

The current distribution is identical to that of the elevated dipole. Therefore at distances very far away from the antenna system, the fields must be identical except for the phase which is dependent on the horizon and azimuth angle. The far field pattern is the product of the radiation pattern of a single element multiplied by the term arising from the geometrically dependent phase term.

> I`ll give you a microwave example.
> You may have seen what used to be a common sight. It is called a
> periscope antenna. A rather large dish on the ground, stub tower, or top
> of the radio shack, would be aimed at a reflector at the top of the
> tower, most often at about 45 degrees, to direct signals horizontally

> along the microwave path. Very large dishes were often needed to focus
> the microwaves so that the first Fresnel zone of energy would all hit
> the reflector. Without the focus of energy on the reflector most of the
> energy would be wasted in useless directions.

A less economical alternative is to increase the size of the reflector
so that _all_ (or nearly all) the fresnel zones are reflected. Then the
far field pattern is identical to that of the dish located at the
reflector location. This is the case which more closely matches the
ground reflection scenario being discussed. The case you are referring
to has the reflector in the near field of the antenna, has many
advantages such as a few extra dB of gain and shorter waveguide runs but
I think out of scope here. Would be an excellent and informative topic
for another thread.

bart
wb6hqk

2074. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001110112815.06891.00000883@ng-fy1.aol.com>
Source record: 176738
Body handling: HTML body converted to readable text

<>

What was decided (in layman's terms) on the Rhombic?
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

2075. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Zot <ZOT@aol.com>
Message-ID: <3A0C23BB.A3E5343C@aol.com>
Source record: 176739

Then you should only expect the same and quit complaining.

From what I've seen here - you are being treated "...with exactly the
measure of respect that your given post warranted".

Only modification I'd add is you have MANY 'given posts'

You will be treated thusly until you change. Which is about as likely as
Nader making into the Whitehouse - or a straight answer from the
"Fracloud".

Hope that helps

Fractenna wrote:
>
>
> Hi Steve,
>
> I have always treated you with exactly the measure of respect that your given
> post warranted.
>
> And will continue to do so.
>
> With Best Regards,
>
> Chip N1IR

2076. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ck7hu8.ero.ln@mail.specsol.com>
Source record: 176740

Fractenna <fractenna@aol.com> wrote:
>>>I am not aware that a patient's medical records are meant to be confidential
>>if
>>the patient chooses them to be public. Can you explain this?<
>>
>>You don't get full access either--only recommendations which you, and not the
>>physician, may elect to disclose. If someone is really nutso, their doctor
>>may
>>be very careful and circumspect about what he or she discloses to the client.
>>
>>Your lack of awareness of this issue is...well...your lack of awareness of
>>this
>>issue.
>>
>>Rick K1BQT

> Not having a mental illness, nor having ever seen a doctor for said condition,
> I am indeed ignorant. But I don't believe what you are saying is entirely
> correct.

> 73
> Chip N1IR

What Rick posted is entirely correct for all medical practitioners, not just shrinks, whether you want to accept that reality or not.

Jim Pennino

2077. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <3a0c22c7$0$83488$45beb828@newscene.com>
Source record: 176741

An orthodox or observant jews does not "work" on shabbos. And that means, no electricity, no cars, no telephones, etc. You can't turn it on during shabbos.

Now some get around that by leaving things on (always on DSL is good for this because no phone call is necessary), but then I guess your would not be too observant then.

Remember, you don't know the time zone of where the poster is and shabbos ends based on local sunset times plus an offset.

--jeffrey steinberg, scarsale ny

In article <%PQO5.2268$%O1.3748@newsfeed.slurp.net>, davidw@copper.net says...
>
>.. mentioned by several post-ers.
>
>Is posting to a NG on the Sabbath permitted to an observant Jew?
>
>Servile labor on Sunday is proscribed to Roman Catholics.
>
>K3BHJ
>
>

2078. Back to our roots

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <3a0c2315$0$83488$45beb828@newscene.com>
Source record: 176742

Without naming names or topics, it looks like our newsgroup is back to talking about antennas and away from name calling.

Yahoo! 5 days by my counting. Maybe more.

--jeffrey steinberg, kc2guc

2079. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <858hu8.ero.ln@mail.specsol.com>
Source record: 176743

Fractenna <fractenna@aol.com> wrote:

<snip>

>>
>>No, I am saying that Chip attached a condition on his offer that is
>>impossible
>>to be met. No reputable doctor would release such information to anyone.
>>
>>I didn't initiate this, Chip did. I considered calling his bluff until
>>I realized it is impossible to meet his conditions.
>>
>>Jim Pennino
>>

> Well, Jim, present an alternative. How is anyone to know? If my suggestion is
> not a good one, then kindly present an alternative--which allows the public to
> know that I am mentally sound.

> Such info can then be used in a court of law in libel cases.

> Regrads,

> Chip N1IR

The only way such information could be made public or used in a court of
law would be if you were the subject of a sanity hearing. Which, given
past performance, is a real possibility in my opinion.

The bottom line is you have (again) set up an impossible challenge.

Jim Pennino

2080. Beam Antenna Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0C31BA.A52D9930@bellatlantic.net>
Source record: 176744

If I build a 3 element, 6 meter yagi using 7/8" diameter elements,
1 1/2 diameter boom 8' long, gamma match, "plumbers delight" and
optimize for swr 1.5 to 1 bandwidth, what is the best I can do?

The initial consideration is swr bandwidth only. Gain and F/B
should be reasonable but not necessarily optomized. The
design frequency is 50.6 Mhz

2081. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <igco0toj1qqd3qrkfjd6hgakfbf6iqe6hr@4ax.com>
Source record: 176745

On or about 10 Nov 2000 11:41:06 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:Well, Jim, present an alternative. How is anyone to know? If my suggestion is
:not a good one, then kindly present an alternative--which allows the public to
:know that I am mentally sound.
:
:Such info can then be used in a court of law in libel cases.
:
:Regrads,
:
:Chip N1IR

The patient himself can either sign a release allowing the publication
of the report, or the patient could obtain a copy of the report and
publish it himself.

I'd opt for the first option.

-SSB

2082. Re: Is there a kit for converting an SB-220 for 6 meter use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <2ado0toi1eul4erh5r8l3ruc3slb67amne@4ax.com>
Source record: 176746

I am almost certain there was an article in QST or CQ about doing it
yourself. If I can find it, I will post the info.

Dick Hughes - W6CCD
Remove 33 from address

On Fri, 10 Nov 2000 10:28:04 -0500, "Paul" <pvanasse@mail.direcpc.com>
wrote:

>Ive recently heard that a company was packaging a kit for converting the 10
>meter tank circuit of a Heathkit SB-220 for 6 meter use. Does anyone know
>where this kit can be acquired and what the cost is? Is this modification a
>difficult task without purchasing a kit?
>
>Thanks and 73
>
>
>PS: Happy Veterans Day to all who served. Your efforts will never be
>forgotten.
>

2083. Re: Is there a kit for converting an SB-220 for 6 meter use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <eodo0ts1qkj4215cevnq7cpnpnu17pg6uu@4ax.com>
Source record: 176747

The article on the 6-meter modification was published in QST Hints &
Kinks, December 1974. It was probably in one or more of the Hints &
Kinks books published after that, but I don't have any of them now.
Hope this helps. Perhaps your local library has back issues of QST.

Dick Hughes - W6CCD

On Fri, 10 Nov 2000 10:28:04 -0500, "Paul" <pvanasse@mail.direcpc.com>
wrote:

>Ive recently heard that a company was packaging a kit for converting the 10
>meter tank circuit of a Heathkit SB-220 for 6 meter use. Does anyone know
>where this kit can be acquired and what the cost is? Is this modification a
>difficult task without purchasing a kit?
>
>Thanks and 73
>
>
>PS: Happy Veterans Day to all who served. Your efforts will never be
>forgotten.
>

2084. UPDATE Solar Storm 11/10/00

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: RG-213AU <coaxwater@aol.com>
Message-ID: <aVWO5.589$U4.58102@newsread1.prod.itd.earthlink.net>
Source record: 176748
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

SPACE WEATHER BULLETIN #00- 11
2000 November 09 at 12:20 a.m. MST (2000 November 09 0720 UT)

**** SEVERE SOLAR RADIATION STORM ****

A severe solar radiation storm began today, 8 November, at 4:50 p.m. MST (2350 UT), and has reached a level of S4 on the NOAA Space Weather Scales. The storm, which currently ranks as the fourth largest since 1976, is expected to peak over the course of the next several hours and then slowly diminish over the next three to four days.

This severe radiation storm could pose a hazard to the astronauts on the International Space Station as well as passengers on commercial airlines flying at high latitudes. The storm could also adversely effect the operation of satellites.

:Issued: 2000 Nov 10 1730 UT
Prepared by the U.S. Dept. of Commerce, NOAA, Space Environment Center.
Please send comments and suggestions to sec@sec.noaa.gov
Updated hourly and as Alerts and Warnings are issued.

:ALERTS:

Magnetic K-Index of 4 Observed 9 Nov 2000 from 1500 to 1800 UT
Comment: None

Magnetic A-Index >=30 Watch for 11 Nov 2000 UT
Comment: None

Magnetic A-Index >=20 Watch for 12 Nov 2000 UT
Comment: None

The following Alert was CONTINUED at 0100 UT on 10 Nov 2000
Protons Event >10 MeV @ >=10pfu BEG 8 Nov 2000 2350 UT
Comment: The current level is 4114 pfu's. A maximum flux of 13,300 pfu's was reached at 1600 UTC on 09 Nov.

The following Alert was CONTINUED at 0100 UT on 10 Nov 2000
Proton event >100 MeV @ >1pfu BEG 8 Nov 2000 2350 UT
Comment: The current flux level is 19 pfu's. A maximum flux of 347 pfu's was reached at 0350 UTC on 09 Nov.

Magnetic K-Index of 4 Observed 10 Nov 2000 from 0000 to 0300 UT
Comment: None

Error 33029 bad record in alerts at ignored.

Sudden Impulse observed at Boulder 10 Nov 2000 0629 UT 67 nT
Comment: None

Magnetic K-Index of 5 Observed 10 Nov 2000 from 0600 to 0900 UT
Comment: None

Magnetic A-Index >=20 Observed 10 Nov 2000 0900 UT
Comment: None

Type II Radio Emission 9 Nov 2000 2123 UT
Comment: Estimated shock velocity = 1000 km/s

Type II Radio Emission 9 Nov 2000 2256 UT
Comment: Estimated shock velocity = Too short to estimate shock speed.

---------- end ----------

2085. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <3a0c240d.6768609@news.azstarnet.com>
Source record: 176749

On Thu, 09 Nov 2000 12:17:46 -0800, Roy Lewallen <w7el@eznec.com> wrote:

This comment isn't in response to Roy's remarks, this is just a handy place to jump back into this thread.

I earlier stated that in the model of a dipole above ground, the null depth was not dependent on height above ground. This is incorrect.

As Senator Blotto would say, I would like to revise and extend my remarks.

I did some more fiddling around with a dipole resonant (zero reactance) at a wavelength of one meter. I placed this antenna at various heights above a perfect ground and determined the depth of the null at 90 degree elevation.

I started at 1/2 wavelength above ground and increased the height by a factor of 2^n where n is an integer. Some of the data follow:

Height (lambda) Null Depth (dB)
0.5 -82.14
1 -76.1
2 -70.1
4 -64.07
8 -58.06
16 -52.03
32 -46.01
64 -39.99
128 -33.97
256 -27.95
512 -21.94
1024 -15.95
2048 -10.04
4096 -4.47

For the above numbers, the null depth is approximated (within 0.05 dB) by the function:

dB ~ 20 * log(lambda) - 76.11

up to about 1000 lambda. The reader is invited to extrapolate to greater heights.

Using two freespace dipoles separated by twice the height and fed equal power but 180 degrees out of phase gives exactly the same results.

I'll let this stand without making any more foolish comments.

Wes

2086. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <m3ho0t83tt6dq3vm102kddse8ckofaiq3b@4ax.com>
Source record: 176750

On Thu, 09 Nov 2000 04:35:12 GMT, Patrick Jankowiak
<vaxhackery@REPLTILEatt.net.> wrote:

>Can anyone enlighten me about 'big ugly' antennas? Are these the ones
>I see with a 4"-5" diameter by 12" tall center mounted loading coil
>and a large top hat?

Yes. "Big Ugly" is a generic term, not a specific design. You'll
know it when you see it. :-)

73, Bill W7TI

2087. Re: Buryable Coax Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <vhho0tsh05af88a013kbfljrfr55erc071@4ax.com>
Source record: 176751

On Thu, 09 Nov 2000 23:04:51 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>>W7TI said: PVC works fine UNLESS you have burrowing rodents. They'll chew right
>> through it.
>
>Roger said: Wellllll...Yes and no.
>If nothing bothers it, and there are no stones to nick the jacket in the
>dirt then straight PVC works fine,

Bzzzzt! My comment about PVC working fine was about CONDUIT, not
coax. I wouldn't bury PVC coax - only polyethylene. See the RF Davis
website for more about buryable coax:

http://www.davisrf.com/amateur.htm

The usual disclaimers apply.

73, Bill W7TI

2088. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <emfhu8.ks3.ln@mail.specsol.com>
Source record: 176752

sideband <sideband@cac.net> wrote:
> On or about 10 Nov 2000 11:41:06 GMT, fractenna@aol.com (Fractenna),
> using the forum rec.radio.amateur.antenna did say:
> :
> :Well, Jim, present an alternative. How is anyone to know? If my suggestion is
> :not a good one, then kindly present an alternative--which allows the public to
> :know that I am mentally sound.
> :
> :Such info can then be used in a court of law in libel cases.
> :
> :Regrads,
> :
> :Chip N1IR

> The patient himself can either sign a release allowing the publication
> of the report, or the patient could obtain a copy of the report and
> publish it himself.

> I'd opt for the first option.

> -SSB

Nope, as posted by Rick, it would take a court order to get a reputable
practitioner to release any patient records, at least in the US, don't
know about other countries.

Next time you're at the doctor's try asking for an x-ray so you can have
a print made to hang on your wall. Most doctors won't even do that, let
alone release detailed information.

Jim Pennino

2089. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11714-3A0C42FD-10@storefull-111.iap.bryant.webtv.net>
Source record: 176753

Ed G. wrote:
"What was decided (in layman`s terms) on the rhombic?"

I think some of us agree the definition of the dividing line between near and far fields is a limiting distance beyond which the reactive energy which returns to the antenna is inconsequential. Just how far away from the antenna that is can depend on the user`s needs. But Terman and many other authorities say a good choice may be about 7 wavelengths from the dipole antenna.

The term "near field" may have been used to define a reflection zone by some. I have never seen that, but I`ve never seen a computer antenna program or any of the new ARRL antenna books either.

I have watched Collins Radio measure the characteristics of a log periodic antenna about 40 years ago at their Richardson, Texas plant. The antenna and sensor were mounted at rather modest heights outdoors over the ground. The antenna mounting allowed them to rotate, turn 90 degrees on its axis, or tilt the tested antenna. It may not have given true free space results. Collins may have only wanted the results of a log periodic mounted at that particular altitude. I`d wager that the results obtained were good enough for comparison and practical purposes. They obviously had rather elaborate test facilities with automatic pattern print outs, etc. The radiation sensor was obviously not miles away, but it was a number of wavelengths away. I`d further wager that the results were reasonably representative of the free space directivity of the log periodic which was no where near 180 wavelengths above ground.

This discussion could go on forever and we might learn from it . I am tired of it myself.

Best regards, Richard Harrison, KB5WZI

2090. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A0C52E4.BE76697F@eznec.com>
Source record: 176754

At least in Oregon, any patient can get a full copy of his or her medical records at any time. What the patient does with that copy is up to the patient. No one else can get a copy without a court order or written permission from the patient.

Roy Lewallen, W7EL

Jim Pennino wrote:
>
> Nope, as posted by Rick, it would take a court order to get a reputable
> practitioner to release any patient records, at least in the US, don't
> know about other countries.
>
> Next time you're at the doctor's try asking for an x-ray so you can have
> a print made to hang on your wall. Most doctors won't even do that, let
> alone release detailed information.
>
> Jim Pennino

2091. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fKYO5.73$g5.328689@news.ntplx.net>
Source record: 176755

Richard Harrison <richardharrison@webtv.net> wrote:

> I think some of us agree the definition of the dividing line between
> near and far fields is a limiting distance beyond which the reactive
> energy which returns to the antenna is inconsequential. Just how far
> away from the antenna that is can depend on the user`s needs. But Terman
> and many other authorities say a good choice may be about 7 wavelengths
> from the dipole antenna.

I do not know of any antenna type where the reactive near field would be 7 wavelengths away from the antenna. I think you are still inter-relating the reactive near field with the radiating near field. The former is one of reactive energy being returned to the antenna -- the latter is one of radiated energy, but in a location where one is not equidistant from all parts of the antenna. This can occur very far away from the antenna for physically large antennas.

> The term "near field" may have been used to define a reflection zone by
> some. I have never seen that, but I`ve never seen a computer antenna
> program or any of the new ARRL antenna books either.

The term "near field" is not used to define a reflection zone. What I offered is that to make a far field measurement in the presence of a ground reflection, one must be far enough from the antenna that the size of the system, including the ground reflection, is in the far field.

73,
Ed Hare, W1RFI

2092. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A0C5CC6.8D6B9290@hiwaay.net>
Source record: 176756

FRacky- I, for one, do not expect, nor need, a report from a mental specialist that has examined you professionally- The fact that you place yourself in a position of getting help would be enough.
Believe it or not, there are many of us out here with some experience (from the inside, or the outside) with mental problems. Some of us are convinced that you have a problem. Most of us merely want you to get help. This is not a retribution problem, but a sincere desire to help you.

Your last paragraph (below) is an illustration of some of the symptoms that indicate that there is a problem.

Hope this helps. Bill-W4BSG

> Fractenna <fractenna@aol.com> wrote:
>
> <snip>

> > Well, Jim, present an alternative. How is anyone to know? If my suggestion is
> > not a good one, then kindly present an alternative--which allows the public to
> > know that I am mentally sound.
>
> > Such info can then be used in a court of law in libel cases.
>
> > Regrads,
>
> > Chip N1IR
>
> The only way such information could be made public or used in a court of
> law would be if you were the subject of a sanity hearing. Which, given
> past performance, is a real possibility in my opinion.
>
> The bottom line is you have (again) set up an impossible challenge.
>
> Jim Pennino

2093. Re: tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0C6D20.2F45@wt.net>
Source record: 176757

harryvetch@my-deja.com wrote:
>
> In article <3A0AD6E3.F5DA99DC@bellatlantic.net>,
> ehsjr@bellatlantic.net wrote:
> > Dimensions (element length, diameter and spacing) all affect the
> > performance characteristics of a beam - F/B ratio, F/Side ratio,
> > Gain, bandwidth. For 2M repeaters, the antenna should be vertically
> > polarized, and you want all the elements in front of the mast.
> I this case it is using ABS for a mast which should not affect the
> directionality. Now, I think using a fielf strenght meter will work. I
> did cut the elements slightly short but made up with it by sticking
> smaller tubing in the ends and put the cut pieces on those smaller
> ended so its adjustable. With a 5 element beam 460 feet up on a hill 20
> feet above the ground at 5 watts what kind of distance should I get?
> nothing is obstructing it in front of it but a small cheary tree on the
> right and a pine tree 20 feet higher then it is on the left with both
> spaced 25-30 feet and antena in between.
>
> kb7tfw

Hard to say for sure, but if you are pretty clear in the distance you
should do pretty well. With a 3 el I have at about 35 ft I can talk all
the way across town with 5 watts. A good 30 miles I would say. "Thats
with a equal antenna on the other end". The others guys setup will share
50% of the range capabilty. You might only work 5-10 miles to a guy with
a ht standing in the yard. You might work 70 miles to a guy with stacked
yagis at 90 ft. All depends. But I can assure you, you will do ok,
unless you are trying to work 170 miles away or something. With my
present 50 watt rig and only a 3 el, vertically polarized, I'm fairly
loud in most areas of Houston which is a big area. And actually I rarely
run 50w. I'm usually only about 28 watts on simplex. MK
--
http://web.wt.net/~nm5k

2094. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0C6FC0.3E09@wt.net>
Source record: 176758

nannycam@iwvisp.com wrote:
>
> Thanx for all the inputs, , , , , very interetsing.
>
> I forgot to mention that my G5RV is the G5RV JR.
> IOW, I'ts the short version that only tunes to forty meters.
> I have a ten meter dipole that I'm going to put up, and I also run my
> 735 through a MFJ versa tuner II.
>
> ==========
>
> On Wed, 08 Nov 2000 20:03:50 GMT, nannycam@iwvisp.com wrote:
>
> >This is a very intersetin thread.
> >I have been off of the low bands for a long time, and recently got a
> >IC-735. I'm using a G5RV in a vee configuration, and even pinched in a
> >horizontal vee facing East. I use it mostly on ten and forty, and get
> >excellent rteports. Low noise is a plus. I have a limited space, and
> >the rear of my residential property has high voltage lines, but it
> >still seems to work great. I don't know what I can do to improve on
> >it, but I'm listening, , , :-}~
> >

How long is the dipole? I'm not familiar with the JR version. The normal G5RV is 102 ft long. If it's working good, You may not need to do anything. Myself, if I were doing that same thing, I would feed a 40 meter dipole with 450 ohm ladder line all the way from the tuner to the antenna. I wouldn't use any coax sections, or chokes etc. I'm not sure if yours has all that, but if it does, it may possibly improve it a bit to run ladder line the whole way. If it didn't, you could always switch back. When using a single dipole for multi band use, I usually want a full half wave dipole for the lowest band. But like I said, if it aint broke, you may not need to fix it. Also always try to use the minumum inductance to tune. That will lower tuner losses. MK
--
http://web.wt.net/~nm5k

2095. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0C76B4.4992@wt.net>
Source record: 176759

Fractenna wrote:
>
> >Fractenna <fractenna@aol.com> wrote:
> >
> >> If your comments are motivated by business and NOT science, then I will
> >> continue to make this clear.
> >
> >By what method will you determine that his comments are motivated by
> >business, other than the fact that they might be, so they must be...
> >
> >73,
> >Ed Hare, W1RFI
>
> Based on the history of the situation, the bature of the comment, and that Mr.
> Best is using a PUBLIC forum.
>
> 73
> Chip N1IR

The word you've entered isn't in the dictionary. Click on a spelling
suggestion below or try again using the Dictionary search box to the
right.

Suggestions for bature:
1. batcher
2. basher
3. Beecher
4. butcher
5. botcher
6. Boucher
7. beachier
8. beshrew
9. batchers
10. bashers

Go: Home - Fun & Games - Translator - Word of the Day - Help

Search for "bature" at Business.com Shop for bature at
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-Hot 100 Music

No entry found for "bature" in the dictionary.

Suggestions:

mature
nature
Batture
Mature
Nature
Batule
mature
nature
nature
nature
mature
nature

For better results, try our search tips.

Hope this helps... MK
--
http://web.wt.net/~nm5k

2096. 6 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <CQ_O5.78$g5.334471@news.ntplx.net>
Source record: 176760

Unfortunately, I accidentally deleted a post from a fellow looking for a 6 M beam that had a good SWR across the band. I used Antenna Optimizer and came up with the following. The dimensions are for just the elements, no boom, but they can be corrected for the presence of a boom using the usual correction factors (ARRL Antenna Book, other sources). Being lazy, I won't do all the math to translate the variables that AO calculated into the acutal dimensions, but I trust the format of the AO .ant file is reasonably self explanatory.

```
3-Element Yagi
Over Ground
52.000 MHz
3 wires, feet
seg = 7
height = 10.5
dia = .625
f = 52
refl = 239.4162
del = 213.2212
dirr = 158.2793
ref = refl/f
de=del/f
dir=dirr/f
front = 4.18
middle = 0
back = -4.18
seg back -ref height back ref height dia
seg middle -de height middle de height dia
seg front -dir height front dir height dia
1 source
Wire 2, center
```

The lines that start with "seg" are the antenna element lines. They are formatted as follows:

```
end 1 end 2 conductor diameter
#segments X Y Z X Y Z diameter
```

where #segments is the number of segments I used in the program calculations, X, Y and Z are the coordinates for the ends of each wire used.

The performance of the antenna is:

```
+----------------------------------------+
�Freq�50.000�51.000�51.000�53.000�54.000�MHz�
+----+------+------+------+------+------+---�
```

```
�Gain� 10.28� 10.41� 10.41� 10.68� 10.82�dBi�
�F/B � 15.99� 16.60� 16.60� 14.19� 12.90� dB�
�Zr � 43.6� 47.4� 47.4� 56.5� 60.6� _�
�Zi � -8.76� -2.02� -2.02� 14.41� 23.2� _�
�SWR � 1.29� 1.11� 1.11� 1.32� 1.55� �
+----+------+------+------+------+------+---�
�Gain� 10.29� 10.42� 10.42� 10.69� 10.82�dBi�
�F/B � 16.03� 16.56� 16.56� 14.18� 12.89� dB�
�Zr � 43.8� 49.1� 49.1� 56.7� 60.9� _�
�Zi � -8.17� -0.26� -0.26� 15.15� 24.0� _�
�SWR � 1.27� 1.06� 1.06� 1.34� 1.57� �
+----------------------------------------+
�Variable� Value� ☐_
� refl� 239.4162� 0_
� del� 213.2212� 0_
� dirr� 158.2793� 0_
```


This was just a quick calculation -- I could have probably played more with element spacing, or not worried about having a 50 ohm feed point. AO is MININEC based, so may not be as accurate as NEC-based models. What I have done for other antenas I have optimized is first us AO to optimize, then re-enter the program into EZNEC, find out what it really does, then make minor tweaks in EZNEC to get it right. If my explanation of the AO file left anything to be desired, email me this weekend at w1rfi@aol.com. For now, I still have my AOL account. :-)

73, Ed Hare, W1RFI

2097. Re: Beam Antenna Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <3A0C80FC.7C9FA485@qadas.com>
Source record: 176761

I generally figure on a 3 element beam that the director would be 5% shorter and the Reflector 5% longer than the driven element. To get greater bandwidth, you could make the directer even shorter, maybe as much as 8% and the reflector longer by 8%.

Another trick would be to use thicker elements or even a bow tie radiator.

In today's software ham world, I would model the different options on AO, EZNEC, or NEC WIN + and select the one that best fits your parameters. Less than a few hours would save days of cutting & drilling!

ehsjr@bellatlantic.net wrote:

> If I build a 3 element, 6 meter yagi using 7/8" diameter elements,
> 1 1/2 diameter boom 8' long, gamma match, "plumbers delight" and
> optimize for swr 1.5 to 1 bandwidth, what is the best I can do?
>
> The initial consideration is swr bandwidth only. Gain and F/B
> should be reasonable but not necessarily optomized. The
> design frequency is 50.6 Mhz

2098. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0C80A4.7399@bellsouth.net>
Source record: 176762

Jeffrey,

May I ask a question? Well, actually more than one. Is "shabbos" a
special observance or is it the same as Sabbath? If it is the same,
if observant Jews can't drive, how do they attend synagogue? Not be-
ing Jewish, I am just trying to get my facts straight.

Thanks,

Jerry

Jeffrey Steinberg wrote:
>
> An orthodox or observant jews does not "work" on shabbos. And that
> means, no electricity, no cars, no telephones, etc. You can't turn it on
> during shabbos.
>
> Now some get around that by leaving things on (always on DSL is good for this
> because no phone call is necessary), but then I guess your would not be too
> observant then.
>
> Remember, you don't know the time zone of where the poster is and shabbos ends
> based on local sunset times plus an offset.
>
> --jeffrey steinberg, scarsale ny
>
> In article <%PQO5.2268$%O1.3748@newsfeed.slurp.net>, davidw@copper.net says...
> >
> >.. mentioned by several post-ers.
> >
> >Is posting to a NG on the Sabbath permitted to an observant Jew?
> >
> >Servile labor on Sunday is proscribed to Roman Catholics.
> >
> >K3BHJ
> >
> >

2099. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8ui79j$1bl0$1@news.gate.net>
Source record: 176763

> works) and glom a couple three cans of spray paint which matches the color
of
> your Accord and spay the hell outta your screwdriver with the stuff and
get
> color-coordinated and turn the scewdriver into an interesting piece of
Honda
> exotica.

Brian....actually that's not a bad idea. ;-) Thanks for the tip!

2100. Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8uidsakaa1@slb7.atl.mindspring.net>
Source record: 176764

I use nothing but coax. Reason being, interference from household appliance, wiring ect. I have never used balanced line but from experience with a random wire fed right from the tuner it would seem that noise would be a problem. I have heard the bit about turning off everything in the house that causes problems but that is not very practical for most people. With the apparent popularity of balanced line, I'm wondering how you solve this problem.
--
CW
KC7NOD

2101. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <rd4P5.374$9U1.17146@news.inreach.com>
Source record: 176765

CW:

Theoretically, the noise pick-up of ladder line should be minimal because the currents induced in the feed line by noise sources will be common mode, whereas the signals coming in from the antenna will be differential mode. Your tuner should respond only to the differential mode signals while the common mode signals cancel out. The reality of the situation will never reach the theoretical, of course, but the noise pick up should not be a problem...

Roger K6XQ

2102. Re: HELP!! Folded Dipole model wanted for NEC4WIN

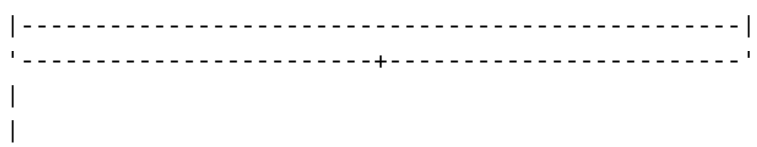
Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: z005381b@bc.seflin.org
Message-ID: <8uftr7$n64@nntp.seflin.org>
Source record: 176766

Robin Young (robin_young@optusnet.com.au) wrote:
: I have to model a Folded Dipole in NEC4WIN for school. I should have turned
: up to my lectures. Can anyone please post me a center fed folded dipole
: model for any frequnecy !! PLEASE HELP

That'll teach you to sleep in!

: robin_young@optusnet.com.au

Post(?) of center fed folded dipole;



--
Jim Rosenthal, WA4STJ

2103. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12118-3A0BA8B1-121@storefull-117.iap.bryant.webtv.net>
Source record: 176815

Ed Hare, W1RFI wrote:
"Yes, but the reflection still takes place."

Agreed. On a microwave path there is only one reflection point. We say the direct and reflected waves have traveled almost exactly the same distance so they can be expected to have nearly the same strength should there be an efficient reflection. So, there could be as much as a 6 db gain over the direct ray by itself, to complete cancellation if the two rays are completely out of phase.

We have concentric Fresnel zones surrounding the straight line between antennas at the path ends. The odd numbered zones are good news and the even numbered zones are bad news. In engineering the path we try to stay within the first Fresnel zone by our path clearance choice. We usually shoot for 0.6 of the first Fresnel zone clearance. We also try to choose a non-reflective spot for the path to graze. We avoid water when we can. That is very tough over the ocean, of course.

Best regards, Richard Harrison, KB5WZI

2104. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12119-3A0BB194-64@storefull-117.iap.bryant.webtv.net>
Source record: 176816

Ed Hare, W1RFI wrote:
"The effect of a reflection off of perfect ground is exactly the same as the effect of feeding another antenna, located 2H below the first antenna in free space, where H is the height of the antenna over perfect ground."

It is hard for me to see how you get enough current in that virtual image antenna for big radiation from it when it is very far away.

Terman has Table 1 in his chapter on antennas and it shows the resistive component of mutual impedance between two parallel half-wave-length radiators. Values run from 73 ohms at zero spacing down to 0.06 ohms at 7 wavelengths spacing. There was no use to extend the table to greater spacing as 0.06 ohms is already insignificant for most purposes.

Best regards, Richard Harrison, KB5WZI

2105. Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <%PQO5.2268$%O1.3748@newsfeed.slurp.net>
Source record: 176817

.. mentioned by several post-ers.

Is posting to a NG on the Sabbath permitted to an observant Jew?

Servile labor on Sunday is proscribed to Roman Catholics.

K3BHJ

2106. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001110063809.20530.00000646@ng-bj1.aol.com>
Source record: 176818

>>I am not aware that a patient's medical records are meant to be confidential
>if
>the patient chooses them to be public. Can you explain this?<
>
>You don't get full access either--only recommendations which you, and not the
>physician, may elect to disclose. If someone is really nutso, their doctor
>may
>be very careful and circumspect about what he or she discloses to the client.
>
>Your lack of awareness of this issue is...well...your lack of awareness of
>this
>issue.
>
>Rick K1BQT

Not having a mental illness, nor having ever seen a doctor for said condition, I am indeed ignorant. But I don't believe what you are saying is entirely correct.

73
Chip N1IR

2107. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 00:01:02 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <2VGO5.22603$UL.1366424@bgtnsc07-news.ops.worldnet.att.net>
Source record: 176804

"Fractenna" <fractenna@aol.com> wrote in message
news:20001109185030.27660.00000675@ng-cu1.aol.com...
>
> I don't want you or ANY ONE ELSE to stop talking about fractal antennas.
If you
> want to then go ahead! I WILL exhort you to be accurate and precise and
not
> spread misinformation.
>
> I will NOT accept harassing and libelous statements and personal attacks
from
> anyone.
>
> If your comments are motivated by business and NOT science, then I will
> continue to make this clear.
>
> It seems to me if no problem is produced then no solution is necessary.
>
> I don't mind or care what you say, as long as it is technically accurate
(or
> attempts to be), relevant, not of a personal nature nor one targeted at a
> competing firm.
>
> Doesn't this make sense?
>
> Cordially,
>
> NC
>

It all makes perfect sence. It would be appreciated if you treated me and others the way you expect us to treat you. This has been my point for some time. I don't like your harassment or libelous statements about me. Nor do I appreciate your comments directed at my employment. If you simply stop, then there should be no further problems at all.

Steve

2108. WTB: ARRL videotape course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 01:13:29 UTC
From: Charles Hunter <crhunter@idirect.com>
Message-ID: <ZYHO5.1798$pD5.33947@quark.idirect.com>
Source record: 176805

Disabled person wishes to purchase used ARRL videotape technician or
General course to learn electronic theory for ham radio.

The courses are currently not available from the ARRL.

Please remove (nospam) from the address to reply by email.

2109. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 01:16:08 UTC
From: k1bqt@aol.com
Message-ID: <20001109201608.16733.00000861@ng-mj1.aol.com>
Source record: 176806

>I am not aware that a patient's medical records are meant to be confidential
if
the patient chooses them to be public. Can you explain this?<

You don't get full access either--only recommendations which you, and not the physician, may elect to disclose. If someone is really nutso, their doctor may be very careful and circumspect about what he or she discloses to the client.

Your lack of awareness of this issue is...well...your lack of awareness of this issue.

Rick K1BQT

2110. Re: Bush & U.S. Constitution

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 02:14:49 UTC
From: BILL WILSON <w5ikb@satx.rr.com>
Message-ID: <3A0B59CE.306DFA34@satx.rr.net>
Source record: 176813

Hi Mr. Know-it-all,

If you knew as much about George W. Bush as you think you do, you would not put his name in your sig as G. W. Bush, Jr. You know very little about him or his father if you think that is his name. Go check it out and report back!!!!!!!!!!

RanHefner wrote:

> In article <3A0891E0.B8B8467B@uci.edu>,
> Jim Kelley <jwkelley@uci.edu> wrote:
>
> > What we have here is a failure to communicate, and you are displaying
> a
> > lack of cognitive skill.
> >
>
> Great dodge! Good move to not address the subject.
>
> --
> "There ought to be limits on freedom." G.W. Bush,Jr. 1999
> G.W. Bush...Not a crackhead anymore!
> http://www.gwbush.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2111. Re: tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 02:23:54 UTC
From: harryvetch@my-deja.com
Message-ID: <8ufm7mvff1@nnrp1.deja.com>
Source record: 176807

In article <3A0AD6E3.F5DA99DC@bellatlantic.net>,
ehsjr@bellatlantic.net wrote:
> Dimensions (element length, diameter and spacing) all affect the
> performance characteristics of a beam - F/B ratio, F/Side ratio,
> Gain, bandwidth. For 2M repeaters, the antenna should be vertically
> polarized, and you want all the elements in front of the mast.
I this case it is using ABS for a mast which should not affect the
directionality. Now, I think using a fielf strenght meter will work. I
did cut the elements slightly short but made up with it by sticking
smaller tubing in the ends and put the cut pieces on those smaller
ended so its adjustable. With a 5 element beam 460 feet up on a hill 20
feet above the ground at 5 watts what kind of distance should I get?
nothing is obstructing it in front of it but a small cheary tree on the
right and a pine tree 20 feet higher then it is on the left with both
spaced 25-30 feet and antena in between.

kb7tfw

>
> harryvetch@my-deja.com wrote:
>
> > I have a modified 2 meter beam that was previos to last summers qst
> > article converting a fm antenna to two meters. It has been gama
bridge
> > matched and is nearly right on at 1:1 in the center freq. When i
have
> > it 15 feet in air and aim it and steer awayat from repeaters i dont
> > hear the directionality i like to see. Is it critical that the
elements
> > need to be of proper length?
> >
> > Harry
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2112. Re: tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 04:09:24 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0B7582.58BE2E84@bellatlantic.net>
Source record: 176808

What happend to your question on front to side ratio?

Now you are asking how much distance should you get.
That's a "bag of snakes" question!
There is no single answer to that question. Perhaps a good
rule of thumb on 2M FM is "line of sight plus" meaning you
should be able to work anything your antenna can "see" plus
some stuff your antenna can't "see". I have a 5 element beam
and worked a station on 2M sideband 97 miles away today, cross
polarized. But I have trouble hitting a repeater on FM 30 miles
away with both antennas vertically polarized, due to
topography between antennas.

In addition - you did not state the gain of the antenna - is it
optomized for gain or F/B, how long is the feed line and what is its
loss, what is its polarization, are you still talking FM or is it SSB,
what is the antenna at the receiving site, how high is it, what
is its polarization etc etc etc - there are a LOT of factors that come
into the "how much distance should I get" question.

harryvetch@my-deja.com wrote:

> In article <3A0AD6E3.F5DA99DC@bellatlantic.net>,
> ehsjr@bellatlantic.net wrote:
> > Dimensions (element length, diameter and spacing) all affect the
> > performance characteristics of a beam - F/B ratio, F/Side ratio,
> > Gain, bandwidth. For 2M repeaters, the antenna should be vertically
> > polarized, and you want all the elements in front of the mast.
> I this case it is using ABS for a mast which should not affect the
> directionality. Now, I think using a fielf strenght meter will work. I
> did cut the elements slightly short but made up with it by sticking
> smaller tubing in the ends and put the cut pieces on those smaller
> ended so its adjustable. With a 5 element beam 460 feet up on a hill 20
> feet above the ground at 5 watts what kind of distance should I get?
> nothing is obstructing it in front of it but a small cheary tree on the
> right and a pine tree 20 feet higher then it is on the left with both
> spaced 25-30 feet and antena in between.
>
> kb7tfw
>
> >
> > harryvetch@my-deja.com wrote:
> >
> > > I have a modified 2 meter beam that was previos to last summers qst
> > > article converting a fm antenna to two meters. It has been gama

> bridge
> > > matched and is nearly right on at 1:1 in the center freq. When i
> have
> > > it 15 feet in air and aim it and steer awayat from repeaters i dont
> > > hear the directionality i like to see. Is it critical that the
> elements
> > > need to be of proper length?
> > >
> > > Harry
> > >
> > > Sent via Deja.com http://www.deja.com/
> > > Before you buy.
> >
> >
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2113. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 04:24:54 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A0B788D.C11828F8@earthlink.net>
Source record: 176809
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

hey pete
congrats on the new radio
i would suggest a 5 ele yagi for 6ssb which is where the most of the activity on 6 is but keep in mind it is NOT like 10 or 20 meters 6 doesnt open all that often you spend a great amount of time monitoring and listening to white noise but when it does open its great fun
as for HF your on your own
73

Peter wrote:

> Where is all the activity on the 6m band (fm, ssb...)? I'm looking at
> getting a new HF/6M radio (Kenwood TS-570S/G) and will need some 6m and HF
> antenna recommendations, thougths anyone?
>
> Thanks.
> Pete

2114. Re: OT: Antenna matching transfomer for FM broadcast band

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 04:29:12 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8uftioeps5@bashir.peak.org>
Source record: 176810

"Carl-Lisa Van Camp" <thevancamps@interwebco.com> wrote:

:Sorry for the OT post, but I bet someone here knows: I'm trying to find a
:50ohm-to-75ohm RF transformer that covers the FM broadcast band (88-108MHz).
:Ideally it would be BNC connectors in and out.
:
:Goal: hook a 75 ohm antenna to a 50 ohm spectrum analyzer input. Anybody
:know where I can buy one of these?

What is your exact application? In most cases, the mismatch will not
matter.

--
Bill Nelson (billn@peak.org)

2115. ICOM AH-4 antenna tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 05:43:26 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <2WLO5.100041$il2.2121180@afrodite.telenet-ops.be>
Source record: 176811

Hello,

A bought a IC-706KIIG a few weeks ago. Because I'm very limited and restricted to put up antennas, I've ordered a AH-4 tuner to go with my IC-706. My situations is as follows :
Living on the first floor, I have a balcony (metal and extends via neigbours) that I want to use as counterpoids. I want to put up a wire (21 feet) as a slooper attached to a three.

Some questions :

- Would a vertical solution work better
- If so, can I wound a wire around a fiber stick to gain antenna lenght ?
- When I use the slooper, can I also use a wounded wire around plastic pipe to gain antenna lenght ?
- When I wind wire, will it go with the tuner or can I only use this for single band antennas ?

All info or tips regarding my restricted situation is welcome !
Tks and 73 de Phil
on4baw@pandora.be

2116. Re: Radials for mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 06:29:31 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <fBMO5.100187$il2.2121881@afrodite.telenet-ops.be>
Source record: 176812

If you have a addic you can put up some radials under the roof and use them
as RF ground ...
The more you put up, the better the antenna wil perform

73 de Phil, on4baw

"Mike Zerbe" <zerbe@pioneer-net.com> wrote in message
news:fnMO5.50570$mu4.94569@dfw-read.news.verio.net...
> I have a mobile 20 meter antenna that I want to put on the roof of my
house.
> Any suggestions for an inexpensive ground plane and best way to attach the
> antenna to the roof. Mike - KA7CGI
>
>

2117. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-10 07:22:03 UTC
From: richardharrison@webtv.net
Message-ID: <12118-3A0BA21B-115@storefull-117.iap.bryant.webtv.net>
Source record: 176814

Ed Hare, W1RFI wrote:
"One cannot measure the actual gain at any elevation without including the ground reflection and one must be in the far field to do it."

I quoted Griffith earlier in this thread. He said that there is an induction field in the immediate vicinity of an antenna. This induction field consists of lines of force set up by voltage and current in the antenna and these collapse back into the antenna twice each cycle. The inductive field contains only reactive energy. These reactive electric and magnetic fields are 90 degrees out of phase with each other.

Strength of the inductive field intensity is approximately proportional to the inverse square of the distance.

The radiation field consists of lines of force which have become detached from the antenna and are moving on out into space as an electromagnetic wave. It consists of real power and diminishes much less rapidly than does the induction field. This intensity is inversely proportional to the distance from the antenna.

At 1/2pi wavelength, the intensities of the induction and radiation fields are equal. Closer to the antenna, the induction field is the stronger of the two. At greater distances, the radiation field predominates.

It is common to choose 1 mile as the distance to start specifying the field intensity of an antenna. For all but the longest wavelengths used in radio, 1 mile is far enough o be well outside the induction field region, but close enough for measurements.

I mile is well outside the near field (induction field region) at 1 MHz, or a wavelength of 300 meters. 300 meters is about 1/5 mile, so a mile is about 5 wavelengths.

Terman and Griffith agree. Terman says the induction magnetic field is inversely proportional to the square of the distance and the induction electric field has a component that is inversely proportional to the cube of the distance. Terman is using volts and amps, not watts and vars. In my earlier posting I quoted per square meter values and said they were the square of the per meter values. These squared values decline as the 4th power of the distance for the induction magnetic field, and as the 6th power for a component of the induction electric field. The radiation field declines as the 2nd power or square of the distance from the antenna, and this can be easily measured outside the near field.

The point is that the near field which contains significant amounts of reactive components doesn`t extend very far for practical purposes.

It now appears to me that Ed is using the classic "near field" term to mean something entirely different from a region containing significant quantities of reactive energy. He seems to be defining it as a region in which direct and reflected waves come together to produce a radiation pattern. That definition is completely alien to me.

Best regards, Richard Harrison, KB5WZI

2118. RADIO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Kenneth McKenzie <tennek@home.com>
Message-ID: <6Q5P5.606755$8u4.8784288@news1.rdc1.bc.home.com>
Source record: 176674

Thomas Edison describes in his patent application for the wireless telegraph in May of 1885 as follows;
For receiving signals I locate in said circuit between condensing surface and the ground a diaphragm sounder which is preferably one of my electro motograph telephone receivers.

The first wireless telegraph picked up the telegraph signals with a loud speaking telephone. De Forest patented his triode in 1907 twenty two years later. For his first radio he used an Edison loud speaking telephone.

Edison's Patent and an essay about wireless transmission can be seen on my site at www.geocities.com/starapex Click on the radio

Cheers
Ken McKenzie

2119. Re: bringing up topics you are unwilling to discuss DID THIS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <6tcq0togbt3nhfqbbe3ele7ds1mnor77uo@4ax.com>
Source record: 176675

On or about Fri, 10 Nov 2000 10:44:30 -0800, Jim Pennino
<jimp@mail.specsol.com>, using the forum rec.radio.amateur.antenna did
say:
:
:Nope, as posted by Rick, it would take a court order to get a reputable
:practitioner to release any patient records, at least in the US, don't
:know about other countries.
:
:Next time you're at the doctor's try asking for an x-ray so you can have
:a print made to hang on your wall. Most doctors won't even do that, let
:alone release detailed information.
:
:Jim Pennino

Wow.. Really? I have copies of the X-Rays of my head, right knee,
c-spine and t-spine, both before and after the plate, replacement, and
fusions, respectively. I show 'em off every once in awhile, when
someone asks me why a 30 year old man moves around like he's 60.

All I did was ask for copies, and paid for them. ::shrug::

-SSB

2120. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <56dq0tgm5grjl0k5jb2b6c2rk8hgdd8471@4ax.com>
Source record: 176676

On or about Sat, 11 Nov 2000 02:58:12 GMT, Rabbi Jacob
<gilbert.mouget@waika9.com>, using the forum rec.radio.amateur.antenna
did say:

:
: Fri, 10 Nov 2000 06:27:34 -0500 dans l'article
: <%PQO5.2268$%O1.3748@newsfeed.slurp.net>
: l'honorable David J. Windisch <davidw@copper.net> escrivit :
:
::Is posting to a NG on the Sabbath permitted to an observant Jew?
:
:You must use the special negative logic keyboard.
:You are not aloud to close an electric circuit because it is fire
:and thus work. But you may open a circuit on the Sabbath.

Once you released the key, though, you'd be closing the circuit again,
and thus working. so that point is out. ::grin::

Had to. It was there.

-SSB

2121. Re: ARRL videotape course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Charles Hunter <crhunter@idirect.com>
Message-ID: <3A0D3625.3076492C@idirect.com>
Source record: 176677

By Golly, I thought the sentence to use the tapes "To learn electronic theory" would have made it clear that the intended use of the material was for electronic theory only which really hasn't changed that much. The question pools are irrelevant as the tape are for use in Canada and we have our own question bank.

I was trying to be as clear as possible without tying-up a whole lot of bandwidth.

BTW the tapes are for someone with a type of polio virus who cannot attend regular classes.

If you hear of any lying around, please let me know.

thanks

73
Charlie

"Ed Hare, W1RFI" wrote:

> Charles Hunter <"crhunter"@(nospam)idirect.com> wrote:
>
> > Disabled person wishes to purchase used ARRL videotape technician or
> > General course to learn electronic theory for ham radio.
>
> > The courses are currently not available from the ARRL.
>
> > Please remove (nospam) from the address to reply by email.
>
> Charles, I offered a few suggestions to you. Did they not pan out? If not,
> then I don't think that anyone has video tapes based on the present question
> pool. You may want to clarify that you are willing to use video courses
> based on the old question pools.
>
> 73,
> Ed Hare, W1RFI

2122. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0D48C6.C628A76@bigfoot.com>
Source record: 176678

Roger Leone wrote:
> Your tuner should respond only to the differential mode signals while the
> common mode signals cancel out.

What cancels the common-mode signals? Balun? Link coupling?
--
http://www.mindspring.com/~w6rca

2123. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A0D5051.ECAC702C@oio.net>
Source record: 176679

CAM wrote:
>
> Roger Leone wrote:
> > Your tuner should respond only to the differential mode signals while the
> > common mode signals cancel out.
>
> What cancels the common-mode signals? Balun? Link coupling?
> --

That's easy! It falls through the little 'windows' in the
ladder-line before it ever reaches the station. It's called
the "Gates" effect...
'Doc

2124. 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <20001111091900.01637.00000062@ng-ck1.aol.com>
Source record: 176680

I'm trying to find out people's experiences with a 40 m single quad loop mounted close to the ground. For example, the bottom wire about 8-10 ft from the ground, either a square or diamond configuration. I'm particularly interested in experiences with comparisons to a vertical antenna that has a good ground system (e.g. 10-20 radials). My biggest interest is stateside coverage, can't seem to get QSL cards from foreign hams, hi.

Thanks for reading the posting.

73s,

Evan

2125. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <20001111100738.03654.00001012@ng-fq1.aol.com>
Source record: 176681

Evan, you'll probably get numerous opinions. Assuming you refer to vertical polarization, the loop will out perform the mono-pole vertical given the same far field ground condition. Primarily because it is bi-directional since the actual TOA (take-off) angle will be the same for nearly all verticals; ie far field ground. And because of the directional characteristics and the closed loop, some improvement in signal to noise will be gained From the loop.. Near field ground radials are not required although it is argue over very poor near field ground radials may also improve the loops performance--absolutely required for the monopole. I have run both (generally in arrays) for years and the 40meter loop does well and can also be an excellent multi-band antenna if fed properly.
You may also want to note, a dual 40 meter array loop (beam) can be errected using one support and take up little room while really providing outstanding performace.....I suggest you get a copy of "Low Band Dxing" at any local Ham store. gd. luck and 73 Bill (k6ec)

2126. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <IYeP5.396$9U1.17833@news.inreach.com>
Source record: 176682

Cam:

I like the Gates effect answer...

But whatever device feeds the ladder line in differential mode (tuner or balun) should have pretty good rejection of common mode signals, except of course for the unavoidable capacitive coupling.

Roger

2127. !!NEW!! Bearcat UBC-3000XLT- Check it out!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: ki <ki001@nyc.rr.com>
Message-ID: <eefP5.59167$w3.4477764@typhoon.nyc.rr.com>
Source record: 176683

http://page.auctions.yahoo.com/auction/44314329

check it out!

2128. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0D9355.E60CD907@dvol.com>
Source record: 176684

David wrote:

> > color-coordinated and turn the scewdriver into an interesting piece of
> Honda
> > exotica.
>
> Brian....actually that's not a bad idea. ;-) Thanks for the tip!

>
Wasn't my idea, it's done all the time in these parts, it's almost expected. We have a body shop which will do the whole nine yards for $200. Cobble together a steel mounting bracket which gets welded to the chassis, undercoat it and paint the HF antenna to match the car. For another $50 he'll pull the headliner down and punch the hole and install the vhf antenna.
>
w3rv

2129. call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8uk0r6$5ec$1@iac5.navix.net>
Source record: 176685

From: Commanding General Georgia Citizens Militia

To: All Members

Encryption key: Book 3 page 17 Paragraph 4 words 3 through 9

Flash Message follows in 1 part:

qghts dhvst kjcht dhehd ghloy bjcxz shirn skhfg alpqm qzpml akdhr dinfg
cjpqk skybv bntrf apmkd aagnk bhryd slkig ckhei cklsp qysak ppkbr shith
kilwz

Execute execute execute

Your code is patriot

2130. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8uk21a$9bd$1@nntp9.atl.mindspring.net>
Source record: 176686

Fred Hambrecht <Fred@w4jle.com> wrote in message
news:8uk0r6$5ec$1@iac5.navix.net...
> From: Commanding General Georgia Citizens Militia
>
> To: All Members
>
> Encryption key: Book 3 page 17 Paragraph 4 words 3 through 9
>
> Flash Message follows in 1 part:
>
> qghts dhvst kjcht dhehd ghloy bjcxz shirn skhfg alpqm qzpml akdhr dinfg
> cjpqk skybv bntrf apmkd aagnk bhryd slkig ckhei cklsp qysak ppkbr shith
> kilwz
>
> Execute execute execute
>
> Your code is patriot
>

HEY! Stop making my lights blink! I'm trying to study for my UN citizenship
test.

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

2131. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <j1gP5.1736$dr2.1745@newsfeed.slurp.net>
Source record: 176687

It's crackers to slip a rozzer the dropsy in snide.

K3BHJ

2132. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DA0CC.A613251@dvol.com>
Source record: 176688

CAM wrote:

> Jerry Oxendine wrote:
> > I would not consider a hamstick for a mobile antenna.
>
> To be fair, they work pretty well 20m-10m. Check out the
> bugstick on my web page.
> --
> http://www.mindspring.com/~w6rca

>
Looks like a good compromise between a real bugcatcher and a Hamstick. A lot less windload than a bugcatcher for certain. Gets down to the losses associated with 1.5" vs. 3" diameter coils.
>
I'm still harboring illusions about using a roof-mounted version of a Saint Looie Special 20ft vertical for fixed-location mobiling. The problem is the mag mount. The monster Hamstick mounts would be fine except that the things suck up too much storage space in a small trunk like mine. I could easily build a knock-down or folding mount but I can't find the big magnets like Hamstick uses. Edmund and McMaster-Carr don't have 'em. Any suggestions??
>
w3rv

2133. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <t0r4rs4adhub1d@corp.supernews.com>
Source record: 176689

In <20001111091900.01637.00000062@ng-ck1.aol.com>, k9sqg@aol.com (K9SQG) writes:

>I'm trying to find out people's experiences with a 40 m single quad loop
>mounted close to the ground. For example, the bottom wire about 8-10 ft from
>the ground, either a square or diamond configuration. I'm particularly
>interested in experiences with comparisons to a vertical antenna that has a
>good ground system (e.g. 10-20 radials). My biggest interest is stateside
>coverage, can't seem to get QSL cards from foreign hams, hi.
>
>Thanks for reading the posting.
>
>73s,
>
>Evan

Evan, I don't understand what ypu mean by single quad loop. So, I'll answer you the best way I can. For years I ran two three element 40 meter quads nested so that they were at right angles to each other around a common center-axis. I suspended them on cantenary lines in the middle of a 4 element phased vertical array on for 80 meters.

By making either outer loop with a small, about six foot section off 6 inch steatite spaced ladder line, and the primary dimension of either outer loop about 5% short, I could simply cut the ladder line on either side in or out of the circuit with a switch and reverse the throw of either of the two quads. More interesting, I could actually even use a coaxical power divider network, and split the power between both quads, thus driving the pattern up the middle between any two. It made a neat and fully operational way to make an eight lobe pattern, as opposed to just the four-way throw one would normally expect from such an array.

My K6STI pattern log file is full of studies I did on this one. It turned out that Brian's predictions as to what I could expect are about right on the money in practice.

Your describe attempt make this antenna, for close-in work, as a relatively high-angle device, are right on target. It is, but with one caveate! We'll get to that in a moment. Let's see how it worked out in practice - I only work single band contest stuff, I'm not good enough to be big cheese in multiband efforts, OK?

Back in about 1965, as far as I know, it ain't officially record-kept stats, it was published in QST that I'd broken the single band total QSO and score known, unofficially on 40CW. But that was not with this quad deal! The ARRL checker made the wry comment in the stats, that, "Maybe he should go back to Texas!"

I *FINALLY*, after some 35 years of trying later, roke my own totals, with this device and .. once .. I've collected the clean sweep cup on a solo 40CW entry with it! But it *NEVER* did well enough, I thought, for the work to fool with it and keep it all going, on DX. You must remember, for purposes of comparison here, that I am in Central Texas, not quite, but almost on the line of the most barren sand soil conductivty short of the Sahara Desert. A wet noodle in W1 or W6 land will have a 20 DB better basic signal to work with that I ever get from any but a South throw.

Every now and then, a pig stumbles on a acorn!

On day I stumbled on a KL7 using a single 80 meter loop just like you suggest? He told me it was worthless on 80 until he fed it in vertical polarization mode! Thwpttt, out came the the modeling program .. and .. I saw immediately he was right! There was a projected and a practical reduction in vertical takeoff angle of these loops, the intant I started feeding them in the corner, so that one element of the dipole was going, more or less, straight up from each feed point!

Again, this is Central Texas, remember? My 40CW total country count in the CQ WW went from about 85 countries a contest, to about 90-92, and the zone count picked up one or two in the deep Asian game from that work. Brian's modeling also told me something else about doing this on low band work with these loops. It told me that more than three elements was worthless. The reason is that the ground image grunges up the whole deal close in to the ground for more than three quad element loops, telling it as a practical answer to what happened. I'll leave it to those far better than I do tear that apart and fractionate the discussion beyond that.

GDRFC!

Incidentally, all these were SHUNT FED loops! Coax tied right to the loop and fed from a gamma match about six feet long from those same six inch steatite open wire feeder spreader formed sections. Works wonderful, and so easy to tune it's silly.

Then. One day I got mad at all the work and put up a single elevated vertical, just to see how it would do is CQ WW.

Pow .. about 90 coutries! This is like comparing not eating pork to having fun with the opposite sex! Darn site better, just between us Pious and Holy folk in this echo!

So .. I extended that single 9 foot high elevated shunt fed all grounded vertical into a full four element elevated phased vertical array. It has only four radials per pole, totally shunt fed and solid grounded. Surprise, I popped 100 countries worked in the CW WW and/or the ARRL DX contest on 40 only that year..

Down came the wire quads.

Wistfully, I think that before I took them down, I should have made one more run at something. I should have rotated the feed point from the corner down at the bottom off that lower wire loop -- up to the middle of the vertical wire element segments. It really wasn't fair to the study not to do that, so as to get all of the vertical component into the maximum current segment of the loop. I *THINK*, had I done that, I might not have seen much difference between it and the vertical four square. In fact, I suspect had I done that, the antenna might be a little quieter and have a bit more gain.

However, it is a *LONG* way up a twenty-foot step ladder to tune this and that... A DB or so, I thing, isn't worth the risk of falling and not being able to enjoy life. From two more than 35 foot non-ham associated falls in life, the broken parts don't ever wake up real nice afterwards in life, I can attest ... ;(

What you wanted to know?

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

2134. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <19234-3A0D8EF1-46@storefull-115.iap.bryant.webtv.net>
Source record: 176690

Ed Hare, W1RFI wrote:
"I do not know of any antenna type where the reactive near field would be nearly 7 wavelengths away from an antenna."

I am tired of this discussion, but think I should respond because someone may infer you meant the reactive near field extends more than 7 wavelengths from all antennas from the statement above.

I`ll refute that very simply.

Look at the FCC charts of "Ground Wave Field Intensity Versus Distance". Chart No. 3 is for 600-620 KHz. All charts begin at 0.1 miles from the antenna. These charts appear in Part 73 of the FCC rules.

Measurement sites are usually no closer than 5 to 10 times the tower height for a single tower station. The closest measurement site will be farther away for a station using a multi-tower array so that the distance to all elements in the array will be essentially equal.

You would not measure in the near field to avoid error. Towers are usually no more than 5/8 wavelength in height, so 10 times the tower height would be 6.25 wavelength.

Broadcast field strengths are frequently quoted at 1 mile from the antenna. Look in any good text. It is presumed that the field strength can be verified at this distance.

Take 600 KHz for example. I referred to the FCC chart which includes this frequency above. The wavelength is 500 meters. A mile is about 1600 meters. That makes a mile 3.2 wavelengths at 600 KHz. Two miles is less than 7 wavelengths.

You wouldn`t challenge the accuracy of a fieldstrength measurement taken 2 miles from the non-directional 600 KHz station on the basis of its proximity, would you?

Best regards, Richard Harrison, KB5WZI

2135. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: alice@kramden.moon
Message-ID: <HwgP5.280$65.216283@news1.iquest.net>
Source record: 176691

"Your crazy to try to secretly bribe a cop"

In article <j1gP5.1736$dr2.1745@newsfeed.slurp.net>, davidw@copper.net was of
the opinion...
>
>It's crackers to slip a rozzer the dropsy in snide.
>
>K3BHJ
>
>

--
The opinions expressed are neither mine nor my employer's. In fact
I don't know whose they are!

2136. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DA6B3.4EB37AE5@dvol.com>
Source record: 176692

K9SQG wrote:

> I'm trying to find out people's experiences with a 40 m single quad loop
> mounted close to the ground. For example, the bottom wire about 8-10 ft from
> the ground, either a square or diamond configuration. I'm particularly
> interested in experiences with comparisons to a vertical antenna that has a
> good ground system (e.g. 10-20 radials). My biggest interest is stateside
> coverage, can't seem to get QSL cards from foreign hams, hi.
>
> Thanks for reading the posting.

>
There was a point when I had three 40m antennas plus a 70ft tower packed into a
50' x 110' suburban lot. One was a self-supporting 1/4 wave roof-mounted vertical
with the base 40ft above ground with 4 sloping radials, a classic elevated GP.
The second was a full-wave single Delta loop with the apex at around 65' and the
horizontal side around 25' above ground. The third was a voltage-fed 80m inverted
L, 65' up spaced 25' away from the tower and 65' more or less horizontal. The L
spanked the vertical and the loop on both long-haul dx and stateside ops so I
took 'em both down.

>
>
> 73s,
>
> Evan

>
w3rv

2137. Re: Back to our roots

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DA722.F401F3FB@dvol.com>
Source record: 176693

Jeffrey Steinberg wrote:

> Without naming names or topics, it looks like our newsgroup is back to talking
> about antennas and away from name calling.
>
> Yahoo! 5 days by my counting. Maybe more.
>
> --jeffrey steinberg, kc2guc

>
. . . . as soon as he gets a job . . .

2138. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <753-3A0D9B30-21@storefull-118.iap.bryant.webtv.net>
Source record: 176694

Another thought is the applicability of commonly used ERP figures for FM broadcast.

At 100 MHz, the wavelemgth is 3 meters. 180 wavelengths is about 1770 feet. Most FM broadcast stations have antennas lower than 1770 feet.

ERP is the product of antenna power and antenna gain. The manufacturer specifies the antenna gain whether the type of construction is dipole, loop, slot, or helix. The manufacturer has no idea of the height his product will have over ground or any other surface.

From the nonsense posted in this thread, one might infer that ERP numbers are mostly wrong. I don`t think so.

Best regards, Richard Harrison, KB5WZI

2139. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8ukan0$96c$1@iac5.navix.net>
Source record: 176695

As a loyal follower your lights will no longer be interfered with, however
be advised you are under suspicion.

"Unclaimed Mysteries" <k4doh@mindspring.com> wrote in message
news:8uk21a$9bd$1@nntp9.atl.mindspring.net...
>
> Fred Hambrecht <Fred@w4jle.com> wrote in message
> news:8uk0r6$5ec$1@iac5.navix.net...
> > From: Commanding General Georgia Citizens Militia
> >
> > To: All Members
> >
> > Encryption key: Book 3 page 17 Paragraph 4 words 3 through 9
> >
> > Flash Message follows in 1 part:
> >
> > qghts dhvst kjcht dhehd ghloy bjcxz shirn skhfg alpqm qzpml akdhr dinfg
> > cjpqk skybv bntrf apmkd aagnk bhryd slkig ckhei cklsp qysak ppkbr shith
> > kilwz
> >
> > Execute execute execute
> >
> > Your code is patriot
> >
>
> HEY! Stop making my lights blink! I'm trying to study for my UN
citizenship
> test.
>
> --
> It came from C. L. Smith's Unclaimed Mysteries.
> http://www.unclaimedmysteries.net/
> "Alabama - the jackhammer state!" -Dan Rather, 11/07/2000
>
>
>

2140. Re: tuning 2 meter beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <16990-3A0DAF98-71@storefull-111.iap.bryant.webtv.net>
Source record: 176696

KB7TFW wrote:
"With a 5 element beam 460 feet up on a hill 20 feet above ground at 5 watts what kind of distance should I get?"

The horizon is about the square root of twice the antenna height in feet, but your answer is in miles. The square root of 960 is about 31 miles. Actual mileage will vary depending on atmospheric conditions and the height of the other guy`s antenna.

How loud the signal appears has almost nothing to do with signal strength once the FM improvement threshold is exceeded. That is a principal advantage of FM. How much noise (scratch) is in the signal has everything to do with signal strength. The more transmitter power and antenna gain you have, the quieter the received signal will be. Repeaters work well without automatic gain controls because of the basic FM advantage.

Best regards, Richard Harrison, KB5WZI

2141. Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Heinz Bolli <heinz.bolli@hbag.ch>
Message-ID: <8ukcs6$1d8$1@bw107zhb.bluewin.ch>
Source record: 176697

With my new Sommer XP708-Beam Antenna I have broadband nois up to s9 when raining or at snowfall.

Has somebody experience what I can do against it?

73 de Heinz, HB9KOF
heinz.bolli@hbag.ch

2142. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Jack Malone <malonej@c2i2.com>
Message-ID: <gRiP5.351$1N2.53926@news.goodnet.com>
Source record: 176698

You may be experiencing corona discharge from some high voltage transmission lines in area or the arc over on insulators on these lines.
Jack, W7EJJ

"Heinz Bolli" <heinz.bolli@hbag.ch> wrote in message news:8ukcs6$1d8$1@bw107zhb.bluewin.ch...
> With my new Sommer XP708-Beam Antenna I have broadband nois up to s9 when
> raining or at snowfall.
>
> Has somebody experience what I can do against it?
>
> 73 de Heinz, HB9KOF
> heinz.bolli@hbag.ch
>
>

2143. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A0DBF37.83621B0E@earthlink.net>
Source record: 176699

I've sent you a JPEG of a top-loaded bug catcher on a home-brew mag mount. While I am not right now using it, I am thinking of mounting a screwdriver antenna on the same plate, which I have upgraded to seven, five inch magnets angled to fit the roof of my small car (Ford Aspire).

Cortland

Brian Kelly wrote:

> CAM wrote:
>
> > Jerry Oxendine wrote:
> > > I would not consider a hamstick for a mobile antenna.
> >
> > To be fair, they work pretty well 20m-10m. Check out the
> > bugstick on my web page.
> > --
> > http://www.mindspring.com/~w6rca
>
> >
> Looks like a good compromise between a real bugcatcher and a Hamstick. A
> lot less windload than a bugcatcher for certain. Gets down to the losses
> associated with 1.5" vs. 3" diameter coils.
> >
> I'm still harboring illusions about using a roof-mounted version of a
> Saint Looie Special 20ft vertical for fixed-location mobiling. The
> problem is the mag mount. The monster Hamstick mounts would be fine
> except that the things suck up too much storage space in a small trunk
> like mine. I could easily build a knock-down or folding mount but I
> can't find the big magnets like Hamstick uses. Edmund and McMaster-Carr
> don't have 'em. Any suggestions??
> >
> w3rv

2144. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A0DC090.9FCF03FA@earthlink.net>
Source record: 176700

Wes,

Your post, here, is another example why I put up with the 90 percent BS posts on this forum. The ten percent is WORTH it.

Cheers,

Cortland

"Wes Stewart, Totally confused at N7WS" wrote:

snip

> ... Using two freespace dipoles separated by twice the height and fed equal power
> but 180 degrees out of phase gives ... .
>

snip

> I'll let this stand without making any more foolish comments.

2145. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0DC204.B98E4BD9@bigfoot.com>
Source record: 176701

Brian Kelly wrote:
> I'm still harboring illusions about using a roof-mounted version of a
> Saint Looie Special 20ft vertical for fixed-location mobiling. The
> problem is the mag mount. The monster Hamstick mounts would be fine
> except that the things suck up too much storage space in a small trunk
> like mine. I could easily build a knock-down or folding mount but I
> can't find the big magnets like Hamstick uses. Edmund and McMaster-Carr
> don't have 'em. Any suggestions??

Sure, get you a GMC pickup like I have. :-)
--
http://www.mindspring.com/~w6rca

2146. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0DC2D2.66973553@bigfoot.com>
Source record: 176702

K9SQG wrote:
> I'm trying to find out people's experiences with a 40 m single quad loop
> mounted close to the ground. For example, the bottom wire about 8-10 ft from
> the ground, either a square or diamond configuration. I'm particularly
> interested in experiences with comparisons to a vertical antenna that has a
> good ground system (e.g. 10-20 radials). My biggest interest is stateside
> coverage, can't seem to get QSL cards from foreign hams, hi.

Follow the link to my delphi web page and take a look at the 40m triangular
loop with its 50 ohm feedpoint. I had it up in AZ and it worked very well.
--
http://www.mindspring.com/~w6rca

2147. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0DC3A5.A0069395@bigfoot.com>
Source record: 176703

Heinz Bolli wrote:
>
> With my new Sommer XP708-Beam Antenna I have broadband nois up to s9 when
> raining or at snowfall. Has somebody experience what I can do against it?

This is a common problem and also applies to dust storms. An RF choke
or a DC-short balun helps.
--
http://www.mindspring.com/~w6rca

2148. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A0DD4A9.2D51@wt.net>
Source record: 176704

K9SQG wrote:
>
> I'm trying to find out people's experiences with a 40 m single quad loop
> mounted close to the ground. For example, the bottom wire about 8-10 ft from
> the ground, either a square or diamond configuration. I'm particularly
> interested in experiences with comparisons to a vertical antenna that has a
> good ground system (e.g. 10-20 radials). My biggest interest is stateside
> coverage, can't seem to get QSL cards from foreign hams, hi.
>
> Thanks for reading the posting.
>
> 73s,
>
> Evan

I would expect the vertical to do a bit better on long haul. Myself, I don't think the overall performance of the loop would be a whole lot different than a dipole mounted at the highest point you hang the loop from. The loop may have a little bit of broadside gain, but not a whole lot. Maybe 1.5-2 db. Myself, I'd probably just put up a dipole as high as I could get it. Much easier than stringing the loop up. Use the vertical if you want to dx. The dipole will work dx, but the vertical will do it better overall, unless the dipole real high in WL. BTW, I much prefer elevated ground planes over ground mounted verticals. It's hard to get enough radials down on the ground at this QTH. And some directions , none at all , as the house is in the way. I compared a ground mount 32 ft whip with 32 radials, and then compared to the same whip at 36 ft, with 4 sloping radials. The elevated antenna was a whole new world compared to the ground mount with only 32 radials. The ground mount wasn't a whole lot better than my dipole at 36 ft to dx. I think it needed more radials. The elevated was 2 plus S units ahead over 2000 miles. And my ground wave was much better. I could work a 100 mile radius with a dead band. Good for locals when the band doesn't support real short skip across town. MK
--
http://web.wt.net/~nm5k

2149. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DE411.65C9B20E@dvol.com>
Source record: 176705

Heinz Bolli wrote:

> With my new Sommer XP708-Beam Antenna I have broadband nois up to s9 when
> raining or at snowfall.
>
> Has somebody experience what I can do against it?
>
> 73 de Heinz, HB9KOF
> heinz.bolli@hbag.ch

>
There's lotsa experience amongst the diehard contesters with precip static.
One widely used trick is to run a wire receiving antenna all over the inside
of the house and just keep crankin'. Loop-based antennas like quads do not
suffer the problem.
>
w3rv

2150. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DE5E7.75182264@dvol.com>
Source record: 176706

CAM wrote:

> Brian Kelly wrote:
> > I'm still harboring illusions about using a roof-mounted version of a
> > Saint Looie Special 20ft vertical for fixed-location mobiling. The
> > problem is the mag mount. The monster Hamstick mounts would be fine
> > except that the things suck up too much storage space in a small trunk
> > like mine. I could easily build a knock-down or folding mount but I
> > can't find the big magnets like Hamstick uses. Edmund and McMaster-Carr
> > don't have 'em. Any suggestions??
>
> Sure, get you a GMC pickup like I have. :-)

>
Maybe ten days after hell freezes over I should do a goofy truck. With an
Aggie decal on the back winnow. Mwaaaaahaha! As if!
>

>
> --
> http://www.mindspring.com/~w6rca

>
w3rv

2151. Horizontal quad????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: JD <jds_14@hotmail.com>
Message-ID: <t0rokse6g1kqf8@corp.supernews.com>
Source record: 176707

Hi all,

Has anyone ever used a driven element from a 5 band quad as a horizontal skywire style loop???? Had an idea of one using a 4 element quad boom as a ground mounted mast so could be rotated for direction. Maybe i have too much time on my hands. Any comments on how it might work?? thanks Judd

2152. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <3a0df76c$0$83500$45beb828@newscene.com>
Source record: 176708

They walk to shul (synogogue). They try to live close to the shul
or they have a really long walk.

Shabbos is an alternative spelling to Shabbot or Sabbath (in english).

--jeffrey

In article <3A0C80A4.7399@bellsouth.net>, joxendi@bellsouth.net says...
>
>Jeffrey,
>
>May I ask a question? Well, actually more than one. Is "shabbos" a
>special observance or is it the same as Sabbath? If it is the same,
>if observant Jews can't drive, how do they attend synagogue? Not be-
>ing Jewish, I am just trying to get my facts straight.
>
>Thanks,
>
>Jerry
>
>
>
>Jeffrey Steinberg wrote:
>>
>> An orthodox or observant jews does not "work" on shabbos. And that
>> means, no electricity, no cars, no telephones, etc. You can't turn it on
>> during shabbos.
>>
>> Now some get around that by leaving things on (always on DSL is good for
this
>> because no phone call is necessary), but then I guess your would not be too
>> observant then.
>>
>> Remember, you don't know the time zone of where the poster is and shabbos
ends
>> based on local sunset times plus an offset.
>>
>> --jeffrey steinberg, scarsale ny
>>
>> In article <%PQO5.2268$%O1.3748@newsfeed.slurp.net>, davidw@copper.net
says...
>> >
>> >.. mentioned by several post-ers.
>> >
>> >Is posting to a NG on the Sabbath permitted to an observant Jew?

>> >
>> >Servile labor on Sunday is proscribed to Roman Catholics.
>> >
>> >K3BHJ
>> >
>> >
>

2153. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <3a0df7e3$0$83500$45beb828@newscene.com>
Source record: 176709

Observant and Orthodox can be interchanged. If you observe everything the Torah asks you to, you would be considered Orthodox.

Just used the word to talk about one who observes all of the things one is supposed to do. I know many Orthodox people who don't observe "all" the things they should (including me).

--jeffrey

In article <20001110195659.28136.00000806@ng-fl1.aol.com>, fractenna@aol.com says...
>
>>May I ask a question? Well, actually more than one. Is "shabbos" a
>>special observance or is it the same as Sabbath?
>
>Same.
>
>
> If it is the same,
>>if observant Jews can't drive, how do they attend synagogue?
>
>I think you mean 'orthodox'; not 'observant'. I don't know why Jeff used that
>term.
>
>Most walk with family and friends to temple on Saturdays. Conservative and
>Reform Jews do not tend to honor such restrictions and drive, talk on the
>phone, and so on on Saturdays.
>
>
> Not be-
>>ing Jewish, I am just trying to get my facts straight.
>>
>>Thanks,
>>
>>Jerry
>>
>>
>
>73
>Chip N1IR

2154. Re: Beam Antenna Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Anon Sindre <anons@no.spam.com>
Message-ID: <9BnP5.1757$hn2.430200@news.uswest.net>
Source record: 176710

<ehsjr@bellatlantic.net> wrote in message
news:3A0C31BA.A52D9930@bellatlantic.net...
> If I build a 3 element, 6 meter yagi using 7/8" diameter elements,
> 1 1/2 diameter boom 8' long, gamma match, "plumbers delight" and
> optimize for swr 1.5 to 1 bandwidth, what is the best I can do?
>
> The initial consideration is swr bandwidth only. Gain and F/B
> should be reasonable but not necessarily optomized. The
> design frequency is 50.6 Mhz
>

You can easily and quickly experiment with various yagi design parameters, using the free Quickyagi modeling/auto-optimizing software. It gives a nice VSWR bandwidth graph - one of its many features... You can download a copy from http://www.raibeam.com/wa7rai.html

2155. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a0e0b4e_4@news3.prserv.net>
Source record: 176711

WOW! I thought I was the only survivor of Mad Magazine readers of 1957.

--
Crazy George
David J. Windisch <davidw@copper.net> wrote in message
news:j1gP5.1736$dr2.1745@newsfeed.slurp.net...
> It's crackers to slip a rozzer the dropsy in snide.
>
> K3BHJ
>
>

2156. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <c24s0tsd7649ng4r0rkp3tf7q4eqjcsdco@4ax.com>
Source record: 176712

On Sat, 11 Nov 2000 16:02:44 -0600, CAM <cam2338@bigfoot.com> wrote:

>Sure, get you a GMC pickup like I have. :-)

Or a '97 Escort station wagon with roof rack. I mounted my antenna
using a Radio Shack mirror mount, clamped to the rack. The coax goes
in through the tailgate and the whole thing required NO holes at all.
And the Escort is verrrrrry quiet, too. Even with the noise blanker
off, I can barely hear ignition noise way in the background. No
alternator/fuel pump noise at all.

73, Bill W7TI

2157. Mobile antenna mount on hood

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: zeppss <zeppss@hotmail.com>
Message-ID: <k2pP5.397$Bi3.639@newsfeed.slurp.net>
Source record: 176713

I have an S-10 pickup truck, the new style without drip rails, and have been using a magmount (6m, 2m, 70cm). I plan to get a 60" antenna soon, and don't want a bigger magmount to hold it. A hole through the roof is not acceptable,
the bed has a fiberglass lid on it, and a hitch mount looks like it is too low relative to the body. I am thinking of using a lip mount somewhere on an edge of the hood, maybe the back edge. (RF exposure would not seem to be a problem: most of my mobile use is of short duration at 5 watts,
max. 50w and 35w, and the antenna would extend well above the roofline.)

Anyone have a similar setup, or care to make suggestions?

2158. Re: transmission question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A0E199B.343FD0CB@nettally.com>
Source record: 176714

An open quarter wave would normally reflect as a short. You need to calculate the length with the velocity factor of the coax in mind. Not sure how this will perform as your motor is probably not 50 ohms to the coax. Sounds like an interesting idea. Though. I would be careful using RG174 with this voltage. Better to go with some larger stuff with teflon dielectric. Don't cut and try the coax with the power applied! Also try remoting the receiver antenna away from the motor.

PDRUNEN wrote:

> Hi Group,
>
> I have a dc motor giving my receiver a noise problem. The receiver is a remote
> on 372.5 MHz and the dc motor is generating some noise which limits my flea
> power range to about 25 feet. In generally, I get 200 feet without the motor
> on.
>
> I have tried bypassing the motor leads to motor chassis ground and pulling a
> ferrite bead inline with the motor power. This has not really helped. I can
> not relocate the reciever either.
>
> So, I would like to try a different method. Place a open ended RG-174 coax
> cable across the motor line. As I recall, if the RG-174 is electrically 1/4
> wave then the open at the other end becomes a short at the generator?
> true/false or is it 1/2 wave?
>
> If so, then, what length would I cut the RG-174? And what is the equation?
>
> Also, the motor is 230V so is this a safe voltage for the RG-174.
>
> Many thanks!!!
>
> Paul

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

2159. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0E19F3.77E@bellsouth.net>
Source record: 176715

Bill,

Just curious. I have a friend that had an Escort 3 years ago and the owner's manual stated that one must not install radios over about 10-20 watts. Obviously, Ford has corrected that? I knew some else that tried to put an HF rig in a Taurus, and it would choke down everytime he keyed the mike!

73

Jerry
K4KWH

Bill Turner wrote:
>
> On Sat, 11 Nov 2000 16:02:44 -0600, CAM <cam2338@bigfoot.com> wrote:
>
> >Sure, get you a GMC pickup like I have. :-)
> ----------
> Or a '97 Escort station wagon with roof rack. I mounted my antenna
> using a Radio Shack mirror mount, clamped to the rack. The coax goes
> in through the tailgate and the whole thing required NO holes at all.
> And the Escort is verrrrrry quiet, too. Even with the noise blanker
> off, I can barely hear ignition noise way in the background. No
> alternator/fuel pump noise at all.
>
> 73, Bill W7TI

2160. Re: UPS OVER CHARGE UNDER DELIVER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: kl7ifp <kl7ifp@email.msn.com>
Message-ID: <#5gogaCTAHA.322@cpmsnbbsa09>
Source record: 176716

Hhhhhey lower 48 types don't bitch till you have to put up with UPS and FED EX. They gladly mail you your package after they have it shipped up here all because some 2 bit company too lazy to put in the U.S. Snail mail. It just as much the fault of the seller for the extra cost . I argued with yaesu to have them send me some part that I need to repair a unit about using the US. postal Service. Told them we didn't have what they want to use. Yaesu stood fast in there decision so I never got the parts and the yaesu unit got tossed. UPS and Fed Ex both sux
"John P. Franklin" <jpfrankl@teleport.com> wrote in message
news:YprN5.18581$xa1.607936@nntp1.onemain.com...
>
> NJRadioDude <njradiodude@aol.com> wrote in message
> news:20001105061544.21566.00001309@ng-mj1.aol.com...
> > >They are the most
> > >expensive and the most incompetent delivery service available. They
find
> it
> > >impossible to deliver even the simplest of package without damage and
on
> > >time. You do not need the trouble this company will cause.
>
>
> Not only that.......they bitched and moaned that they needed part of our 1
> 1/4 meter band......the SOB's never used it! So we got crapped on for
> nothing!
>
> Pat
>
>

2161. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:00:00 UTC
From: kl7ifp <kl7ifp@email.msn.com>
Message-ID: <uwScyyCTAHA.316@cpmsnbbsa09>
Source record: 176717

I got a 4X4 X3 under my tower that is self supported and it has survive many
of 90 plus winds .... 120 knots so far been the greatest gust that it has
with stood. only reason I didn't do the 3x3x5 that was manufacture recommend
was hit bed rock 3 feet down.
"B Nehl" <k0emt@dbbear.com> wrote in message
news:1a2e0t0fambivicl62qd4ufn6m8mgrp39i@4ax.com...
> >This life and death subject has no room for antidotal experiences.
> >Please obtain the necessary specifications and requirements directly
> >from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
> >the allowable antenna area for a 30ft self-supporting 25G tower
> >exposed to ice and 90mph winds is ZERO.
>
> I agree that the Rohn specs & requirements should be followed.
> I have been to the Rohn website (www.rohn.net) and have sent an email
> to them detailing my plans and seeking their recommended base size.
>
> However, I am still interested in knowing what others have done.
> Problems, etc that others have run into. The group I run with tends
> to "over-engineer." Can a base ever be "too-big?"
>
> 73,
>
> Bryan - k0emt

2162. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:17:11 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0C9DE1.F33CE067@dvol.com>
Source record: 176767

David wrote:

>
> And, if it matters, I'm willing to spend the big bucks for what will do the
> job.
>
> Thanks for your advice,
> David, K4ZZR

>
I can't comment from actual experience but I'm headed in the same direction, a TS-50 on 20/15. I drive small used disposable <$4k hi-gpm rice-burners and "Quite frankly my dear I don't give a damn" what the aerial hanging on the butt-end of my current Geo/Suzuki looks like, it's gonna be a big homebrewed Bugcatcher sorta thing. But I'm not you. Over on your end of the spectrum I can cite the experiences of one of my clubmates, Tony n2ss. Big time Sony marketing mahout who drives big bucks machinery which has to "look right". As of a month or so ago he'd rolled up well over 200 dxcc countries confirmed with his 706mk2g and his trunk full of gawawful lame Hamsticks.
>
There is no difinitive answer to to your query because the technical aspects don't factor in operating objectives, limitations, smarts, ears and propagation.

>
w3rv

2163. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:43:35 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0CA414.6A811D8D@dvol.com>
Source record: 176768

David wrote:

> Thanks everyone for your help.....I was sufficiently swayed by many of your
> replies and have ordered the IC-706MK2g and the HS-1500 (all black) to match
> my Honda Accord.

>
No, Mon, that ain't the way ya DO it! GEEZ . . ! You got no class at all. Go to the paint code sticker inside your driver's side door column and take that number to your local auto refinishing supplies dealer (A NAPA store usually works) and glom a couple three cans of spray paint which matches the color of your Accord and spay the hell outta your screwdriver with the stuff and get color-coordinated and turn the scewdriver into an interesting piece of Honda exotica.
>

> Pretty expensive but it sure looks like a quality
> product.
>
> I always get great advice in this newsgroup.

>
That ain't all you can get around here.
>
>73,

> David, K4ZZR

>
w3rv

2164. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 00:56:59 UTC
From: fractenna@aol.com
Message-ID: <20001110195659.28136.00000806@ng-fl1.aol.com>
Source record: 176669

>May I ask a question? Well, actually more than one. Is "shabbos" a
>special observance or is it the same as Sabbath?

Same.

If it is the same,
>if observant Jews can't drive, how do they attend synagogue?

I think you mean 'orthodox'; not 'observant'. I don't know why Jeff used that term.

Most walk with family and friends to temple on Saturdays. Conservative and Reform Jews do not tend to honor such restrictions and drive, talk on the phone, and so on on Saturdays.

Not be-
>ing Jewish, I am just trying to get my facts straight.
>
>Thanks,
>
>Jerry
>
>

73
Chip N1IR

2165. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 01:26:16 UTC
From: mike.luther@ziplog.com
Message-ID: <t0p81orsmid8d6@corp.supernews.com>
Source record: 176670

In <3A0C80A4.7399@bellsouth.net>, Jerry Oxendine <joxendi@bellsouth.net> writes:

>Jeffrey,
>
>May I ask a question? Well, actually more than one. Is "shabbos" a
>special observance or is it the same as Sabbath? If it is the same,
>if observant Jews can't drive, how do they attend synagogue? Not be-
>ing Jewish, I am just trying to get my facts straight.
>
>Thanks,
>
>Jerry

Jerry, the most faithful of the Orthodox varients of the culture; walk. For a short time a Russian couple, of which the man was a guest lecturer and professor at Texas A&M University, was here. A couple years ago, of the Orthodox variation of the faith, they took an apartment as close as possible to the local small synagogue. On Sabbath, they spent it in the temple, as well as deliberately walking to visit the several nursing homes and the hospital complex also close by.

They chose to seek out the relatively few other Jewish people that were in these institutions, just in service, companionship and an opportunity of a life-time for them to see what the culture was like here. It was interesting to be reminded of this variance in the culture that was so obvious on Saturday when you would see them walking the mile or so this way and that way .. this way and that way.

Sundown Friday night until Sundown Saturday you'd see them. It was a fascinating opportunity to learn first hand, of some of the Jewish history, influence and records of the culture deep within Russia, over in the Siberian area near Perm .. and the Jewish Oblast nestled way above China over there near Korea. These people could talk first hand of it, where for most of us, Jewish or not, all we would ever know would be what little is in the books!

Time, people, perceptions change. That's really good, it's the way we grow and the human race makes progress, we hope! When my Grandfather came here through Ellis Island, before WW II, actually, he was of the Orthodox variation. They deliberately took a house even in the same block as the Temple where they finally settled. Yes, just so they could walk to services on Shabbos. Not only that, but they hired a non-Jewish woman to come in and cook for them on it, as well wouldn't, early on, even turn on or off the light switches!

This of a man whose first job he ever had here, in the first city into which he settled, was to PULL the firewagon! From that, he advanced, when the larger horse-drawn one came, to be a pumper! Yes, one of the ones who stood on either side and moved the hand drawbars up and down as needed! Eventually, he became a tailor .. and .. saw the electric sewing machine invade his hand-work! No, not in the same city, either than the house-in-the-same block deal, but walk still, he would!

Slowly, as life changed around him, his tailor shop was put out of business by the department store that sited near him, and .. right in line with our usegroup thread, he took up a third new career in life, of all things, as an electronic parts counter salesman in a wholesale outfit! Where .. he at way over 50, he learned for the first time, all about resistors, capacitors and ..

antennas!

I was so fortunate! As a kid interested in them as a ham, I was able to talk about them and share with him! No, not in the way I think about them today, but, at least in a practical way .. including his full awareness of what the UHF TV game was all about. Why? Because he was one of the first to get a UHF converter for the set there in the home..

Which .. he always still refused to watch on Sabbath .. Even though, he finally rode to Temple in a car on Saturday! Yet, twenty years after my Grandfather died, the Russian couple as visitors, still were walking!

:)

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

2166. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 04:45:15 UTC
From: "R. Makul K1XV" <k1xv@arrl.net>
Message-ID: <mhjp0tk8pvubcje64mcvtiudrb9nkg99hv@4ax.com>
Source record: 176671

This has me confused. When you release the key, doesn't the circuit reclose, thereby reestablishing the "fire"?

Ray

On Sat, 11 Nov 2000 02:58:12 GMT, Rabbi Jacob <gilbert.mouget@waika9.com> wrote:

>You must use the special negative logic keyboard.
>You are not aloud to close an electric circuit because it is fire
>and thus work. But you may open a circuit on the Sabbath.

2167. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 04:58:23 UTC
From: dennis@wawa.juniper.net
Message-ID: <8uijlf$30vh$1@heap.juniper.net>
Source record: 176672

Wes Stewart, Totally confused at N7WS <n7ws@azstarnet.com> wrote:
>I did some more fiddling around with a dipole resonant (zero reactance) at a
>wavelength of one meter. I placed this antenna at various heights above a
>perfect ground and determined the depth of the null at 90 degree elevation.

Did the peaks stay in the ball park of 8.17 dBi at all these heights? If
so then, since the nulls couldn't really get shallower without the peaks
getting smaller, I think you might instead be seeing a numerical artifact.

You need to be careful about trusting the depth of a null as computed
by a program like this with complex configurations (the number of null's
you get when the height is large should suggest that the program views
this as "complex"), since the value is arrived at essentially by subtracting
two big numbers to get a small number and the precision of the result will
be dependent on the number of digits in the big numbers that the program
has managed to keep significant. The intensity at a peak, which will
essentially be the sum of the same two big numbers (more or less) will
have less error on a percentage basis. If the peaks and nulls aren't
changing in unison what you are seeing is more likely an example of why
results that computers produce should always be viewed with a certain
amount of suspicion.

Of course I could be wrong, but when I tried this the peaks really stuck
pretty close to 8.17 dBi even though the null depth was all over the
place. I think it is just an artifact.

Dennis Ferguson

2168. ucsd mailing list gateway from usenet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 05:26:10 UTC
From: brian+mlist@ucsd.edu
Message-ID: <200011110458.UAA11600@noc.ucsd.edu>
Source record: 176673

Because neither I nor my staff have the time to devote to answering the
increasing number of complaints such as the one below, I have chosen to
discontinue the Usenet<->mailing-list gateways here.

Effective immediately, the following lists will no longer be
gatewayed to or from Usenet by UCSD:

ham-ant@ucsd.edu
ham-boatanchors@ucsd.edu
ham-digital@ucsd.edu
ham-dx@ucsd.edu
ham-equip@ucsd.edu
ham-homebrew@ucsd.edu
ham-marketplace@ucsd.edu
ham-policy@ucsd.edu
ham-space@ucsd.edu
info-hams@ucsd.edu
packet-radio@ucsd.edu

I simply don't have the energy to put up with this stuff anymore.
If you need Usenet access, perhaps Deja or one of those services
can fill your need.
--
Brian Kantor
Senior Network and Systems Administrator
Academic Computing Network Operations 0124
University of California at San Diego
La Jolla, CA 92093-0124 USA

>
>Message-ID: <3A0CC670.4A2C3958@worldnet.att.net>
>Date: Fri, 10 Nov 2000 23:09:20 -0500
>From: Tom Currie <Tom.Currie@worldnet.att.net>
>Reply-To: Tom.Currie@att.net
>To: brian@ucsd.edu, madden@ucsd.edu, postmaster@ucsd.edu
>Subject: [Fwd: EMAIL PROCESSORS WANTED]
>
>If it's from UCSD, we know it's spam....
>
[spam deleted]

2169. Re: bringing up topics

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 18:27:04 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <4bhq0tkom5sepkeh9n774aple19ghq3cr2@4ax.com>
Source record: 176718

On 10 Nov 2000 12:09:17 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>> I don't believe what you are saying is entirely correct.<
>
>You may believe what you like--and like what you believe. But, it's easy
>enough to check, if you're really interested.
>
>Rick K1BQT

What I want to know is, why did Phil Salkind fire Chip and then
blame it on the newsgroup?

2170. Re: bringing up topics

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-11 18:27:06 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <kehq0t43fk62ct4a2ac50u46bpifoeuhcc@4ax.com>
Source record: 176619

On Fri, 10 Nov 2000 13:41:44 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001110064415.20530.00000651@ng-bj1.aol.com...
>> >Fractenna <fractenna@aol.com> wrote:
>> >
>> >> If your comments are motivated by business and NOT science, then I will
>> >> continue to make this clear.
>> >
>> >By what method will you determine that his comments are motivated by
>> >business, other than the fact that they might be, so they must be...
>> >
>> >73,
>> >Ed Hare, W1RFI
>>
>>
>> Based on the history of the situation, the bature of the comment, and that
>Mr.
>> Best is using a PUBLIC forum.
>>
>> 73
>> Chip N1IR
>>
>>
>
>Are you not using a PUBLIC forum as well? Why does my disagreeing with you
>in a PUBLIC forum have anything to do with business?
>
>From another perspective, why is it acceptable for you to publicly state
>your technical and non-technical opinions but when I state mine, you
>conclude that I must have ulterior motives? It is ethically and morally
>acceptable for me to disagree with you and state that agreement in response
>to your public posts on this newsgroup. The real issue for you is that you
>find it untenable that anyone disagrees with you publicly. When my
>disagreemts have been stated, your only defense of your position has been
>claims that I don't understand basic concepts or that I am out to get you.
>I am not out to get you, I disagree with some of your technical comments.
>Its really that simple.
>
>Steve VE9SRB

Steve, thanks for continuing to keep things in focus here in
spite of Chip's artful dodging. You, Roy, Chuck, and the others have

really demonstrated that his technical claims are questionable.

2171. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8uljei$jg2$5@bashir.peak.org>
Source record: 176628

Richard Harrison <richardharrison@webtv.net> wrote:

: ERP is the product of antenna power and antenna gain. The manufacturer
: specifies the antenna gain whether the type of construction is dipole,
: loop, slot, or helix. The manufacturer has no idea of the height his
: product will have over ground or any other surface.

Not quite. ERP is the sum of the transmitter output power and antenna
gain - minus feedline, filter, coupler etc losses.

--
Bill Nelson (billn@peak.org)

2172. Re: 40 m loop experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Dave Gibbons <darogi@pcug.org.au>
Message-ID: <3a0e594f@newshost.pcug.org.au>
Source record: 176629

Hi ,
I have for any years used a 80 metre loop , but never tried so low as 10 to 12 feet. I started at 20 feet and then went to about 35 feet, but here did not seem to be much difference.. The loop was a very erratic shape, a lop sided irregular diamond which started life as a ten metre rhombic... Then the ends joined and the length cut for 80 metres. It worked well on 80 and 40 and to a lesser efficiency on any other band. With the ends of the coax shorted and tuned against ground, was quite good on 160.. It was dismantled to improve appearance of the garden!!! I am thinking about trying it again at low level where it will be inconspicuous!!
73, Dave VK1GD..

--

_____
Dave Gibbons (VK1GD)
darogi@pcug.org.au
K9SQG wrote in message <20001111091900.01637.00000062@ng-ck1.aol.com>...
>I'm trying to find out people's experiences with a 40 m single quad loop
>mounted close to the ground. For example, the bottom wire about 8-10 ft from
>the ground, either a square or diamond configuration. I'm particularly
>interested in experiences with comparisons to a vertical antenna that has a
>good ground system (e.g. 10-20 radials). My biggest interest is stateside
>coverage, can't seem to get QSL cards from foreign hams, hi.
>
>Thanks for reading the posting.
>
>73s,
>
>Evan

2173. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: jbarrett@remove.stny.rr.com
Message-ID: <HutP5.187739$JS3.28847577@typhoon.nyroc.rr.com>
Source record: 176630

In article <8uk0r6$5ec$1@iac5.navix.net>, "Fred Hambrecht" <Fred@w4jle.com> wrote:
>From: Commanding General Georgia Citizens Militia
>
>To: All Members
>
>Encryption key: Book 3 page 17 Paragraph 4 words 3 through 9
>
>Flash Message follows in 1 part:
>
>qghts dhvst kjcht dhehd ghloy bjcxz shirn skhfg alpqm qzpml akdhr dinfg
>cjpqk skybv bntrf apmkd aagnk bhryd slkig ckhei cklsp qysak ppkbr shith
>kilwz
>
>Execute execute execute
>
>Your code is patriot

Fortunately, I have a purloined copy of "Book 3".

The decoded message reads as follows:

"Pour beaten egg mixture into a buttered frying pan. Cook over medium heat,
stirring regularly until scrambled to desired consistency. Season to taste and
serve with a spig of parsley.

J.B.

2174. Mounting R7 on Fire Escape

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: ibg1@hotmail.com
Message-ID: <8ulpt4iej1@nnrp1.deja.com>
Source record: 176631

Hello,

Has anyone come up with a good design for mounting an R7 or any type of antenna with rather large counter poises on a fire escape? Ideally it would be nice to put it on the roof, but unfortunately landlords are not always cooperative. I would like to be able to extend it a good amount beyond the fireescape so as to not interfere with people, if there is a fire. It would also be nice to be able to pivot or swivel the extension to be able to mount & work on the antenna.

If anyone has any ideas, I'd be great to hear them

Thanks es 73's de
KF2MM, Ian

Sent via Deja.com http://www.deja.com/
Before you buy.

2175. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: "Jr. Samples" <jrsamples@dontbelieveit.com>
Message-ID: <3A0E6B58.228CC838@dontbelieveit.com>
Source record: 176632

Nope!! Your wrong. It really says. "Be sure to drink your Oveltine."

Jim Barrett wrote:

> The decoded message reads as follows:
>
> "Pour beaten egg mixture into a buttered frying pan. Cook over medium heat,
> stirring regularly until scrambled to desired consistency. Season to taste and
> serve with a spig of parsley.
>
> J.B.

2176. Re: Horizontal quad????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <v1uP5.117398$iI2.2509319@afrodite.telenet-ops.be>
Source record: 176633

When making the loop horizontal, you get almost vertical radiation, so this wil be very effective on short range reception/transmission. Normally this antenna don't pick up to much noise and this can be an advantage when living in a city

Phil

"JD" <jds_14@hotmail.com> wrote in message news:t0rokse6g1kqf8@corp.supernews.com...
> Hi all,
>
> Has anyone ever used a driven element from a 5 band quad as a horizontal
> skywire style loop???? Had an idea of one using a 4 element quad boom as a
> ground mounted mast so could be rotated for direction. Maybe i have too much
> time on my hands. Any comments on how it might work?? thanks Judd
>
>

2177. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <05rs0tc7ns5r0kiirp0qq5bt7e417siii3@4ax.com>
Source record: 176634

Well, your finger has to pull back, thus you are doing the work of releasing the key. It was just a thought. I'm not sure what the interpretation of the Rabbai's is in this matter. I am not Jewish.

Oh, and I tend to question everything, it's just in my nature. Sometimes this tends to anger people, but that is not my intent. I simply seek answers to questions.

-SSB

On or about Sat, 11 Nov 2000 13:42:46 GMT, Rabbi Jacob <gilbert.mouget@waika9.com>, using the forum rec.radio.amateur.antenna did say:

:
: Sat, 11 Nov 2000 07:00:50 -0500 dans l'article
: <56dq0tgm5grjl0k5jb2b6c2rk8hgdd8471@4ax.com>
: l'honorable sideband <sideband@cac.net> escrivit :
:
::::Is posting to a NG on the Sabbath permitted to an observant Jew?
:::
:::You must use the special negative logic keyboard.
:::You are not aloud to close an electric circuit because it is fire
:::and thus work. But you may open a circuit on the Sabbath.
::
::
::Once you released the key, though, you'd be closing the circuit again,
::and thus working. so that point is out. ::grin::
:
:No because when you release the key, it's the spring that does the
:job of closing the circuit, not you.
:
:Why do you question this technology which has been used for years
:in clinics and hotels ?

2178. Re: Horizontal quad????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a0e8085_1@news.cybertours.com>
Source record: 176635

"JD" <jds_14@hotmail.com> wrote in message
news:t0rokse6g1kqf8@corp.supernews.com...
> Hi all,
>
> Has anyone ever used a driven element from a 5 band quad as a
horizontal
> skywire style loop???? Had an idea of one using a 4 element quad boom as a
> ground mounted mast so could be rotated for direction. Maybe i have too
much
> time on my hands. Any comments on how it might work?? thanks Judd
>
Hi Judd,

A Horizontal loop can be used to good advantage for DX when it is larger than 1 wave length. An 80m (256ft.) Loop fed with balanced transmission line makes a good all round antenna.. a 40m (133 ft.) Loop will likewise work well on 40--10m But a 20m (65 ft.) horizontal loop is not so good on 20m if DX is your primary aim. it's radiation angle is too high.. But contacts will be made even with this default.. it might be a good choice if you wanted say to work 20m WAS.

anyway there is a great discussion of Horizontal loops and their properties found on LB Cebik's page at:
http://www.cebik.com/atl1.html

Happy haming 73, Dave Kc1di

2179. Re: transmission question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A0E8419.1E319C49@cmcorp.com>
Source record: 176636

PDRUNEN wrote:

> Hi Group,
>
> I have a dc motor giving my receiver a noise problem. The receiver is a remote
> on 372.5 MHz and the dc motor is generating some noise which limits my flea
> power range to about 25 feet. In generally, I get 200 feet without the motor
> on.
>
> I have tried bypassing the motor leads to motor chassis ground and pulling a
> ferrite bead inline with the motor power. This has not really helped. I can
> not relocate the reciever either.

You probably did not use appropriate choking techniques.
What kind of ferrite did you use? (Many types do not attenuate 372 MHz!)

You are probably better off using a common mode choke for this problem.
I'd try an AC line filter with the appropriate current/voltage ratings.

>
> So, I would like to try a different method. Place a open ended RG-174 coax
> cable across the motor line. As I recall, if the RG-174 is electrically 1/4
> wave then the open at the other end becomes a short at the generator?
> true/false or is it 1/2 wave?
>
> If so, then, what length would I cut the RG-174? And what is the equation?
>
> Also, the motor is 230V so is this a safe voltage for the RG-174.
>
> Many thanks!!!
>
> Paul

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2180. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A0E99EA.BD8ECFBC@bigfoot.com>
Source record: 176637

"Jr. Samples" wrote:
>
> Nope!! Your wrong. It really says. "Be sure to drink your Oveltine."

That's O-V-A-L-T-I-N-E for anyone old enough to spell. :-)
--
http://www.mindspring.com/~w6rca

2181. Re: Horizontal quad????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: JD <jds_14@hotmail.com>
Message-ID: <t0t97ehot8vo18@corp.supernews.com>
Source record: 176638

KC1DI wrote in message <3a0e8085_1@news.cybertours.com>...
>
>"JD" <jds_14@hotmail.com> wrote in message
>news:t0rokse6g1kqf8@corp.supernews.com...

Thanks for the reply all. I did a little modeling with ez-nec on this. With the outside loop cut for 30 meters, and two loops in the center, one cut for 14,and the other cut for 10. At 30 feet the 30 meters had a take off angle of about 37 degrees. 14 was about 30 degrees. All higher bands had about a 22 degree angle. I put the feed points in the center of opposing paralel wires. Oddly enough, i got a better angle just feeding the 30 meter loop on all bands but 10. 10 was a cloud burner in that scenerio. Feeding the 10 meter loop in the same configuration showed a 15 degree angle , and a very narrow beamwidth, which is ok too. The center loops must be helping on the higher bands, seeing how the outside loop is not resonant at those freqs, but it looks like a viable unit, with pretty fair gain. Not spectacular, but not bad. weight would be about 15 lbs, so easy to handle and not much wind load. The problem is, the input impedance shows about 4000 ohms on ez-nec!!!!! Surely that can.t be the case??? Any ideas on how to fix that???
Thanks again, Judd
>Hi Judd,
>
>A Horizontal loop can be used to good advantage for DX when it is larger
>than 1 wave length. An 80m (256ft.) Loop fed with balanced transmission
>line makes a good all round antenna.. a 40m (133 ft.) Loop will likewise
>work well on 40--10m But a 20m (65 ft.) horizontal loop is not so good on
>20m if DX is your primary aim. it's radiation angle is too high.. But
>contacts will be made even with this default.. it might be a good choice if
>you wanted say to work 20m WAS.
>
>anyway there is a great discussion of Horizontal loops and their properties
>found on LB Cebik's page at:
>http://www.cebik.com/atl1.html
>
>Happy haming 73, Dave Kc1di
>
>

2182. Re: Where to start on 6M/HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <YBxP5.25437$h96.127156@nntp0.chicago.il.ameritech.net>
Source record: 176639
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

6m most activity is around 50.125 and up. You can find some 6m repeaters.
Just look them up in an ARRL repeater book, and give them a try.

HF, 20 meters has the most activity, especially during the day/early evening
hours. After that 40 meters and 80/75 meters.

Hope that helps.

Kent, K9EZ

"Dennis Kaylor" <k4oxg@earthlink.net> wrote in message
news:3A0B788D.C11828F8@earthlink.net...
> hey pete
> congrats on the new radio
> i would suggest a 5 ele yagi for 6ssb which is where the most of the
activity
> on 6 is but keep in mind it is NOT like 10 or 20 meters 6 doesnt open all
> that often you spend a great amount of time monitoring and listening to
white
> noise but when it does open its great fun
> as for HF your on your own
> 73
>
> Peter wrote:
>
> > Where is all the activity on the 6m band (fm, ssb...)? I'm looking at
> > getting a new HF/6M radio (Kenwood TS-570S/G) and will need some 6m and
HF
> > antenna recommendations, thougths anyone?
> >
> > Thanks.
> > Pete
>

2183. Re: Horizontal quad????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A0EB0AF.393256EF@oio.net>
Source record: 176640

JD wrote:
>
> Hi all,
>
> Has anyone ever used a driven element from a 5 band quad as a horizontal
> skywire style loop???? Had an idea of one using a 4 element quad boom as a
> ground mounted mast so could be rotated for direction. Maybe i have too much
> time on my hands. Any comments on how it might work?? thanks Judd

Judd,
Using a common feed point for a multi-band quad is not the
best idea in the world. For example, the 10m and 20m elements
~will~ interact with a common feedpoint. Used as a single
element antenna instead of a beam driver, there may not be
much affect. When used as the driver on a beam there is quite
a bit of distortion in the radiation pattern.
'Doc

2184. Re: Kantronics KAM Plus TNC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: F1BDQ-Christophe <f1bdq@free.fr>
Message-ID: <3a0ec488@news-uk.onetel.net.uk>
Source record: 176641
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

Hi, At the same question, Kantronics answer that : (be carreful it's a little bit long but i don't know if i can join a file here...)

73' Christophe - F1BDQ

Version 8.2 Firmware Update
Firmware Update Version 8.2 adds advanced digipeating capabilities for GPS/APRS operations by adding four new commands for digipeating--UIDIGI, UIFLOOD, UITRACE, and UIDWAIT--and adding UIGATE to control cross-band digipeating for the Kam Plus, Kam, KPC-9612 Plus and KPC-9612. See the GPS/APRS discussion below. In addition, 8.2 versions for the KPC-3 and KPC-9612 are upgraded so that their command sets are more like those for the KPC-3 Plus and KPC-9612 Plus. For example, MODEM mode has been added so you'll be able to copy the NWS EMWIN weather broadcasts. See description of EMWIN below.
If you've skipped over one or more of last year's upgrades for your TNC, don't be concerned; 8.2 firmware incorporates the major features of the previous upgrades. The Version 8.2 Firmware Upgrade Manual Addendum, shipped with the firmware, includes a full description of the new digipeater commands and commands modified or combined with other commands since the last update.
Since documentation is not included for previous updates, KPC-3 and KPC-9612 owners might wish to purchase our newly written KPC-3 Plus and KPC-9612 Plus manuals which incorporate material from previous updates and are a great reference source. These manuals contain over 280 pages of information, including 60 pages of operational information on the various VHF/UHF digital modes, an 80 page Command Reference, and an extensive index. The operational chapter includes sections on the following: the packet mode of operation, remote access to your TNC, the packet personal mailbox (PBBS), working with a full service BBS to forward messages, GPS interfacing, the KA-Node networking system, WEFAX (for KPC-3 and KPC-3 Plus), the NEW EMWIN mode, KISS mode (for TCP/IP operation), and DAMA mode (the European node system mode).
Since the Version 8.2 update is not available for KPC-2, KPC-4, or KPC-2400 owners (due to their limited memory space), this may be an ideal time to consider the purchase of a new KPC-3 Plus or KPC-9612 Plus. Advanced GPS/APRS Digipeating: Amateurs are using GPS receivers, a packet unit, and an FM transmitter to report the location of their vehicles or stations to others. Their broadcasts use one-way (unproto UI) packets, to report call sign, latitude and longitude. Packet stations hearing these broadcasts may display the positional information, often using map-based programs such as APRS. To extend the range of reporting, it has become common practice for the mobile stations to use digipeat paths containing generic digipeater

names, such as RELAY and WIDE. Using these names (aliases), there is no need to recall and enter specific call signs during a trip.
In response to requests from many GPS and APRS enthusiasts to more fully support "generically named" digipeater activities, we've added four digipeater commands to the 8.2 firmware, that provide alternative ways in which to digipeat using generic call signs. First, the UIDIGI command allows up to four additional digipeater aliases and supports a swap of MYCALL for the alias name during digipeating. Second, the UIFLOOD command adds the ability of the TNC to digipeat several times, frames that contain only one digipeater address, such as WIDE3-3. Here, the ssid (-3) is decremented each time the frame is digipeated and each TNC digipeats such a frame only once. UITRACE does the same but adds the digipeaters MYCALL address to each outgoing frame, creating a return-path record, a "trace."
For You Techies out there, here's a brief description of each new digipeating command:
UIDIGI ON [+|-] call1[,call2[,call3[call4]]]
Up to four call signs can be specified for special digipeater duty. If any of the UIDIGI calls appears in the to-be-digipeated field of a UI packet, and if MYCALL does not appear in the source field or any of the has-been-digipeated fields, the UIDIGI call in the to-be-digipeated field will be replaced by MYCALL with the H bit set and the packet will be digipeated.
UIFLOOD name, n, [ID|NOID] (n=0-255)
When a UI frame is received with a call in the to-be-digipeated field of the form name'x-y (e.g. WIDE'3-3), the ssid is decremented and the UI frame is digipeated without the H bit set if such a packet has not been "seen" for the last n seconds. If the optional ID parameter is set, the MYCALL is placed in an additional digipeater field with the H bit set.
UITRACE name ,n (n=0-255)
This command is similar to UIFLOOD except that the MYCALL is inserted as a has-been digipeated address. Thus digipeated frames grow in duration as they are digipeated several times.
UIDWAIT
When OFF, digipeaters retain first channel access. When ON, digipeaters must compete with normal packets for channel access (using PERSIST).
NWS EMWIN Broadcasts: The NWS Emergency Managers Weather Information Network (EMWIN) is a wireless, direct-to-computer information service that the National Weather Service (NWS) provides with help from the Federal Emergency Management Agency. The NWS feeds a constant stream of weather information (@ 1200,8,N,1), from around the world, to a satellite orbiting the Earth. Many cities are coming on line now to capture this stream and rebroadcast it on fixed VHF FM frequencies., usually just above the 2-meter amateur band, tunable with most rigs. With an FM receiver or scanner, a KPC-3, KPC-3 Plus, KPC-9612, KPC-9612 Plus, KAM Plus, or KAM with Enhancement Board, and PC with communications software, you can copy these broadcasts. The content of the broadcasts may be plain ASCII text (copyable with Pacterm - shipped with Kantronics TNCs) or graphics (copyable with "WeatherNode" software, stocked for sale by Kantronics).
To copy the broadcasts, simply cable together the equipment mentioned above, tune your VHF FM receiver to the local EMWIN frequency, set the KPC

interface command to MODEM, and follow the text on your PC screen.
Please be sure to select the right KPC model(s) for your update(s); the
EPROMS (firmware) are not interchangable.

"Paul" <pvanasse@mail.direcpc.com> a crit dans le message news:
g0UM5.3107$925.101440@news.direcpc.com...
> Im looking for several Kantronics KAM Plus TNC's with late issue firmware
> chipsets. (7.0 or higher). Please email price and condition.
>
> Thanks and 73
>
>

2185. Daiwa Cn801H cross needle meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3A0EC6E8.745CA5BE@pobox.com>
Source record: 176642

I cannot find any specs detailing if this meter is backlit, or PEP peak reading.

Anyone know?

2186. Re: 40m slinky dipole, 1.12 SWR! But it wants me dead!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: gdrdear@aol.comnojunk
Message-ID: <20001112115916.19587.00001382@ng-fb1.aol.com>
Source record: 176643

>See I am one of the damned, an apartment dweller. (First floor, PVC pipe
>damned I might add) So naturally

Has anyone tried stuffing a copper cable down a spare drain to create a ground.
Might be tricky, inconvienient, but effective on the first floor ??

2187. Re: transmission question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: cspacone@pacbell.net
Message-ID: <3a0ecefc.2073565@News.pacbell.net>
Source record: 176644

My son uses small value capacitors from the motor leads to the case on his electric powered RC cars for just that reason. Find some low value caps (20 to 300 pF) and put one from negative to case, one from positive to case and one across the positive and negative. This should take care of it. If you have a scope you could find the exact frequency of the noise and calculate the cap value otherwise you'll need to experiment. Remember to keep the cap leads as short as possible.

Chris

On 12 Nov 2000 03:07:51 GMT, pdrunen@aol.com (PDRUNEN) wrote:

>Hi Group,
>
>I have a dc motor giving my receiver a noise problem. The receiver is a remote
>on 372.5 MHz and the dc motor is generating some noise which limits my flea
>power range to about 25 feet. In generally, I get 200 feet without the motor
>on.
>
>I have tried bypassing the motor leads to motor chassis ground and pulling a
>ferrite bead inline with the motor power. This has not really helped. I can
>not relocate the reciever either.
>
>So, I would like to try a different method. Place a open ended RG-174 coax
>cable across the motor line. As I recall, if the RG-174 is electrically 1/4
>wave then the open at the other end becomes a short at the generator?
>true/false or is it 1/2 wave?
>
>If so, then, what length would I cut the RG-174? And what is the equation?
>
>Also, the motor is 230V so is this a safe voltage for the RG-174.
>
>Many thanks!!!
>
>Paul

2188. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <4ujt0t0dv28pql0f9dt6go4vg4g7i2pqkc@4ax.com>
Source record: 176645

On Sat, 11 Nov 2000 23:17:55 -0500, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>Just curious. I have a friend that had an Escort 3 years ago and the
>owner's manual stated that one must not install radios over about 10-20
>watts. Obviously, Ford has corrected that? I knew some else that tried
>to put an HF rig in a Taurus, and it would choke down everytime he keyed
>the mike!

Hadn't heard that. I'm running 100 watts and so far no problems.
BTW, I had originally considered a ball mount on the right rear
quarter panel, but when I saw a box full of electronics right there,
decided to do the roof mount. I don't know what that box is, but I
suspect it may be the air bag module. Sure wouldn't want that to go
off when I keyed the mike!

73, Bill W7TI

2189. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11512-3A0ED566-2@storefull-116.iap.bryant.webtv.net>
Source record: 176646

Bill Nelson wrote:
Not quite. ERP is the sum of the transmitter output power and antenna gain - minus feedline, filter, coupler etc losses.

If one were to do a db accounting, one would add gains and losses for a net power output in dbm or dbw, etc. DB are logarithmic units, so that to multiply you add the db.

But, ERP is the product of antenna gain (the ratio, not the db) and the power delivered to the antenna (which has already discounted feedline, filter, coupler, etc losses.

If a transmitter delivers 25 KW to the antenna which has a power gain of 4, the station has an ERP of 100 KW. It delivers the same power to a receiver that a 100 KW transmitted signal into an antenna with a gain of 1 (0db) would deliver to that receiver, with the same locations involved.

The antenna in the example has a gain of 6 db, but that is not the unit used to compute ERP. The simple power gain (4) is the unit always used in a case of this magnitude in calculating ERP. The same process is used, regardless of magnitude, when calculating ERP.

Best regards, Richard Harrison, KB5WZI

2190. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8umm2c$819$0@208.206.142.92>
Source record: 176647

kl7ifp wrote:
>
> I got a 4X4 X3 under my tower that is self supported and it has survive many
> of 90 plus winds .... 120 knots so far been the greatest gust that it has
> with stood. only reason I didn't do the 3x3x5 that was manufacture recommend
> was hit bed rock 3 feet down.

I once had a 50 ft Rohn 25 set in a cubic yard of concrete, unguyed, with a tribander and stacked Cushcraft 11 el 2 meter yagis on top. It stayed up FB for about 6 years, through some pretty daunting winds, and would probably still be there if not for one late winter day when Mother Nature played one of her tricks...

Feb 28, '82 began sunny and warm, a really nice late winter day portending an early spring. But in late afternoon, a Blue Norther blew in, rain changed to freezing rain, the Rohn 25 became a huge 14 inch icicle, and the heavily gusting winds from the north really whipped it around. I wondered if it would stay up, and late that evening as a virtual blizzard howled away, it came down, falling south, kinked over at the base just above the concrete. It fell across a storage shed and the end of tribander boom just nicked the roof of the house, taking down the rain gutter.
One of the Cushcraft 11's was history, but the other and the tribander were in pretty good shape for the ride they had gone through. They now reside atop the replacement 60ft unit, also set in a cu yard of concrete, which has a single set of stainless steel guy cables at the 50 ft level, and over the past 15 years has withstood everything Mother could toss at it, so far.

Brian Kelley can explain it in Mechanical Engineerese, but I know that what happened is that the buffeting winds caused the tower to whip back and forth, and with the heavy ice load, a strong wind gust caught it leaning the wrong way, and with the added ice load it overpowered the lower part of the tower's mechanical strength to withstand it all, and over it came. Note that the 4x4x4ft concrete base didn't budge.
While such weather events are rare in this part of the world, I am lucky that it wasn't situated where it could come through the middle of the roof - mine or someone else's. No more freestanding rigs for me. And none situated where it could possibly come down on property belonging to others. The present version is located alone in the middle of a 150x150ft lot. If it should succumb to one of Mom's whims at least it misses everything but the earth.

Dick

2191. Re: Mounting R7 on Fire Escape

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <X90OOhaT7pJKiVAAgIOwVBqYFOTW@4ax.com>
Source record: 176648

ibg1@hotmail.com wrote:

>Hello,
>
>Has anyone come up with a good design for mounting an R7 or any type of
>antenna with rather large counter poises on a fire escape? Ideally it
>would be nice to put it on the roof, but unfortunately landlords are
>not always cooperative. I would like to be able to extend it a good
>amount beyond the fireescape so as to not interfere with people, if
>there is a fire. It would also be nice to be able to pivot or swivel
>the extension to be able to mount & work on the antenna.
>
>If anyone has any ideas, I'd be great to hear them
>
>Thanks es 73's de
>KF2MM, Ian

I'm not sure how many people use your fire escape, other than on an
emergency basis, but anyone touching your antenna could get a rather
nasty shock, and that could be dangerous on a fire escape, where a
fall could be deadly.

Also, a metal fire escape, with all of its odd-length metal pieces,
could play havoc with an R7's radiation pattern, or even produce
harmonics.

You might look at a B&W AP-10, a window-mounted whip. I had good luck
with one in a 3rd story apartment, many a moon ago.

Bob
k5qwg
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

2192. Help - Problem with Cushcraft MA5B

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: RM <russ@m5ady.fsnet.co.uk>
Message-ID: <8umo4s$141$1@newsg3.svr.pol.co.uk>
Source record: 176649

I have had a Cushcraft MA5B mini beam on the tower since January of this year, and have been
absolutely amazed with it's performance.

However, over the last week, the SWR has shot throught the roof on 20m, and has increased
somewhat on all of the other bands. The SWR previously was spot on across all bands. I haven't
had a chance to get antenna down yet due to high wind conditions, but would be interested to hear
from anyone who has had similar experiences, or who has any suggestions regarding possible cause.

Thanks in advance,

Russ
M5ADY

2193. Re: Help - Problem with Cushcraft MA5B

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A0EE6C5.79115193@oio.net>
Source record: 176650

Russ,
From the way you described the change, one of the things I'd check would be the 20 meter traps, or all the traps. They may have been invaded by critters, etc.
'Doc

2194. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A0EE8E2.FB3583EA@earthlink.net>
Source record: 176651

I used five inch magnets from commercially available mag-mounts; two of them come from flea-market monster "CB" mounts and required painting and weatherproofing, but they work fine. The plate is aluminum from a local scrap yard, around one-third of a circle, about 16 inches from the small end to the circular portion. On the front of the circle I have five magnets, on the back, which is cut off short, I have two. The antenna you see is actually a bit large for that mount, and a more prudent design puts the coil a bit lower with a slightly smaller top hat on an 18 inch Hustler (TM) mast.. In order to make installation easier I used an Outbacker (TM) base, with integral spring. This is one of the few springs I have found strong enough to hold a small bug-catcher upright at most highway speeds. I have since obtained a military antenna mount some fifteen inches tall whose spring is 5 inches wide, but I have yet to adapt that for the mount you see.

Really, this is as large as a sane person -- mostly sane -- would try for a magnetic mount. It can only go near the hatch, as a good ground strap is absolutely necessary. But the sheet metal on these small cars is deficiently strong, and I fear even with a doubler inside I might tear a hole in the car's roof.

The magnets also must be aligned parallel to the roof where they are. If they are only approximately so, the mount can (has!) separate under some conditions of acceleration, relative wind and side-to-side motion. In addition, trees are a hazard; I lost a side window once when I used a guy; a branch snuck in behind the guy and pivoted the mount off and into the window. $300! Ouch!

Regards,

Cortland

Brian Kelly wrote:

> Cortland Richmond wrote:
>
> > I've sent you a JPEG of a top-loaded bug catcher on a home-brew mag mount.
> > While I am not right now using it, I am thinking of mounting a screwdriver
> > antenna on the same plate, which I have upgraded to seven, five inch magnets
> > angled to fit the roof of my small car (Ford Aspire).
>
> >
> Got the .jpg OK, very nice shot Cortland. That's what I'd call "a compact
> antenna farm"! Where did the magnets come from?
> >
> Tnx
> >
> w3rv

2195. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A0EE9B4.F267A23E@earthlink.net>
Source record: 176652

I ran 100 watts from a Taurus for some years, had lots of fun working JA's
on 80 CW, breaking DX pileups on 40 CW, and no problems with the engine.
However... the fuel pump on the Taurus is notoriously noisy.

Cortland

Jerry Oxendine wrote:

> Bill,
>
> Just curious. I have a friend that had an Escort 3 years ago and the
> owner's manual stated that one must not install radios over about 10-20
> watts. Obviously, Ford has corrected that? I knew some else that tried
> to put an HF rig in a Taurus, and it would choke down everytime he keyed
> the mike!
>
> 73
>
> Jerry
> K4KWH
>
> Bill Turner wrote:
> >
> > On Sat, 11 Nov 2000 16:02:44 -0600, CAM <cam2338@bigfoot.com> wrote:
> >
> > >Sure, get you a GMC pickup like I have. :-)
> > --
> > Or a '97 Escort station wagon with roof rack. I mounted my antenna
> > using a Radio Shack mirror mount, clamped to the rack. The coax goes
> > in through the tailgate and the whole thing required NO holes at all.
> > And the Escort is verrrrrry quiet, too. Even with the noise blanker
> > off, I can barely hear ignition noise way in the background. No
> > alternator/fuel pump noise at all.
> >
> > 73, Bill W7TI

2196. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A0EEAF0.18F76490@earthlink.net>
Source record: 176653

And "ugly" is relative as well. My bug-catcher (to ME) is positively beautiful. Even when it's ugly! But one thing we agree on; you know it when you see it!

(g)

Cortland

Bill Turner wrote:

> Yes. "Big Ugly" is a generic term, not a specific design. You'll know
> it when you see it. :-)

2197. Re: Daiwa Cn801H cross needle meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: "John S." <jsrace@mindspring.com>
Message-ID: <8umqpn$p5a$1@slb1.atl.mindspring.net>
Source record: 176654

Jerry I have the 801V same as the H but for vhf.Yes it is backlit and it has
a peak and average switch.Very nice unit.Nice large easy to read meter.
jerry r <jerryrcremovethis@pobox.com> wrote in message
news:3A0EC6E8.745CA5BE@pobox.com...
> I cannot find any specs detailing if this meter is backlit, or PEP peak
> reading.
>
> Anyone know?
>

2198. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0EE49C.689B@bellsouth.net>
Source record: 176655

Yup!

Nowadays, cars <<can>> do some wierd things when subjected to RF. When
I first installed my screwdriver my rear defogger indicator would glow
and modulate as I talked. Sometimes the windshield wipers AND the washer
would come on! LOL! I wound 6 turns of the coax around a small dowel
near the antenna feedpoint and cured it.

Jerry
K4KWH

Bill Turner wrote:
>
> On Sat, 11 Nov 2000 23:17:55 -0500, Jerry Oxendine
> <joxendi@bellsouth.net> wrote:
>
> >Just curious. I have a friend that had an Escort 3 years ago and the
> >owner's manual stated that one must not install radios over about 10-20
> >watts. Obviously, Ford has corrected that? I knew some else that tried
> >to put an HF rig in a Taurus, and it would choke down everytime he keyed
> >the mike!
> ---
> Hadn't heard that. I'm running 100 watts and so far no problems.
> BTW, I had originally considered a ball mount on the right rear
> quarter panel, but when I saw a box full of electronics right there,
> decided to do the roof mount. I don't know what that box is, but I
> suspect it may be the air bag module. Sure wouldn't want that to go
> off when I keyed the mike!
>
> 73, Bill W7TI

2199. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8umvddbvl1@iac5.navix.net>
Source record: 176656

I guess it depends on what is is... Amazing the convoluted logic it takes to make one appear they are abiding by the rules.

One wonders if God parses his laws as finely as those who speak for him.

While none of this is my concern, I do find it rather curious.

"Rabbi Jacob" <gilbert.mouget@waika9.com> wrote in message news:feCP5.1657$dA5.6495280@nnrp3.proxad.net...
>
> Sun, 12 Nov 2000 05:16:13 -0500 dans l'article
> <05rs0tc7ns5r0kiirp0qq5bt7e417siii3@4ax.com>
> l'honorable sideband <sideband@cac.net> escrivit :
>
> :Well, your finger has to pull back, thus you are doing the work of
> :releasing the key.
>
> If the spring is broken or missing, nothing happens when you pull
> back your finger.
>
> This is the proof that it is the spring and not your finger that
> does the work of closing the electric circuit.
>
> HTH
>
> --
> Rabbi jacob
>

2200. Re: Help - Problem with Cushcraft MA5B

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20001112155853.05092.00001427@ng-cc1.aol.com>
Source record: 176657

If it is like other stories I have heard about Cushcraft, the vibration of the wind may have caused the screws holding the wire in the traps to work loose. Check all the connections and put glue or something on them to keep them from working loose.
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

2201. Ham IV Rotor/Control Pin-out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: "Roger A. McCarty" <rmccarty@earthlink.net>
Message-ID: <YGDP5.12557$Gd7.592487@newsread2.prod.itd.earthlink.net>
Source record: 176658

Hello,

I am in need of a Ham IV rotator pin connection diagram. Specifically, which terminals are the brake control lines and what voltage (AC/DC) does the brake solenoid need to pull in.

Thanks very much in advance

Roger KD6CC

2202. Dish

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Martien <martien@martpeeters.tmfweb.nl>
Message-ID: <8un63opml1@azure.nl.gxn.net>
Source record: 176659

Hellow

I have a dish of the principe cassagrain type?

The lnb is behind the dish.

How can i disconnect the lnb from the dish
Many thanks
Martien PA3DZA.

2203. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29770-3A0F1E98-20@storefull-113.iap.bryant.webtv.net>
Source record: 176660

Ed Hare, W1RFI wrote:
"If you want to make far-field measurements of an antenna over ground, you will have to be 2D^2 / lambda away from the antenna, with D = the largest dimension of the antenna system, including its height over ground."

That makes no sense for great antenna heights.

As anyone can see, for an antenna many wavelengths above ground, the required minimum distance for measurement becomes for practical purposes 2 h squared, where h is the antenna height, with Ed`s interpretation.

The higher the antenna, the farther away you would have to be (by twice the square of the height) to make valid measurements. That is not so. valid measurements are made over ground every day. You don`t have to go into outer space (if that were even helpful with Ed`s interpretation of the formuls) to make useful measurements. You don`t have to have an anechoic chamber either, but they are nice.

The purpose of the formula that Ed quotes is to ensure that the wavefront has flattened to a plane wave which produces no more than 30 degrees of phase error. S , D, and lambda are all in the same units, meters, feet, or wavelengths, your choice.

Ground effects must be considered, but that means that you must be rather close to the antenna so that the reflection from the ground will NOT bother you in making the measurement. You do need enough distance from the antenna to get a plane wave at the capture area (aperture) of the antenna being tested or the aperture of the test antenna. Reciprocity says you can either receive or transmit with the antenna under test to determine its gain and pattern.

I used lambda = 1/3 foot for my 3 GHz antenna.
I used D = 3 feet for the longest dimension of my aperture.
S = 54 feet
S is still 162 wavelengths for this antenna which was 180 wavelengths high. The long minimum distance is because the minimum dimension of my aperture was very large in terms of wavelength and it gets squared. But in an antenna this removed from ground, height is no longer a factor, presuming you can keep the effect of the reflected energy under your control.

Best regards, Richard Harrison, KB5WZI

2204. Re: Tower Height

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Gary Myers <GMYERS2@carolina.rr.com>
Message-ID: <p4GP5.59497$G95.14549042@typhoon.southeast.rr.com>
Source record: 176661

the answer is simple - go as high as you can! 35 ft will NOT be as effective for most all communications on 20 as 54' will - especially DX!!!

After running EZNEC and YT on this scenario there is 3 db difference at ALL relevant angles for the 50' vs the 35. And 5 db for a 65' compared to a 35! Unless you truly want local coverage I would recommend the 50 foot height without hesitation. The high angle lobe is down 11 db from the main lobe and really is not going to rob any energy to speak of - the frontal lobe of the main beam covers ALL relevant angles (there is NOTHING above 18 degrees per YT - at least nothing outside of a couple thousand miles). The frontal lobe is centered at 18 degrees (-3db @ 8.7 and 28 degrees) whereas the 35' height is centered at 24 degrees and extends up to almost 39 degrees.

Signal should not be a consideration here - only other factors such as funds and neighbors! (and actually the neighbors would be better off with the 50' as well).

g.

"Thomas Beltran" <tbeltran@earthlink.net> wrote in message
news:uzsM5.12546$rl.1053689@newsread2.prod.itd.earthlink.net...
> I'm considering putting up a tower and either a mono-band 20 meter yagi,
or
> a quad. My question concerns the decision about how tall a tower to buy.
> Would there be much difference between say a 35 foot tower and perhaps a
54
> foot tower in terms of ability to hear signals better and to be heard?
The
> only thing I've seen in print concerning this question was that a yagi
> should be approximately one wavelength off the ground to avoid interaction
> with the ground? Does that sound right? Tom
>
>
>

2205. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A0F45B3.AFD4AC97@datacomm.com>
Source record: 176662

Rabbi Jacob wrote:
>
> Sun, 12 Nov 2000 05:16:13 -0500 dans l'article
> <05rs0tc7ns5r0kiirp0qq5bt7e417siii3@4ax.com>
> l'honorable sideband <sideband@cac.net> escrivit :
>
> :Well, your finger has to pull back, thus you are doing the work of
> :releasing the key.
>
> If the spring is broken or missing, nothing happens when you pull
> back your finger.
>
> This is the proof that it is the spring and not your finger that
> does the work of closing the electric circuit.

If the object is the avoidance of labor on the Sabbath, has anyone considered where, how, and from whom, the spring acquires it's energy, and if that energy was transferred on the Sabbath?

Louis

>
> HTH
>
> --
> Rabbi jacob

2206. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A0F45FA.1BF9@bellsouth.net>
Source record: 176663

Cortland,

We seem to agree on the old adage "Beauty is in the Eye of the
Beholder". I think the same thing about my "Bug-screw"--which is a
3" dia. screwdriver! The "beauty" is in the way it performs. Today,
since the WX was nice here in NC, I got out in the yard "piddling" and
doing field strength measurements. I used a smaller screwdriver, an old
Master Mobile center-load, an ancient antenna called the Bay Mobile (the
predecessor to the Webster Bandspanner, and a ham stick. As expected,
the Big Ugly came in first, the smaller screwdriver #2, Master Mobile
#3, Bay Mobile #4, and the ham stick didn't even move the meter! LOL!
Just what I expected! I just LOOOOVE them Big "Ugly" antennas!

73

Jerry
K4KWH

Cortland Richmond wrote:
>
> And "ugly" is relative as well. My bug-catcher (to ME) is positively
> beautiful. Even when it's ugly! But one thing we agree on; you know it
> when you see it!
>
> (g)
>
> Cortland
>
> Bill Turner wrote:
>
> > Yes. "Big Ugly" is a generic term, not a specific design. You'll know
> > it when you see it. :-)

2207. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A0F4764.234563C8@datacomm.com>
Source record: 176664

How about a number of stout Rebar pieces drilled into the Bed Rock? I
wish I had such material available where I lived. If oversized holes
were drilled into the rock at an angle, and Epoxy used to retain the
Rebar, which was bent vertical after leaving the rock, the result could
be unequaled support, unavailable without great expense!

Louis

kl7ifp wrote:
>
> I got a 4X4 X3 under my tower that is self supported and it has survive many
> of 90 plus winds .... 120 knots so far been the greatest gust that it has
> with stood. only reason I didn't do the 3x3x5 that was manufacture recommend
> was hit bed rock 3 feet down.
> "B Nehl" <k0emt@dbbear.com> wrote in message
> news:1a2e0t0fambivicl62qd4ufn6m8mgrp39i@4ax.com...
> > >This life and death subject has no room for antidotal experiences.
> > >Please obtain the necessary specifications and requirements directly
> > >from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
> > >the allowable antenna area for a 30ft self-supporting 25G tower
> > >exposed to ice and 90mph winds is ZERO.
> >
> > I agree that the Rohn specs & requirements should be followed.
> > I have been to the Rohn website (www.rohn.net) and have sent an email
> > to them detailing my plans and seeking their recommended base size.
> >
> > However, I am still interested in knowing what others have done.
> > Problems, etc that others have run into. The group I run with tends
> > to "over-engineer." Can a base ever be "too-big?"
> >
> > 73,
> >
> > Bryan - k0emt

2208. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <0iju0t0u9ua9ad2um0qgq2f6lr5ajv1lot@4ax.com>
Source record: 176665

That makes sense, I guess. Thanks for cleaing that up.

-SSB

On or about Sun, 12 Nov 2000 19:31:23 GMT, Rabbi Jacob
<gilbert.mouget@waika9.com>, using the forum rec.radio.amateur.antenna
did say:

:
: Sun, 12 Nov 2000 05:16:13 -0500 dans l'article
: <05rs0tc7ns5r0kiirp0qq5bt7e417siii3@4ax.com>
: l'honorable sideband <sideband@cac.net> escrivit :
:
::Well, your finger has to pull back, thus you are doing the work of
::releasing the key.
:
:If the spring is broken or missing, nothing happens when you pull
:back your finger.
:
:This is the proof that it is the spring and not your finger that
:does the work of closing the electric circuit.
:
:HTH

2209. Re: Antenna Connector Quality

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A0F6C3B.C6705389@hiwaay.net>
Source record: 176666

Please forgive the digression, but- there are probably smaller differences in insertion loss among the manufacturers than there are in other, important characteristics. In my experience, the two main problem areas have been poor thread quality (the cast threads are the pits) and failure of the center sleeve, on UHF connectors.

Any connector that is in service with repeated connect- disconnect operations will Hell to use, if the threads are bad. The same service will open up the sleeve and result in poor (or no) connection, if the sleeve is skimpy or has low spring quality.

There has been a lot of very good advice on this NG on the subject of N vs UHF connectors. THe consensus from the better Guru's is that the N type are rarely really needed, unless you are at UHF with QRP and long runs, in which case you should be using other means of transmission, anyway.

Good luck- Bill

Brew99 wrote:
>
> Which manufacture makes the best quality "N" or "UHF" connectors? By best I
> mean, lowest insertion loss.
>
> Thanks,

2210. Re: Mobile antenna mount on hood

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Martin Walker <mbwalker@netonecom.net>
Message-ID: <3a0f7010$0$83473$45beb828@newscene.com>
Source record: 176667

I have a setup like you describe on my Ranger pickup. It's a lip mount at the left/rear edge of the hood with a 49" dual band MFJ-1412 antenna. It allows me to pull in my garage and just barely hit the 7' tall door opening with the antenna. Performance is good but not necessarily any better than what others in this area get (on 2m) using a simple 1/4 wave antenna mounted in the roof.

Martin
KC8CFP

zeppss <zeppss@hotmail.com> wrote in message
news:k2pP5.397$Bi3.639@newsfeed.slurp.net...
> I have an S-10 pickup truck, the new style without drip rails, and have
been
> using a magmount (6m, 2m, 70cm). I plan to get a 60" antenna soon, and
don't
> want a bigger magmount to hold it. A hole through the roof is not
> acceptable,
> the bed has a fiberglass lid on it, and a hitch mount looks like it is too
> low relative to the body. I am thinking of using a lip mount somewhere on
an
> edge of the hood, maybe the back edge. (RF exposure would not seem to be a
> problem: most of my mobile use is of short duration at 5 watts,
> max. 50w and 35w, and the antenna would extend well above the roofline.)
>
> Anyone have a similar setup, or care to make suggestions?
>
>
>
>

2211. check it out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:00:00 UTC
From: Jordan Mitchell <invtimem@hotmail.com>
Message-ID: <3a0e3348@defiant.btitelecom.net>
Source record: 176668

To find out a new opportunity to earn money in a minimum of time
(15000$ and more per month), visit www.earnatease.com.

2212. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 00:14:40 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0DEECF.29DBCBFA@dvol.com>
Source record: 176620

Cortland Richmond wrote:

> I've sent you a JPEG of a top-loaded bug catcher on a home-brew mag mount.
> While I am not right now using it, I am thinking of mounting a screwdriver
> antenna on the same plate, which I have upgraded to seven, five inch magnets
> angled to fit the roof of my small car (Ford Aspire).

>
Got the .jpg OK, very nice shot Cortland. That's what I'd call "a compact
antenna farm"! Where did the magnets come from?
>
Tnx
>
w3rv

2213. transmission question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 03:07:51 UTC
From: pdrunen@aol.com
Message-ID: <20001111220751.12366.00003123@ng-md1.aol.com>
Source record: 176621

Hi Group,

I have a dc motor giving my receiver a noise problem. The receiver is a remote on 372.5 MHz and the dc motor is generating some noise which limits my flea power range to about 25 feet. In generally, I get 200 feet without the motor on.

I have tried bypassing the motor leads to motor chassis ground and pulling a ferrite bead inline with the motor power. This has not really helped. I can not relocate the reciever either.

So, I would like to try a different method. Place a open ended RG-174 coax cable across the motor line. As I recall, if the RG-174 is electrically 1/4 wave then the open at the other end becomes a short at the generator? true/false or is it 1/2 wave?

If so, then, what length would I cut the RG-174? And what is the equation?

Also, the motor is 230V so is this a safe voltage for the RG-174.

Many thanks!!!

Paul

2214. WTB: Cushcraft R7

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 03:58:02 UTC
From: vanstralenb@aol.com
Message-ID: <20001111225802.03269.00001224@ng-cm1.aol.com>
Source record: 176622

I'm looking for a nice vertical to put up before the snow flies. Anybody with one out there extra to their needs?

tnx es 73 de Bill
vanstralenb@aol.com

2215. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 06:19:43 UTC
From: n8wwm@aol.com
Message-ID: <20001112011943.02983.00000527@ng-bj1.aol.com>
Source record: 176623

```
>OBVIOUSLY someone with too much time on his hands
>From: Commanding General Georgia Citizens Militia
>
>To: All Members
>
>Encryption key: Book 3 page 17 Paragraph 4 words 3 through 9
>
>Flash Message follows in 1 part:
>
>qghts dhvst kjcht dhehd ghloy bjcxz shirn skhfg alpqm qzpml akdhr dinfg
>cjpqk skybv bntrf apmkd aagnk bhryd slkig ckhei cklsp qysak ppkbr shith
>kilwz
>
>Execute execute execute
>
>Your code is patriot
```

2216. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 06:20:35 UTC
From: n8wwm@aol.com
Message-ID: <20001112012035.02983.00000528@ng-bj1.aol.com>
Source record: 176624

You forgot to include the "secret agent man" wav file.

2217. SLV (Saint Louis Vertical)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 07:25:06 UTC
From: WE0H <mikereid1@uswest.net>
Message-ID: <OyrP5.2126$hn2.554850@news.uswest.net>
Source record: 176626

I am looking for the adjustable coil for the SLV. I have the 20' Black Widow already, but need the rest of the parts to build the antenna. Can anyone help? Thanks, Mike.

--
Mike Reid
WE0H
mikereid1@qwest.net

2218. Re: SLV (Saint Louis Vertical)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 07:39:36 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A0E4938.571F44F9@netscape.net>
Source record: 176627

WE0H wrote:
>
> I am looking for the adjustable coil for the SLV. I have the 20' Black Widow
> already, but need the rest of the parts to build the antenna. Can anyone
> help? Thanks, Mike.

http://www.fix.net/~jparker/w6mma.htm

--
Jim Fuller

2219. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-12 08:42:49 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8ule5j$b7k$1@slb7.atl.mindspring.net>
Source record: 176625

N8wwm <n8wwm@aol.com> wrote in message
news:20001112012035.02983.00000528@ng-bj1.aol.com...
> You forgot to include the "secret agent man" wav file.
>
Yes. That omission is the key. ALL UNITS TRIANGULATE ON N8WWM. SWARM! SWARM!
SWARM!

($1 to Seinfeld)

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

2220. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A109BC5.AAE7A27@datacomm.com>
Source record: 176519

VE2VFD Pat wrote:
>
> On Sun, 12 Nov 2000 17:36:51 -0800, Louis Bybee <louisb@datacomm.com>
> wrote:
> >If the object is the avoidance of labor on the Sabbath, has anyone
> >considered where, how, and from whom, the spring acquires it's energy,
> >and if that energy was transferred on the Sabbath?
>
> **Physics, the Torah and the Sabbath! Tonite on Jerry Sprigner!** :o)
>
> Seriously folks, lighten up... If a Jew (or any other religious
> person) feels comfortable in the way he follows his faith, what
> possible business is it of yours or mine?

When said views are posted in a public forum!

You wouldn't have to ask very far to determine that people don't come
much more "lightened up" than moi!

Despite what would appear to be an off topic subject for this forum, I
found this to be one of the first of a religious nature that was
unoffensive, and purely informative (even I actually learned something).
My response was more aligned with an exercise in logic, and not intended
to criticize one's religious beliefs.

Louis

>
> Pat - ve2vfd
> "There is nothing an agnostic cannot do if he really doesn't know what
> he believes in" ;o)
>
> Pat - VE2VFD
>
> (ps: for email take out the words "remove this now" from my address)

2221. Re: 2M Groundplane radials touching snow?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A10A219.F97B351C@oio.net>
Source record: 176520

Matthew Delaney wrote:
>
> I have a 2M ground plane mounted on my roof (actually hanging off my gutter
> due to the need for a semi-stealth installation), but the 2 radials that
> hang over the roof only clear it by an inch or so. Right now it's working
> very well (very low SWR), but here in the NE US, snow is just around the
> corner. If I get some snow on the roof and it starts to bury the ends of the
> radials against the roof, will this have a drastic effect on my SWR? If it
> will have a major effect, I can raise the antenna somewhat (it's supported
> through a T shaped assembly of PVC pipes, with the cross part of the T
> hanging off the gutter). However, if it's not going to be major, I'd rather
> not raise it anymore, due to the loss of some of the stealthness and the
> extra weight on the gutter.
>
> Thanks,
> Matthew Delaney, N2MDB

Matthew,
I doubt it snow will make any difference at all.
'Doc

2222. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A10A29E.56FD9141@oio.net>
Source record: 176521
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Hans,
Have you seen the little gadget that fits in the 'stake'
holes, to mount antennas? Forgot who makes them...
'Doc

2223. One More Question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Lloyd <VE7LWB@rac.ca>
Message-ID: <QO3Q5.63366$Z2.863537@nnrp1.uunet.ca>
Source record: 176522
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

Does anyone know of any company or companies that make cavity cans for
ham bands? Most of all cavity cans for 6M {50~54Mhz} and 10M {29~30Mhz}??

.

2224. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A10C3BF.9EA@bellsouth.net>
Source record: 176523
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

What about getting one of those stainless tool boxes for right behind the cab? There you could drill holes to your heart's content, the antenna would be right in the center, and when you trade, just remove the box for the new truck.

Jerry
K4KWH

K0HB wrote:
>
> Have a one-month-old 2001 Chev Silverado LT that I just don't want to
> drill holes in, nor do I want to put scratches in the clearcoat with a
> mag-mount.
>
> Anyone have a favorite way of mounting a dual-band antenna (2M/440),
> maybe on the bed rails or in a stake pocket?
>
> Thanks in advance for any bright ideas.
>
> 73, Hans, K0HB
>
> --
> ~~~
> If you make people think they're thinking, they'll love you;
> but if you really make them think, they'll hate you.
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2225. Re: Question: buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8uob2g$6up$1@neptunium.btinternet.com>
Source record: 176583

Steve, from where do you get the idea RF currents 'stop' at
3 to 4" below the surface ?

It is not that radials greater than 6" deep 'defeat the
purpose', it is just that there is not much more benefit to
be obtained by digging deeper.

Compared with wire diameter, 6" is quite deep enough to
obtain an adequate connection between wire and soil.

Reg
****
Steve wrote .
> I have erected many antennas and towers. After studing
about RF grounds, I
> found that buring ground radials below 6" ground level
defeats the purpose. The
> RF stops at 3 to 4" of ground depth and dissapates. They
will work for
> lightning protection, but do they really work for RF?

2226. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Scott Schultz <n0iu@arrl.net>
Message-ID: <3a0fcfc7$0$62627$1dc6d6e3@news.corecomm.net>
Source record: 176584

Who in the world told you that's what QSO stood for???

"Meng-Po Chen" <mpc@.sinica.edu.tw> wrote in message
news:8uo4sv$2lav$1@news1.sinica.edu.tw...
> OM,
> I know QSO stands for Quasi Sinusoidal Oscillation. My question is
> that when two hams complete a QSO, why is it like a sine wave oscillation?
> Any hints on the techinical details or explanation is cordiallly welcome.
>
> thanks in advance.
>
> 73 Frank , BM2FWY
> mpc@asiaa.sinica.edu.tw
>

2227. Re: Request Suggestions for "Portable 10 M Base Station Antenna"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A0FDAA0.6FA1F81D@cmcorp.com>
Source record: 176585

Kevin Fontes wrote:

> Hello All,
> I will be spending 2 weeks on a Farm during the christmas season. Can
> somesone please give me a recommendation for a simple base station antenna
> that I can use for this short two week period? Simple and low cost if
> possible.
>
> Thanks in advance,
> 73
> Kevin, KI0EB

Noting beats the simplicity of a dipole!

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2228. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001113081250.24420.00001731@ng-cd1.aol.com>
Source record: 176586

>From: richardharrison@webtv.net (Richard Harrison)

>From the nonsense posted in this thread, one might infer that ERP
>numbers are mostly wrong. I don`t think so.

There is absolutely no need to be insultive to those participating in this discussion. Don't we have quite enough of that here already?

73,
Ed Hare, W1RFI

2229. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001113081826.24420.00001732@ng-cd1.aol.com>
Source record: 176587

>From: richardharrison@webtv.net (Richard Harrison)

>The antenna in the example has a gain of 6 db, but that is not the unit
>used to compute ERP. The simple power gain (4) is the unit always used
>in a case of this magnitude in calculating ERP. The same process is
>used, regardless of magnitude, when calculating ERP.

No ERP calculation can be accurate unless it includes the gain obtained through the ground reflection. In the case of an antenna that is designed not to radiate energy downward, the ground reflection can be minimal, so it may be possible to use the free-space gain of the antenna very handily to calculate ERP.

As an aside, to calculate ERP is referenced to the gain of a half-wave in free space, so the easiest way to use it is to start with the antenna gain in dBd.

BTW, 6 dB and a power gain of 4 are precisely equivalent. Either can be used in calculating ERP.

73,
Ed Hare, W1RFI

2230. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001113082901.24420.00001735@ng-cd1.aol.com>
Source record: 176588

>From: richardharrison@webtv.net (Richard Harrison)

>Ed Hare, W1RFI wrote:

>"If you want to make far-field measurements of an antenna over ground,
>you will have to be 2D^2 / lambda away from the antenna, with D = the
>largest dimension of the antenna system, including its height over
>ground."

>That makes no sense for great antenna heights.

Perhaps my choice of words led you to believe that I am saying something different than I intend.

It applies equally to great antenna heights. If you want to measure or calculate the far-field pattern of an antenna *over ground* (this does NOT mean the calculate the free-space pattern, it means the pattern that one obtains in the real world when the antenna is over ground, ie all the lobes and such that happen when the antenna interacts with the ground) one must be very very far away from the antenna.

This does not apply to making calculations of free-space patterns from the data extrapolated from measurements made on an antenna range. That can be done very nicely in the radiating near field as determined by the dimensions of the antenna itself, although the methods to calculate out the ground reflection to obtain an actual free-space pattern can be a bit interesting.

>Ground effects must be considered, but that means that you must be
>rather close to the antenna so that the reflection from the ground will
>NOT bother you in making the measurement.

This is the part of my statements that you have misunderstood. I originally said that to measure or calculate the pattern that one gets when one places an antenna over ground, one must be as far away from the antenna as I have stated.

From the statement that you made above, it looks pretty clear that you misunderstood me to mean that one had to be that far away to make ANY measurement of the antenna.

One cannot make a measurement of the ground-reflection pattern under circumstances where the ground reflection will not bother you when making the measurement.

I think you and I have been arguing apples and oranges, Richard. Perhaps this could explain why you think my statements to be nonsense.

73,
Ed Hare, W1RFI

2231. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15703-3A0FEE43-6@storefull-116.iap.bryant.webtv.net>
Source record: 176589

Ed Hare, W1RFI wrote:
"There is absolutely no reason to be insultive to those participating in
this discussion."

If you are looking for an insult, Ed, you`ll find one.

Best regards, Richard Harrison, KB5WZI

2232. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Stephen Verbil <sverbil@usa.net>
Message-ID: <3A0FF538.AEB63C8A@usa.net>
Source record: 176590

I am very concerned about one part of Ed's letter: I believe he is looking for a way to tie the building electrical ground system together with the antenna ground system. I would guess, Ed, this is because you have learned somewhere about the problems that ensue when you have different, independent grounds. Rick did a good job dealing with the RF issues, I'll just stick with safety...

However, the way to accomplish that is *not* to pick up a 'ground' at an outlet that happens to be nearby the coax' entrance to the building. The safety ground available there is designed to provide a path to ensure (among other things) that the protection for that circuit will trip. It is not designed to carry antenna discharge currents!

Excerpted from the National Electric Code, Chapter 8, Section 810 which covers, among other things, amateur radio transmitting and receiving equipment,

the ground connection from an "antenna discharge unit" :

(f) Electrode. The grounding conductor shall be connected as follows.
1. To the nearest accessible location on the following:
a. The building or structure grounding electrode system as covered in Section 250-50
b. The grounded interior metal water piping system as covered in Section 250-104(a)

c. The power service accessible means external to enclosures as covered in Section 250-92(b)
d. The metallic power service raceway
e. The service equipment enclosure, or
f. The grounding electrode conductor or the grounding electrode conductor metal enclosures; or
2. If the building or structure served has no grounding means, as described in (f)(1), to any one of the individual electrodes described in Section 250-50; or

j) Bonding of Electrodes. A bonding jumper not smaller than No. 6 copper or equivalent shall be connected between the radio and television equipment grounding electrode and the power grounding electrode system at the building or structure served where separate electrodes are used.

and finally...

(h) Size. The grounding conductor shall not be smaller than No. 10 copper, No. 8 aluminum, or No. 17 copper-clad steel or bronze.

So... your connection goes to a grounding electrode (your rod driven into the ground. You should interconnect it, and when you run the interconnection you need to make a straight run to the point you use (lots of folks use the service entrance enclosure and its associated ground connection). Normal house wiring doesn't use #10 sized ground conductors.

In summary, connecting to the ground available in an outlet won't accomplish what you want. And. being a GFI outlet, there's a good chance that if any stray RF is on the outside of your coax, you'll trip the GFI and turn off anything attached to that outlet.

Might be interesting with Christmas lights plugged in there in the winter :-) ...
--
--Cheers, and good luck with your new inverted-vee.
--Stephen Verbil, NA1SV
--
-- "The opinions expressed here do not necessarily represent
the opinions of anyone I'm working with or for."

Rick Littlefield wrote:

> Hi Ed--
>
> Grounding for DC from the second floor is easy, but grounding for RF at 28 MHz
> is nearly impossible because the wire will be too long in terms of wavelength.
> I think the best way to keep RF out of the shack is by making sure the outer
> surface of your antenna feedline is "choked off" against RF currents. If it
> isn't, any ground wire you install may actually become part of the antenna
> system!
>
> To prevent what are called "common-mode RF currents" from returning to your
> shack, make sure you use a balun of some sort at the antenna's feedpoint
> (ferrite sleeves, coils of coax, or something), and also wrap a few coils of
> coax at the back of your rig and tape them up. If no RF current can come back
> down the outside of you feedline, the chassis RF potential on your rig should
> remain "cold" and you can then connect a wire to ground rods that will act as a
> DC ground without radiating RF. That's the condition you want to create.
>
> Up here in NH, I live on a sandhill with terrible ground conductivity and I
> don't even attempt to ground my station for RF. Instead, I choke all my
> feedlines to create a high impedance condition for RF current return (rather
> than a low impedance condition through RF grounding). I also disconnect my
> feedlines and master power when I'm not using the station to avoid problems
> from thunderstorms or severe snow static. In the past three years, I've lost
> two Fax machines, a modem, some lightbulbs, and a couple appliances to
> lightning--but never a radio. If your station isn't connected to anything
> (including a ground), nothing will happen to it unless the house burns down
> around it!
>
> 73
>
> Rick K1BQT

2233. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A0FF774.AB79FD9B@ix.netcom.com>
Source record: 176591

Meng-Po Chen wrote:

> OM,
> I know QSO stands for Quasi Sinusoidal Oscillation. My question is
> that when two hams complete a QSO, why is it like a sine wave oscillation?
> Any hints on the techinical details or explanation is cordiallly welcome.
>
> thanks in advance.
>
> 73 Frank , BM2FWY
> mpc@asiaa.sinica.edu.tw

==========
Good Morning Frank

In the context that hams use QSO -- it does NOT mean Quasi Sinusoidal
Oscillation.
QSO as used in communications was taken from the Q-Signal lists of the old
telegraph/wireless radio days.
On 1st July 1913 the Q code became an official international information code,

updated as changing circumstances demanded to include new codes relating to
such matters as aviation and maritime. Amateur Radio Operators used it also
since
many of them were radio/telegraph operators as well.

Widely used by radio amateurs operating CW, today's Q code has
slightly different meanings but is still very similar to the 1913 version.
One of the great benefits of using the Q code is the pleasure in being
able to communicate with overseas operators who may not be fluent in
your language.

Strictly QSO means:
QSO Can you communicate with ... direct or by relay?
I can communicate with ... direct (or by relay through ...).

Hams have taken the "communicate" to mean a two way conversation between two
Ham Stations. Thus the phrase "Thanks for the enjoyable QSO" translates to
"Thanks for the enjoyable conversation"

For the history of Q-Signals see URL:
http://www.ac6v.com/pagear.html#QZ
There you will information on other codes (Z-code, R-code, S-code, X-code and
others)
Also See Brevity Codes at URL:
http://www.ac6v.com/pagers.html

For a very detailed list of Q-Signals as used by the military, marine,
aviation etc -- see URL:
http://www.wemsi.org/qsigs.html

For commonly used Q-Signals by Hams today -- see URL:
http://larc.unl.edu/qsign.html

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

2234. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A0FF789.4F8ADBF6@ix.netcom.com>
Source record: 176592

Meng-Po Chen wrote:

> OM,
> I know QSO stands for Quasi Sinusoidal Oscillation. My question is
> that when two hams complete a QSO, why is it like a sine wave oscillation?
> Any hints on the techinical details or explanation is cordiallly welcome.
>
> thanks in advance.
>
> 73 Frank , BM2FWY
> mpc@asiaa.sinica.edu.tw

==========
Good Morning Frank

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Oscillation.
QSO as used in communications was taken from the Q-Signal lists of the old
telegraph/wireless radio days.
On 1st July 1913 the Q code became an official international information code,

updated as changing circumstances demanded to include new codes relating to
such matters as aviation and maritime. Amateur Radio Operators used it also
since
many of them were radio/telegraph operators as well.

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slightly different meanings but is still very similar to the 1913 version.
One of the great benefits of using the Q code is the pleasure in being
able to communicate with overseas operators who may not be fluent in
your language.

Strictly QSO means:
QSO Can you communicate with ... direct or by relay?
I can communicate with ... direct (or by relay through ...).

Hams have taken the "communicate" to mean a two way conversation between two
Ham Stations. Thus the phrase "Thanks for the enjoyable QSO" translates to
"Thanks for the enjoyable conversation"

For the history of Q-Signals see URL:
http://www.ac6v.com/pagear.html#QZ
There you will information on other codes (Z-code, R-code, S-code, X-code and
others)
Also See Brevity Codes at URL:
http://www.ac6v.com/pagers.html

For a very detailed list of Q-Signals as used by the military, marine,
aviation etc -- see URL:
http://www.wemsi.org/qsigs.html

For commonly used Q-Signals by Hams today -- see URL:
http://larc.unl.edu/qsign.html

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

2235. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A0FF79B.E8D77BE9@ix.netcom.com>
Source record: 176593

Meng-Po Chen wrote:

> OM,
> I know QSO stands for Quasi Sinusoidal Oscillation. My question is
> that when two hams complete a QSO, why is it like a sine wave oscillation?
> Any hints on the techinical details or explanation is cordiallly welcome.
>
> thanks in advance.
>
> 73 Frank , BM2FWY
> mpc@asiaa.sinica.edu.tw

==========
Good Morning Frank

In the context that hams use QSO -- it does NOT mean Quasi Sinusoidal
Oscillation.
QSO as used in communications was taken from the Q-Signal lists of the old
telegraph/wireless radio days.
On 1st July 1913 the Q code became an official international information code,

updated as changing circumstances demanded to include new codes relating to
such matters as aviation and maritime. Amateur Radio Operators used it also
since
many of them were radio/telegraph operators as well.

Widely used by radio amateurs operating CW, today's Q code has
slightly different meanings but is still very similar to the 1913 version.
One of the great benefits of using the Q code is the pleasure in being
able to communicate with overseas operators who may not be fluent in
your language.

Strictly QSO means:
QSO Can you communicate with ... direct or by relay?
I can communicate with ... direct (or by relay through ...).

Hams have taken the "communicate" to mean a two way conversation between two
Ham Stations. Thus the phrase "Thanks for the enjoyable QSO" translates to
"Thanks for the enjoyable conversation"

For the history of Q-Signals see URL:
http://www.ac6v.com/pagear.html#QZ
There you will information on other codes (Z-code, R-code, S-code, X-code and
others)
Also See Brevity Codes at URL:
http://www.ac6v.com/pagers.html

For a very detailed list of Q-Signals as used by the military, marine,
aviation etc -- see URL:
http://www.wemsi.org/qsigs.html

For commonly used Q-Signals by Hams today -- see URL:
http://larc.unl.edu/qsign.html

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

2236. Cushcraft R8 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: trout <trout@cityusa.net>
Message-ID: <i3a01t812qu288tnvebje2s81h739im8u7@4ax.com>
Source record: 176594

The R8 has stainless straps holding together different
parts of this antenna. Would drilling the tubes and using
small sheet metal screws in addition to the straps cause
performance problems ???

2237. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A100F05.DF426664@dvol.com>
Source record: 176595

AC6V wrote:

>
>
> In the context that hams use QSO -- it does NOT mean Quasi Sinusoidal
> Oscillation.
> QSO as used in communications was taken from the Q-Signal lists of the old
> telegraph/wireless radio days.
> On 1st July 1913 the Q code became an official international information code,
>
> updated as changing circumstances demanded to include new codes relating to
> such matters as aviation and maritime. Amateur Radio Operators used it also
> since
> many of them were radio/telegraph operators as well.

>
Where did the "Z" codes come into play, the military?
>
w3rv

2238. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7255-3A0FFDE5-26@storefull-118.iap.bryant.webtv.net>
Source record: 176596

Ed Hare, W1RFI wrote:
"No ERP calculation can be accurate unless it includes the gain obtained through the ground reflection."

ERP is calculated by multiplying measured power, at the FCC designated power determination point, times the gain of the antenna (as a simple ratio). The reference antenna for this is a dipole, which is specified as having a gain of one.

No ground reflection is involved.

Ed also wrote:
"As an aside, to calculate, ERP is referenced to the gain of a half-wave in free space, so the easiest way to use it is to start with dBd."

Anyone should use what is easiest and accurate. All FM broadcast antenna gains are given in dBd, as Ed said. That adds no clarity so I didn`t add it to my explanation. The only items that matter are (1) the antenna simple gain ratio over the standard, and (2) the designated power output of the FM transmitter.
If the antenna multiplies the power by concentrating it approximately toward the horizon at the expense of radiating it toward the zenith, by a factor of 4, the Effective Radiated Power output of the transmitter is multiplied by a factor of 4. That is the definition.

Ed also wrote:
"BTW, 6 dB and a power gain of 4 are precisely equivalent."

Well, not precisely, but close enough. DB and power gain represent the same thing, a power ratio. So, either can be used to calculate ERP. I would suggest using the easier. The definition of ERP is designated power times power gain.

Best regards, Richard Harrison, KB5WZI

2239. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A101A02.96C6DD8E@dvol.com>
Source record: 176597

Cortland Richmond wrote:

> I used five inch magnets from commercially available mag-mounts; two of them come
> from flea-market monster "CB" mounts and required painting and weatherproofing,
> but they work fine.

>
Maybe I'd better resign myself to scrounging, too. I haven't been able to locate a
decent commercial source.
>

> The plate is aluminum from a local scrap yard, around
> one-third of a circle, about 16 inches from the small end to the circular portion.
> On the front of the circle I have five magnets, on the back, which is cut off
> short, I have two.

>
THAT is a heap of magnets! Yeah, more magnets toward the front.
>

> The antenna you see is actually a bit large for that mount, and
> a more prudent design puts the coil a bit lower with a slightly smaller top hat on
> an 18 inch Hustler (TM) mast.. In order to make installation easier I used an
> Outbacker (TM) base, with integral spring. This is one of the few springs I have
> found strong enough to hold a small bug-catcher upright at most highway speeds. I
> have since obtained a military antenna mount some fifteen inches tall whose spring
> is 5 inches wide, but I have yet to adapt that for the mount you see.

>
I'd dearly love to get my mitts on one of the HF antennas I see on the Humvees we have
around here just for the parts.
>

>
> Really, this is as large as a sane person -- mostly sane --

>
'Nother whole topic . . .
>

> would try for a
> magnetic mount. It can only go near the hatch, as a good ground strap is
> absolutely necessary. But the sheet metal on these small cars is deficiently
> strong, and I fear even with a doubler inside I might tear a hole in the car's
> roof.

>
I think you'd be surprised how much it takes to tear the stuff but it does ding easily.
>

> The magnets also must be aligned parallel to the roof where they are. If they are
> only approximately so, the mount can (has!) separate under some conditions of
> acceleration, relative wind and side-to-side motion. In addition, trees are a
> hazard; I lost a side window once when I used a guy; a branch snuck in behind the
> guy and pivoted the mount off and into the window. $300! Ouch!

>
You betchum ouch!!
>
That's the big glitch. Ideally the magnets would be mounted to the frame via spherical swivels so that they find their own "homes" on the contoured surface. I think I just had a brainfart on how to do that, bolt the magnets to the frame via spherical bearing rod ends. Yessss . !
>
Fact is that I'm headed off in a somewhat different direction. My close-in goal is to mag-mount one of the 20 foot collapsible composite fishing poles per the w6mma St. Louis Vertical on the roof for stationary portable ops vs. undeway mobile ops. Go find a big, quiet hill out in the boonies, get the pole outta the trunk and push it up, drape a few radials around, etc. In this scenario I wouldn't need a flock of magnets. But the problem is the same, where the heck are the magnets?

>
>
> Regards,
>
> Cortland
>

>
w3rv

2240. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29609-3A100797-18@storefull-117.iap.bryant.webtv.net>
Source record: 176598

Ed Hare, W1RFI wrote:
"It applies (the largest dinension in the antenna system, including its height over ground) equally to great antenna heights."

How high, Ed? Half the distance to the moon?

I`ve found a 1982 edition of the ARRL Antenna Book. On page 15-24: "The presence of the ground further complicates the range selection, not in the selection of S but in the exact location of the source and test antennas above earth."

On page 15-25, a sample calculation of;
Smin = 2D^2 / lambda
is made for a 7-ft dish at 1296 MHz (lambda = 0.75 foot). Smin = 130 feet.
The distance above ground is not added to the 7-ft dish dianeter. It is not involved in the example at all.

Bet regards, Richard Harrison, KB5WZI

2241. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <hKUP5.98$g5.456323@news.ntplx.net>
Source record: 176599

Richard Harrison <richardharrison@webtv.net> wrote:

> "It applies (the largest dinension in the antenna system, including its
> height over ground) equally to great antenna heights."

> How high, Ed? Half the distance to the moon?

At half the distance to the moon, the curvature of the earth would be great enough that the antenna would appear to be in free space.

Let me try again here. A real antenna over ground exhibits peaks and nulls. Again, my contention is that to measure that pattern, including the peaks and nulls, one must be in the far field of the antenna system, including the distance between the antenna and its "image antenna. How far from an antenna do you believe one has to be in order to measure the peaks and nulls of the pattern of an antenna over ground?

73,
Ed Hare, W1RFI

2242. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <kMUP5.99$g5.456366@news.ntplx.net>
Source record: 176600

Richard Harrison <richardharrison@webtv.net> wrote:

> Ed Hare, W1RFI wrote:

> "I do not know of any antenna type where the reactive near field would
> be nearly 7 wavelengths away from an antenna."

> I am tired of this discussion, but think I should respond because
> someone may infer you meant the reactive near field extends more than 7
> wavelengths from all antennas from the statement above.

No, I meant that the reactive near field is nowhere near as large as 7
wavelengths from any antenna I can envision.

73,
Ed Hare, W1RFI

2243. Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <8up6p1$3ms$1@nnrp1.deja.com>
Source record: 176601
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Have a one-month-old 2001 Chev Silverado LT that I just don't want to drill holes in, nor do I want to put scratches in the clearcoat with a mag-mount.

Anyone have a favorite way of mounting a dual-band antenna (2M/440), maybe on the bed rails or in a stake pocket?

Thanks in advance for any bright ideas.

73, Hans, K0HB

--
~~~
If you make people think they're thinking, they'll love you;
but if you really make them think, they'll hate you.

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2244. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A101D09.74C7@wt.net>
Source record: 176602

Meng-Po Chen wrote:
>
> OM,
> I know QSO stands for Quasi Sinusoidal Oscillation. My question is
> that when two hams complete a QSO, why is it like a sine wave oscillation?
> Any hints on the techinical details or explanation is cordiallly welcome.
>
> thanks in advance.
>
> 73 Frank , BM2FWY
> mpc@asiaa.sinica.edu.tw

Usually most hams after QSO will SWO. But some only SOP. This was the
idea behind the "frectal throne". MK
--
http://web.wt.net/~nm5k

2245. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A101FB5.E7CEE6C5@ix.netcom.com>
Source record: 176603

Brian Kelly wrote:

> AC6V wrote:
>
> > >
> > > In the context that hams use QSO -- it does NOT mean Quasi Sinusoidal
> > > Oscillation.
> > > QSO as used in communications was taken from the Q-Signal lists of the old
> > > telegraph/wireless radio days.
> > > On 1st July 1913 the Q code became an official international information code,
> > >
> > > updated as changing circumstances demanded to include new codes relating to
> > > such matters as aviation and maritime. Amateur Radio Operators used it also
> > > since
> > > many of them were radio/telegraph operators as well.
> >
> > >
> > Where did the "Z" codes come into play, the military?
> > >
> > w3rv

==========
From the article by Kenneth Brown G0PSW at URL:
http://www.ac6v.com/pagear.html#QZ

Some time later (after 1913) came the Z code, running in parallel with the Q code.
This originated as a company code of Cable and Wireless with
application limited, in the main, to high speeds machine morse
operating at speeds of typically 120wpm. Widely used by many
countries, including Germany, the Q code and Z code continued in use
throughout the war. After the war high-speed morse became less
widely used and was replaced by other forms of traffic communication
such as RTTY and facsimile. The Z code, therefore, gradually went out
of fashion and slowly disappeared. Examples of the Z code include
ZAA you are not observing circuit discipline, ZAN we can receive
absolutely nothing, ZST send slips twice, ZAP acknowledge please
and there were lots of others.

More on Z-Codes and X-Codes at URL:
http://webhome.globalserve.net/rlacroix/

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/

Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

2246. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <URVP5.9695$%%1.629736@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176604

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29609-3A100797-18@storefull-117.iap.bryant.webtv.net...
>
> On page 15-25, a sample calculation of;
> Smin = 2D^2 / lambda
> is made for a 7-ft dish at 1296 MHz (lambda = 0.75 foot). Smin = 130
> feet.
> The distance above ground is not added to the 7-ft dish dianeter. It is
> not involved in the example at all.
>
> Bet regards, Richard Harrison, KB5WZI
>

Hi Richard and Ed:

Hope you guys don't mind my two cents.

Both of you are correct so long as your discussion is kept in the perspective of the example discussed. I think you're comparing apples and oranges.

In Richard's example above, you have a 7 foot dish at 1296 MHz. This antenna would have an elevation beamwidth of approximately 7 degrees. If the antenna has good sidelobe performance, there would be virtually no antenna image in the ground and the antenna's height above ground is not considered in determining the distance to the far-field. In this case, the antenna far-field is approximately 130 feet (171 wavelengths). To measure a reasonable far-field pattern of this antenna you should have a range of at least 130 feet. Even when measuring large aperture antennas on long ranges, its still good to watch out for ground reflections that may exist and many times, diffraction screens are used to make ground effects "invisible" to the measurements.

Now in the case of HF antennas over ground, we go back to Ed's comments. With a Rhombic or horizontal dipole over ground, there will be a ground image as a function of the dielectric constant and conductivity of the earth. If the antenna was on a 70 foot tower, then the "antenna system" dimension would be 140 feet and the approximate far-field would be at a distance of 1194 feet (10m wavelength) which is about 36 wavelengths. Note that in terms of wavelength, this is significantly smaller than the example above at 1296 MHz. That's why HF antenna patterns can be measured on a much smaller physical ranges than high gain microwave antennas. Another factor to consider in all of this is the "strength" of the antenna image in the ground. Typically, at HF frequencies the level of reflected energy may be down as much as 3 dB and there will also be some phase shift. On very poor grounds, the antenna image may be negligible. Still, ground reflections

will impact antenna measurements.

As a general rule of approximations, three fields exist about an antenna as follows:

1) The reactive near field from a distance of 0 to approximately 0.62 * sqrt(D^3 / WL)

2) The radiating near field from 1) to approximately 2 D^2 / WL

3) The far field from 2 D^2 / WL

It is important to understand that these are general approximations.

Steve VE9SRB

2247. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001113125052.15542.00001484@ng-mj1.aol.com>
Source record: 176605

<<Have a one-month-old 2001 Chev Silverado LT that I just don't want to drill holes in, nor do I want to put scratches in the clearcoat with a mag-mount.

Anyone have a favorite way of mounting a dual-band antenna (2M/440), maybe on the bed rails or in a stake pocket?

Thanks in advance for any bright ideas.>>

I know that you don't want to drill holes, but right above the interior light is enough room to mount a drilled thru type mount w/ a 90 Deg. fitting. If you have a console up there, you have more space to move it to the middle of the roof.

THere are stake pocket mounts in QST & the other mags. I'm sure that HRO & AES have them.
I just think that the pattern will be pretty skewed.

Ladder racks might help....
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

2248. Re: Question: buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A102DEB.A2985970@att.net>
Source record: 176606

Interesting comment, Reg . . .

I thought that any ohmic contact between buried radials and the soil was
strictly incidental and played no role in the operation of the radials:
return current collection.

If "connection between wire and soil" is involved in radial operation
and is of importance, why is it that insulated radial wire seems to work
well? Or are such radials sub-par?

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Reg Edwards wrote:
>
> Steve, from where do you get the idea RF currents 'stop' at
> 3 to 4" below the surface ?
>
> It is not that radials greater than 6" deep 'defeat the
> purpose', it is just that there is not much more benefit to
> be obtained by digging deeper.
>
> Compared with wire diameter, 6" is quite deep enough to
> obtain an adequate connection between wire and soil.

2249. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A10328D.225F@wt.net>
Source record: 176607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

K0HB wrote:
>
> Have a one-month-old 2001 Chev Silverado LT that I just don't want to
> drill holes in, nor do I want to put scratches in the clearcoat with a
> mag-mount.
>
> Anyone have a favorite way of mounting a dual-band antenna (2M/440),
> maybe on the bed rails or in a stake pocket?
>
> Thanks in advance for any bright ideas.
>
> 73, Hans, K0HB

I've seen mounts that slide into the stake holes. That might work. MK
--
http://web.wt.net/~nm5k

2250. 2M Groundplane radials touching snow?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Matthew Delaney <delaney@ucs.net>
Message-ID: <t10ctp9cg5kl41@corp.supernews.com>
Source record: 176608

I have a 2M ground plane mounted on my roof (actually hanging off my gutter due to the need for a semi-stealth installation), but the 2 radials that hang over the roof only clear it by an inch or so. Right now it's working very well (very low SWR), but here in the NE US, snow is just around the corner. If I get some snow on the roof and it starts to bury the ends of the radials against the roof, will this have a drastic effect on my SWR? If it will have a major effect, I can raise the antenna somewhat (it's supported through a T shaped assembly of PVC pipes, with the cross part of the T hanging off the gutter). However, if it's not going to be major, I'd rather not raise it anymore, due to the loss of some of the stealthness and the extra weight on the gutter.

Thanks,
Matthew Delaney, N2MDB

2251. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <tnd01t8n46q48b30v9nuad99tiuk9t7baa@4ax.com>
Source record: 176609

On Mon, 13 Nov 2000 10:55:37 -0600, Mark Keith <nm5k@wt.net> wrote:

>Usually most hams after QSO will SWO. But some only SOP.

And if they don't, you're SOL.

73, Bill W7TI

2252. dipole help needed !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Brian Hemmis <K3USC@att.net>
Message-ID: <B635A77D.19E0C%K3USC@att.net>
Source record: 176610

I'm rebuilding my all band dipole- cut for 80m , fed with balanced line.
I've heard of some people making longer dipoles- say 180'- any advantage to
this ? I have the room for this but not enough for a 160m dipole. Any
expert opinions out there ? Thanks Brian K3USC

2253. AR-33 & AR-40 Rotators- Need info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Mike Wood <mw-ngrp@signalgrp.com>
Message-ID: <3A10429B.647AB5AC@signalgrp.com>
Source record: 176611

I am repairing 2 rotators- an AR-33 & AR-40 CDE rotator. The AR-33 rotator has the Autorotator control box with 5 adjustable preset headings selectable by front panel pushbuttons. The AR-40 has a front panel knob which is rotated to select the desired heading. Both are the 5 wire type without a solenoid brake.

I would appreciate someone Faxing or mailing me a copy of the shematic diagrams for either or both of these rotators. I will reimburse you for any costs involved.

Many thanks...
--
Mike Wood, K1MW
Wake Forest, NC
Send your FAX to 919-556-0115
mail to P.O. Box 1979, Wake Forest, NC 27588

2254. Sommer XP708

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Heinz Bolli <heinz.bolli@hbag.ch>
Message-ID: <8upl8ngfs1@bw107zhb.bluewin.ch>
Source record: 176612

I use this Antenne since 6 Months and am very happy with it.

A phenomena makes me some problems. During rainfall (and also snow I think)
I have broadband noise over S9 from 7 to 30Mc.

Did somebody make the same experience and what was the solution for
eliminating this problem?

Thanks for all answers, 73

Heinz Bolli, HB9KOF
heinz.bolli@hbag.ch

2255. Re: Sommer XP708

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8upm1liij1@iac5.navix.net>
Source record: 176613

An RF choke to ground should dissipate the static charge and make it quieter.

"Heinz Bolli" <heinz.bolli@hbag.ch> wrote in message news:8upl8ngfs1@bw107zhb.bluewin.ch...
> I use this Antenne since 6 Months and am very happy with it.
>
> A phenomena makes me some problems. During rainfall (and also snow I think)
> I have broadband noise over S9 from 7 to 30Mc.
>
> Did somebody make the same experience and what was the solution for
> eliminating this problem?
>
> Thanks for all answers, 73
>
> Heinz Bolli, HB9KOF
> heinz.bolli@hbag.ch
>
>

2256. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Kelly Bersch <kbersch@not-sofast.net>
Message-ID: <qz_P5.4123$EF3.87291@e420r-atl1.usenetserver.com>
Source record: 176614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

How about an on-glass antenna. Not the best but easy to install. I still prefer a good roof mount. :)

73 de AC7EW
Kelly

"K0HB" <K0HB@arrl.org> wrote in message news:8up6p1$3ms$1@nnrp1.deja.com...
Have a one-month-old 2001 Chev Silverado LT that I just don't want to drill holes in, nor do I want to put scratches in the clearcoat with a mag-mount.

Anyone have a favorite way of mounting a dual-band antenna (2M/440), maybe on the bed rails or in a stake pocket?

Thanks in advance for any bright ideas.

2257. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: j1aguiar@aol.com
Message-ID: <20001113181724.04756.00001264@ng-cc1.aol.com>
Source record: 176615

>Subject: Re: Static noise from rain or snow
>From: Brian Kelly kelly@dvol.com
>Date: 11/11/00 6:28 PM Eastern Standard Time
>Message-id: <3A0DE411.65C9B20E@dvol.com>
>
>
>
>Heinz Bolli wrote:
>
>> With my new Sommer XP708-Beam Antenna I have broadband nois up to s9 when
>> raining or at snowfall.
>>
>> Has somebody experience what I can do against it?
>>
>> 73 de Heinz, HB9KOF
>> heinz.bolli@hbag.ch
>
>>
>There's lotsa experience amongst the diehard contesters with precip static.
>One widely used trick is to run a wire receiving antenna all over the inside
>of the house and just keep crankin'. Loop-based antennas like quads do not
>suffer the problem.
>>
>w3rv
>
>
>
Some years ago I had a three element Cubex quad using a Q match, lengh of 72
ohm coax, and had many instances when static charges would build up on the coax
inside the house. So bad it was impossible to get near the coax as these blue
balls of fire would strike out at me. I solved the problem by installing a
gamma match to the driven element " plumbers delight", the driven element was
now at ground dc ground. Jim

2258. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <23043-3A1076D9-30@storefull-115.iap.bryant.webtv.net>
Source record: 176616

Steve, VE9SRB wrote:
"Another factor to consider in all this is the "strength" of the antenna image in the ground."

Thanks, Steve, for an illuminating view.

One way to illustrate the decline in importance of the ground image of an antenna as the antenna`s height increases may be an optical analogy.

I`ve avoided this analogy because I`d rather zero in on an agreement than to enlarge the argument over what the analogy means.

Imagine a mirror. Trim a cardboard sheet to exactly cover the mirror. Keeping the cardboard in the line of sight and parallel to the mirror, remove it until it is an inconspicuous dot in the mirror`s reflection. At that point the reflection and the cardboard are irrelevant to each other.

Something roughly similar happens between an antenna and its reflection in the earth. The analogy is admittedly strained but in a general way it shows what happens with an antenna very far from earth.

Best regards, Richard Harrison, KB5WZI

2259. Re: dipole help needed !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8uq4e8$80r$1@plutonium.btinternet.com>
Source record: 176617

For multi-band working there is no particular length of dipole which is significantly better than another. Don't bother too much about whether it is resonant or not. HEIGHT is a more important matter. The higher the better on the lower HF bands.

If you are unable to erect a full size dipole for 160m then put up the longest you can and turn the ends through a right angle, either sideways or downwards, to increase the overall length.

The only rule of thumb - efficiency falls off rapidly when overall dipole length is less than about 0.3 wavelengths at the the lowest operating frequency. That's about 160 feet on 160m. So your 180 feet should be fine even if you are unable to extend downwards at the ends.

Use 450 ohm ladder line or 600 ohm open wire feeder all the way to the shack if you can manage it. Use a choke-balun at the shack end and you will need a simple tuner. Be prepared to adjust the length of line for occasional coarse tuning purposes.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Brian Hemmis wrote ..
> I'm rebuilding my all band dipole- cut for 80m , fed with balanced line.
> I've heard of some people making longer dipoles- say 180'- any advantage to
> this ? I have the room for this but not enough for a 160m dipole. Any
> expert opinions out there ? Thanks Brian K3USC
>

2260. HELP NEEDED !! CAVITY CANS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:00:00 UTC
From: Lloyd <VE7LWB@rac.ca>
Message-ID: <8A0Q5.63326$Z2.860779@nnrp1.uunet.ca>
Source record: 176618
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

Hi I have a question for all. I am about to build my own 6M {50 ~ 54 Mhz}
cavity
cans, but I need some help big time. The building of the can is not a
problem, however
the size of the coupling loop is ! Does anyone have a 6M or 10M cavity can
that
that they could give me details on size and all that good stuff for the
making of
the loops? Please no, I guess it's this big or stuff like that, but real
facts on size
in one.

2261. grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:11:52 UTC
From: beroset@mindspring.com
Message-ID: <3a0ee1f1.13139633@news.mindspring.com>
Source record: 176569

I'm putting up an inverted V antenna in some trees on my lot and I have questions about grounding. The shack is on the second floor in a room over the garage. I've dug a trench, laid in some PVC conduit and I've got sufficient RG-8 to go down the tree, through the conduit, and back up to the second floor. At the garage, where the wire will be entering, I've driven an 8' copper ground rod.

Q1: when I tie the antenna ground system to the house ground, can I wire it into the ground of a GFCI outlet that's conveniently nearby?

Q2: what kind of lightning arrestors are available for this installation?

Q3: how exactly do I ground the cable? I could strip the coax jacket and solder the copper ground wire to the sheild, but what's recommended as far as weatherproofing? Would it be better to have a connector?

Thanks for any help with this.

Ed
AF4YN

2262. Re: Mounting R7 on Fire Escape

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:19:54 UTC
From: ibg1@hotmail.com
Message-ID: <8unc36mdb1@nnrp1.deja.com>
Source record: 176571

Bob,

Thanks much for the Reply.

A couple of things..

No one uses the fire escape. I suppose it is only there for its sole purpose. No one even puts any plants out there.. since it doesn't get enough sun. As far as getting a shock from the antenna goes.. I am not home all the time.. and when I am I can look right over my shoulder and see the fire escape. The reason I asked for a design was because I want to extend the antenna beyond the fire escape so that none of the problems you mentioned below would occur... I've been to a machine shop, but they need exact specs and since I've never seen or done something like this before, I wanted to see if someone had any ideas.

Tnx agn

73's KF2MM

In article <X90OOhaT7pJKiVAAgIOwVBqYFOTW@4ax.com>,
Bob Miller <bamiller@texas.net> wrote:
> ibg1@hotmail.com wrote:
>
> >Hello,
> >
> >Has anyone come up with a good design for mounting an R7 or any type
of
> >antenna with rather large counter poises on a fire escape? Ideally it
> >would be nice to put it on the roof, but unfortunately landlords are
> >not always cooperative. I would like to be able to extend it a good
> >amount beyond the fireescape so as to not interfere with people, if
> >there is a fire. It would also be nice to be able to pivot or swivel
> >the extension to be able to mount & work on the antenna.
> >
> >If anyone has any ideas, I'd be great to hear them
> >
> >Thanks es 73's de
> >KF2MM, Ian
>
> I'm not sure how many people use your fire escape, other than on an
> emergency basis, but anyone touching your antenna could get a rather
> nasty shock, and that could be dangerous on a fire escape, where a
> fall could be deadly.
>
> Also, a metal fire escape, with all of its odd-length metal pieces,

> could play havoc with an R7's radiation pattern, or even produce
> harmonics.
>
> You might look at a B&W AP-10, a window-mounted whip. I had good luck
> with one in a 3rd story apartment, many a moon ago.
>
> Bob
> k5qwg
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2263. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:30:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0F35A6.BFD8142A@bellatlantic.net>
Source record: 176570

Yeah - but that's only if you're running Windows...

'Doc wrote:

> CAM wrote:
> >
> > Roger Leone wrote:
> > > Your tuner should respond only to the differential mode signals while the
> > > common mode signals cancel out.
> >
> > What cancels the common-mode signals? Balun? Link coupling?
> > --
>
> That's easy! It falls through the little 'windows' in the
> ladder-line before it ever reaches the station. It's called
> the "Gates" effect...
> 'Doc

2264. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 00:35:22 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <eHGP5.415800$i5.7102702@news1.frmt1.sfba.home.com>
Source record: 176572

Thank God I am an atheist!

Mike Camp ki7fq
El Cerrito CA

"Fred Hambrecht" <Fred@w4jle.com> wrote in message
news:8umvddbvl1@iac5.navix.net...
> I guess it depends on what is is... Amazing the convoluted logic it takes
to
> make one appear they are abiding by the rules.
>
> One wonders if God parses his laws as finely as those who speak for him.
>
snipppp.....

2265. Request Suggestions for "Portable 10 M Base Station Antenna"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 01:25:37 UTC
From: Kevin Fontes <fontesk@earthlink.net>
Message-ID: <lqHP5.13043$Gd7.645090@newsread2.prod.itd.earthlink.net>
Source record: 176573

Hello All,
I will be spending 2 weeks on a Farm during the christmas season. Can somesone please give me a recommendation for a simple base station antenna that I can use for this short two week period? Simple and low cost if possible.

Thanks in advance,
73
Kevin, KI0EB

2266. Re: Request Suggestions for "Portable 10 M Base Station Antenna"

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 02:13:03 UTC
From: k1bqt@aol.com
Message-ID: <20001112211303.12952.00001446@ng-da1.aol.com>
Source record: 176574

>Simple and low cost if possible.<

Get some RG-58, some wire, and make a simple dipole. Hang it from the barn roof or a tree and make a sloper or an inverted "V". Should match to your rig without a tuner and work great! With conditions the way they are right now, that extra 3-5 dB you'd get with a beam won't amount to.....well.....a hill of beans.

73

Rick K1BQT

2267. Question: buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 02:51:40 UTC
From: steve4621@aol.com
Message-ID: <20001112215140.27367.00000002@ng-fw1.aol.com>
Source record: 176575

I have erected many antennas and towers. After studing about RF grounds, I found that buring ground radials below 6" ground level defeats the purpose. The RF stops at 3 to 4" of ground depth and dissapates. They will work for lightning protection, but do they really work for RF?

Steve

2268. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 02:53:15 UTC
From: k1bqt@aol.com
Message-ID: <20001112215315.12952.00001456@ng-da1.aol.com>
Source record: 176576

Hi Ed--

Grounding for DC from the second floor is easy, but grounding for RF at 28 MHz is nearly impossible because the wire will be too long in terms of wavelength. I think the best way to keep RF out of the shack is by making sure the outer surface of your antenna feedline is "choked off" against RF currents. If it isn't, any ground wire you install may actually become part of the antenna system!

To prevent what are called "common-mode RF currents" from returning to your shack, make sure you use a balun of some sort at the antenna's feedpoint (ferrite sleeves, coils of coax, or something), and also wrap a few coils of coax at the back of your rig and tape them up. If no RF current can come back down the outside of you feedline, the chassis RF potential on your rig should remain "cold" and you can then connect a wire to ground rods that will act as a DC ground without radiating RF. That's the condition you want to create.

Up here in NH, I live on a sandhill with terrible ground conductivity and I don't even attempt to ground my station for RF. Instead, I choke all my feedlines to create a high impedance condition for RF current return (rather than a low impedance condition through RF grounding). I also disconnect my feedlines and master power when I'm not using the station to avoid problems from thunderstorms or severe snow static. In the past three years, I've lost two Fax machines, a modem, some lightbulbs, and a couple appliances to lightning--but never a radio. If your station isn't connected to anything (including a ground), nothing will happen to it unless the house burns down around it!

73

Rick K1BQT

2269. Re: Mounting R7 on Fire Escape

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 03:24:46 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <IV0POj64o7mtk2i5RJ0t+44B12tb@4ax.com>
Source record: 176577

ibg1@hotmail.com wrote:

>Bob,
>
>Thanks much for the Reply.
>
>A couple of things..
>
>No one uses the fire escape. I suppose it is only there for its sole
>purpose. No one even puts any plants out there.. since it doesn't get
>enough sun. As far as getting a shock from the antenna goes.. I am not
>home all the time.. and when I am I can look right over my shoulder and
>see the fire escape. The reason I asked for a design was because I want
>to extend the antenna beyond the fire escape so that none of the
>problems you mentioned below would occur... I've been to a machine
>shop, but they need exact specs and since I've never seen or done
>something like this before, I wanted to see if someone had any ideas.

Well, if you do make some kind of extension, make sure the darn thing
is sturdy. I used to have an R3, and it took a fairly stiff and heavy
2" pipe to provide a sturdy vertical mount for it. My neighbor had an
R7, and he had a similarly sturdy vertical pipe mount. If you're going
to extend outward from the fire escape, the extension pipe will need
to be bracketed in some kind of triangulation design. The R7 is
heavier than it looks, especially when the wind starts blowing. (I
originally tried putting my R3 on a wooden post, and nearly broke the
thing before I went to the heavy metal pipe.)

Good luck!

Bob
k5qwg
>
>Tnx agn
>
>73's KF2MM
>
>In article <X90OOhaT7pJKiVAAgIOwVBqYFOTW@4ax.com>,
> Bob Miller <bamiller@texas.net> wrote:
>> ibg1@hotmail.com wrote:
>>
>> >Hello,
>> >
>> >Has anyone come up with a good design for mounting an R7 or any type
>of

>> >antenna with rather large counter poises on a fire escape? Ideally it
>> >would be nice to put it on the roof, but unfortunately landlords are
>> >not always cooperative. I would like to be able to extend it a good
>> >amount beyond the fireescape so as to not interfere with people, if
>> >there is a fire. It would also be nice to be able to pivot or swivel
>> >the extension to be able to mount & work on the antenna.
>> >
>> >If anyone has any ideas, I'd be great to hear them
>> >
>> >Thanks es 73's de
>> >KF2MM, Ian
>>
>> I'm not sure how many people use your fire escape, other than on an
>> emergency basis, but anyone touching your antenna could get a rather
>> nasty shock, and that could be dangerous on a fire escape, where a
>> fall could be deadly.
>>
>> Also, a metal fire escape, with all of its odd-length metal pieces,
>> could play havoc with an R7's radiation pattern, or even produce
>> harmonics.
>>
>> You might look at a B&W AP-10, a window-mounted whip. I had good luck
>> with one in a 3rd story apartment, many a moon ago.
>>
>> Bob
>> k5qwg
>> >
>> >
>> >Sent via Deja.com http://www.deja.com/
>> >Before you buy.
>>
>>
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

2270. Re: VHF Duplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 04:01:23 UTC
From: Stephen Verbil <sverbil@usa.net>
Message-ID: <3A0F6792.B3A9ED33@usa.net>
Source record: 176578

...not to mention large (1/2 wave in size for each cavity) - you'll need at least two, probably four to do it right, and they don't take too kindly to getting banged around, or to temperature changes, and they are extremely narrow-banded, not frequency-agile. So forget it....

In the "old days", they were small mobile duplexers available in the VHF range and UHF range. The VHF ones for IMTS telephones were approximately 6 MHz split, I think, and they were rather lossy... the UHF ones (also for IMTS system) were set up for 5 MHZ split, and some hams *are* still using those so they can run full duplex while chatting on their favorite linked systems.

--Stephen Verbil, NA1SV
--
-- "The opinions expressed here do not necessarily represent
the opinions of anyone I'm working with or for."

Keith McQueen wrote:

> They do exist, but probably not in the form that you are expecting. To do
> in-band duplex in the 2m band requires large tuned cavities. This is what
> we use to duplex a receiver and a transmitter to make a 2m repeater. This
> is the only common use in the ham bands. At commercial sites, they are
> occasionally used to duplex multiple transceivers onto a common antenna.
> Unfortunately, to buy these new, they are prohibitively expensive (for
> common use). For example, the 4 cavity duplexer on our club repeater cost
> over $1000!
>
> "Dick Hughes" <rhughes33@cableone.net> wrote in message
> news:tveg0tc1pm9ol6u4v6picoj2bv4ptg0g5d@4ax.com...
> > I have two, VHF radios. One for voice and one for packet cluster. I
> > would like them to be able to share the same 2-meter antenna without
> > manual switching. A 2-meter/2-meter duplexer would be nice, but I
> > have never seen such an animal. Any ideas?
> >
> > Dick Hughes - W6CCD

2271. Antenna Connector Quality

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 04:06:31 UTC
From: Brew99 <bruce-icq@home.com>
Message-ID: <bNJP5.5682$3j.2986099@news1.gvcl1.bc.home.com>
Source record: 176579

Which manufacture makes the best quality "N" or "UHF" connectors? By best I mean, lowest insertion loss.

Thanks,

2272. veron verenging hunsingo

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 07:05:15 UTC
From: "Richard, PD1AOT" <mddl@home.nl>
Message-ID: <LoMP5.34156$Ae1.418181@zwoll1.home.nl>
Source record: 176580
Cross-posted to: alt.nl.radio.zendamateur.gelicentieerd,nl.radio.amateur,nl.radio.scanners,rec.radio.amateur.antenna

hallo allemaal,

zijn jullie al weer eens op www.qsl.net/pi4hsg geweest ??.

er zijn in de loop van de tijd een aantal foto's bij geplaatst en de opmaak
is wat aangepast.

mvg / 73 Richard PD1AOT

web redacteur VERONvereniging Hunsingo

2273. What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 07:23:11 UTC
From: <>
Message-ID: <8uo4sv$2lav$1@news1.sinica.edu.tw>
Source record: 176581

OM,
I know QSO stands for Quasi Sinusoidal Oscillation. My question is
that when two hams complete a QSO, why is it like a sine wave oscillation?
Any hints on the techinical details or explanation is cordiallly welcome.

thanks in advance.

73 Frank , BM2FWY
mpc@asiaa.sinica.edu.tw

2274. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-13 07:59:43 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A0FAD4C.C8636143@dvol.com>
Source record: 176582

Dick Carroll wrote:

>
>
> Brian Kelley can explain it in Mechanical Engineerese,

>
Thanks a whole bunch Richard, I intentionally stayed away from this thread because I knew half the denizens of this NG would quite properly and predictably point the guy toward the Rohn tower installation specifications and requirements so I didn't add to the din. But since you mentioned it . .
>

> but I know
> that what happened is that the buffeting winds caused the tower to whip
> back and forth, and with the heavy ice load, a strong wind gust caught
> it leaning the wrong way, and with the added ice load it overpowered the
> lower part of the tower's mechanical strength to withstand it all, and
> over it came.

>
Cometh another short-form lecture on applied mechanics, the basic field spanning several engineering disciplines which deals with the behavior of structures under load.
>
The deal goes something like this: An unguyed tower sticking up out of the ground is a simple "cantilever beam" as are are the wings of an F-16. All beams will fail when loaded to a point which exceeds the material strength. In the case of low carbon steel which is what Rohn uses the failure stress ("yield stress") is around 30,000 Lbs. per square inch. A one inch square steel bar pulled like a length of rope is on the edge of failure when the load goes up to 30,000 Lbs. Failures can occur due to either compression (column collapse) or tension (break rope). Tower legs usually fail first as columns vs. tension failures. Which is why when you examine a failed tower you usually see one leg really crumpled and the other two legs just bent over. The crumpled leg should be on the downwind side of the tower which was in compression when it crapped out.
>
For simplification visualize a 10 ft. length of pipe poking up out of a concrete base rather than a complex structure like a tower. Pull horizontally (wind load on the antennas) on the top of the pipe with a force of 200 Lbs. If you multiply the wind load by the length of pipe you get a quantity called the "bending moment", in this case 200 x 10 = a 2,000 ft-lb bending moment. The bending moment in a simple cantiliver beam varies from zero at the top to it's maximum value at the point where it enters the concrete.
>

Whether or not a 2,000 ft-lb bending moment is enough to fail the pipe obviously depends on the geometry of the pipe. Common sense indicates that a 10" diameter pipe with a 1" thick wall will not fail but a 1/2" diameter pipe with a 1/16" wall will be history. Thus all beams have what is called the "cross section moment of inertia" ("I"), the number which defines the effect of the physical geometry of the beam. For common structural shapes like standard pipe "I'" can be looked up in published tables which makes checking pipe antenna masts a fairly simple process. For more complex structures like tower sections with three legs and cross bracing ya got a real rat's nest of calculations to deal with.
>
The third factor which enters into the analysis is the orientation of the load with repect to the orientation of the geometry of the beam. A 2x4 for instance will take a much higher load if pulled in one direction than in the other. The number which defines this effect is "c", the distance from the "neutral axis" of the geometry to the "extreme fiber" in inches. In the case of a 3" diameter pipe the neutral axis is simply the axial centerline of the pipe and c=1.50 inches. Once again, determining "c" is another rat's nest when dealing with more complex structures.
>
Roll all these factors together and plug the numbers into a very simple equation s=Mc/I and bingo you'll have the maximum stress in the tower or mast or whatever. Which in the case of a tower sticking up out of a concrete base always occurs at the surface of the concrete. If the result is anywhere near 30,000 Lb. per square inch for a steel structure you better go back to the drawing board and either get rid of some load or beef up the cross section geometry.
>
Reality is much more complex than my simplistic rant on the subject but the basic relationships are there. There's a whole stack of additional factors which also need to be cranked into a realistic analysis. A secondary load called the "shear stress", the non-uniform but distributed wind load on the tower itself in addition to the point loads created by the antennas and mast, stress concentration factors, corrosion allowances, the design safety factor, determination of the failure mode, tension or compression buckling of one of the legs, etc.
>
Which in a nutshell is why you put towers up by the book and don't get stupid and try to outguess the pros who designed the tower by pushing their published loading and installation envelopes.
>
>

> Note that the 4x4x4ft concrete base didn't budge.

>
There are two kinds of bases. The base for a guyed tower is there simply to keep the tower from sinking into the ground because the guys take the horizontal loads, the base of the tower is loaded in compression, not in bending except in specific odd circumstances like not enough guying. It might be noted that the guys only take out the horizontal load on the tower. They *add* vertical load to the tower. Trig 101. Therefore the vertical load on the base and the tower legs is the dead weight of the whole shebang *plus* the downward component of the wind load on the guys. Given enough wind you can collapse a guyed tower and/or the base straight

into the ground. Which is why once again you pay attention to the book and don't anchor the guys too close to the tower.
>
In the case of a freestander the primary function of the (much larger) base is to act as a sort of counterweight which balances out the wind load at the tipover pivot point. Gets into soil mechanics, etc. In all cases more concrete deeper is always better.
>

>
> While such weather events are rare in this part of the world, I am
> lucky that it wasn't situated where it could come through the middle of
> the roof - mine or someone else's. No more freestanding rigs for me.

>
You got bit too hard. Lotsa freestanders out there which can take the loads. Lookit all the freestanding cell phone poles. Ya just don't push the numbers.
>

>
> And none situated where it could possibly come down on property
> belonging to others. The present version is located alone in the middle
> of a 150x150ft lot. If it should succumb to one of Mom's whims at least
> it misses everything but the earth.

>
AMEN.
>
Hey, Dick - Put another set of guys on that tower willya?

>
>
> Dick

>
w3rv

2275. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001114171418.15461.00001550@ng-mj1.aol.com>
Source record: 176419

>Someone once said to me, "Never argue with an idiot, they drag you down
>to their level and then beat you with experience" Phd or not, the guy
>is still an idiot and more to the point he thinks we care about his so
>called intellectual property. You never see Mr Yagi yelling on these
>newsgroups. Grow up and get a life!
>
>Kevin J Wren
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>
>

It would be difficult for Dr. Yagi to 'get a life', for example, as he died
many years ago.

RIP.

Chip N1IR

2276. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8usemqrvv0@208.207.71.134>
Source record: 176420

Brian Kelly wrote:

> I'll tellya how far back I go, I remember when the local gendarmes were on AM just above
> our 160m band with big base-loaded whips.

Lots of the old BC AM radios had that frequency marked at the top of the dial. That was the station-to-car frequency, of course. The CW net operated behind the scenes, handling the interdepartmental traffic both near and far, and lots of relaying took place.
When I hired on to the Missouri Highway Patrol in early '65 to work in a district HQ, we still had all the CW gear in place and functional, although a newly installed Model 28ASR TTY now handled the traffic that had long been handled by CW. The Chief Op fired up the Collins autotune xmtr and tested it ever couple weeks with the state HQ station, which itself still handled lots of CW traffic routinely, since Missouri was a primary relay station for traffic headed both east and west and many other departments had not yet made the transistion to wireline TTY. I was tested on my CW skills as a part of my employment testing but was never assigned where it was in current use.
After a year or so of proving the viability of the wireline TTY circuit, the CW transmitter and its antenna were removed, but we retained the console mounted receivers (two National RCL's) and the receive antennas (dipoles on 50 ft utility poles out back). We still used the receivers to check time signals from WWV. (And on boring late night shifts when things were quiet, some of us were known to tune in a ham CW band to help while away some of the slow hours <g>).
The upright Collins transmitter (can't remember the model number but it ran an 813 tube in the autotuned final) stood tall behind the dispatch console and fed a longwire which came right into the radio room through a insulated feedthrough directly to the top of the transmitter. Outside the radio room, the longwire sloped up to an attach point on the side of the 350 ft freestanding tower.
The HQ station in the state capitol ran two large Wilcox transmitters which used 750TH tubes in the finals and used several variations of Hammarlund receivers with dipole antennas. I was a part of the crew that removed all the CW equipment and antennas from that station in 1976. At the time it never occured to me to note how the old CW net came to a close, who was the last to use CW, and all that. Now I wish I had payed more attention.

Dick

2277. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <3A11BCB2.60F3F8A0@bigfoot.com>
Source record: 176421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Jerry Oxendine wrote:
>
> What about getting one of those stainless tool boxes for right behind
> the cab? There you could drill holes to your heart's content, the ant-
> enna would be right in the center, and when you trade, just remove the
> box for the new truck.

The boxes require drilling four holes in the pickup.
--
http://www.mindspring.com/~w6rca

2278. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14997-3A11BA56-3@storefull-118.iap.bryant.webtv.net>
Source record: 176422

Ed Hare, W1RFI wrote:
"Suffice it to say that at great distance, the signal reflected off a mirror is at the same level as the light bulb and the level of the signal reflected off the mirror does not appear less bright than the bulb if the distance between the bulb and the mirror is changed, as long as the observation point is >> the distance between the bulb and the mirror."

Approximately true if the bulb is close to the mirror.

It`s true that the energy reflected from a perfect reflection point is the same energy that strikes the point. There is no loss.

But, when the source is far away from the reflection point, the image in the reflector is small. Little energy arrives at a reflector to be reflected. The combined energies from the radiator and reflector are mainly those of the radiator.

Something different happens when the reflector is at great distance from the radiator. The paths from the direct and reflected rays can be about the same length as happens at the grazing point on a microwave path. Depending on phasing, the two rays can combine to produce as much as a 6 db gain or a complete cancellation. The reflection is weak, but the direct ray is just as weak.

When the reflection point is close to the radiator but not close enough for the reflection to be nearly as strong as the direct ray, the combination of the two sources won`t be so dramatic. Nearly all the energy will come from the direct ray.

I just tried an experiment with a flashlight and a mirror which was inconclusive. The light reflected from the mirror was stronger with the flashlight closer to the mirror, but the total pathlength was changing considerably. The wavelength is very short indeed.

Best regards, Richard Harrison, KB5WZI

2279. Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: plmills@attglobal.net
Message-ID: <3A11C2D3.A8A62890@attglobal.net>
Source record: 176423
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hello to all,

First let me say that up until now I've been a happy camper
using Cushcraft products. However, I've just learned something
that may be of interest to anyone considering purchasing a
new Cushcraft antenna.

I recently bought an R-8 vertical. It was just damaged by
lightning and I e-mailed Cushcraft tech support regarding
parts availability....the answer was 2 sentences that suggested
I buy a new antenna and try to collect on insurance. Needless
to say, I was not happy with that so I wrote a letter to the
Cushcraft manager of amateur products. This gentleman was kind
enough to telephone me today. Essentially, the conversation
focused on the fact that the parts I needed would be so expensive
as to make buying a new antenna more practical. However, one
interesting fact did come to light. Parts for the R-8 vertical
had not been "priced" yet and were thus unavailable. Further,
Cushcraft does not "price" replacement parts until the product
has been out for 9 to 12 months. I'd suggest you keep this
in mind....if you drop your new R-8 or new whatever, you may
not be able to get parts for it for up to a year!!

thanks & 73,
Phil
W5BVB

2280. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001114182338.08948.00000452@ng-fs1.aol.com>
Source record: 176424

>Pete Holden wrote:
>>
>> I have a 20 meter, 1/4 wave ground plane mounted on my roof with 4 radials
>> sloping down from it's base. The SWR ranges at less than 1.4:1.
>>
>> Should I use a balun? Should it be a 1:1 or a 4:1? Would a balun in this
>> situation improve antenna performance? Would it reduce TVI and RFI? I'm
>> concerned about this now as I'm thinking of getting a linear and want my
>> antenna to be as good as it can get.
>>
>> Thanks, Pete KA0TZK

With elevated verticals it helps to use the balun. You should use 1:1 (50:50 ohm) for vertical with few sloping radials (around 45 deg), which typically produced 50 ohm impedance. It prevents radiation from coax and reduces TVI caused proximity of RF fields from the coax.
If you have current meter, you could see the difference in suppressing the radiation from the coax. It helps tuning and the pattern too.

Yuri, K3BU

2281. Looking for a icom

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Neal <nealj@accesstoledo.com>
Message-ID: <t13kf94hv40e2b@corp.supernews.com>
Source record: 176425

WTB
ICOM IC-251A all mode transceiver in mint condition with manual and mic.
Must live within 100 miles of Toledo,Ohio for pickup.
Please state condition and price on first e-mail.
Neal
nealj@accesstoledo.com

2282. Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A11B7C5.57BF@bellsouth.net>
Source record: 176426

Hello Group,

>From time to time I have had inquiries about the Hf screwdrivers that I build. I now have pics that I can attach and send via email. If anyone is looking at purchasing a screwdriver antenna, drop me an email and I will send you some pic files for your perusal. Don't, however, fllod me with "curiosity" mail. If you are, indeed interested in purchasing a screwdriver antenna, then I would like you to take a look. Mine are larger, heavier-duty, and uses teflon coil forms and #14 wire for high power. I also make a "Super" 3" dia. one for those who want the Q of a bugcatcher and the convenience of a screwdriver. Prices are lower than most of the competition, and you get more for your money.

TNX,

Jerry
K4KWH

2283. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A11D6B0.9CA7E77F@uci.edu>
Source record: 176427

Richard Harrison wrote:
> I just tried an experiment with a flashlight and a mirror which was
> inconclusive. The light reflected from the mirror was stronger with the
> flashlight closer to the mirror, but the total pathlength was changing
> considerably.

Right. I'll bet the flashlight would be even brighter were you to hold
it right up to your eye. Prolly a one over r squared kinda deal.

ac6xg

2284. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A11DF62.1060@bellsouth.net>
Source record: 176428
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Yup!

Sounds familiar! I had the same trouble with Cushcraft when calling
about repair parts. The guy was surly, not at all helpful, and acted
as if I were an idiot. I just slammed the phone down and never contact-
Cushcraft again!

Jerry
K4KWH

plmills@attglobal.net wrote:
>
> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2285. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8usns2$5f0$1@nntp9.atl.mindspring.net>
Source record: 176429

<primecase@my-deja.com> wrote in message news:8us4ve$i7m$1@nnrp1.deja.com...
> Someone once said to me, "Never argue with an idiot, they drag you down
> to their level and then beat you with experience" Phd or not, the guy
> is still an idiot and more to the point he thinks we care about his so
> called intellectual property. You never see Mr Yagi yelling on these
> newsgroups. Grow up and get a life!
>
> Kevin J Wren
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Come on dude. He has been quiet and not causing any trouble and everyone
else here has left him alone because of it. Welcome to the troll filter for
TRYING to stir things up.

2286. Re: HELP NEEDED !! CAVITY CANS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jim <jspaz@i-55.com>
Message-ID: <3A11E34D.36E4DD2E@i-55.com>
Source record: 176430
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

There have been several magazine articles on just what you are asking. How to build your own 6 meter cavities. Try doing a search on the web and try to locate them. I have the info around here someplace. Only problem is my file system leaves much to be desired.

You might do better in trying to locate some of the paging service companies where you live. Many of them have taken their low band systems off the air. As such they should have a number of the large low band (5 to 6 foot long) cavities around someplace.

Jim

Lloyd wrote:

> Hi I have a question for all. I am about to build my own 6M {50 ~ 54 Mhz}
> cavity
> cans, but I need some help big time. The building of the can is not a
> problem, however
> the size of the coupling loop is ! Does anyone have a 6M or 10M cavity can
> that
> that they could give me details on size and all that good stuff for the
> making of
> the loops? Please no, I guess it's this big or stuff like that, but real
> facts on size
> in one.

2287. Re: One More Question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jim <jspaz@i-55.com>
Message-ID: <3A11E4A0.C9A56669@i-55.com>
Source record: 176431
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

Try TX - RX Systems. They make some nice cans. Lsat number I had for them
was 716-549-4700. They should be in Angola, NY.

Wacom is another that make good cans on the ham bands. Don't have their info
in front of me.

Jim

Lloyd wrote:

> Does anyone know of any company or companies that make cavity cans for
> ham bands? Most of all cavity cans for 6M {50~54Mhz} and 10M {29~30Mhz}??
>
> .

2288. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: greg <greg@valkyrie.net>
Message-ID: <3a11e559$1_2@athena.netset.com>
Source record: 176432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

i couldent get parts for a a3s. they wouldent call back on there phone game
and wouldent email/phone me back on there website game so i now own a brand
new force12 :)

N8TDL

< Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2289. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8usosk$3jb$1@nntp9.atl.mindspring.net>
Source record: 176433

"Mike Zerbe" <zerbe@pioneer-net.com> wrote in message
news:ewiQ5.22$%Z2.1493@sea-read.news.verio.net...
> Q signs are just abbreviated ways to say things to make conversations take
> up less air time. Amateurs use Q signs and the military uses Z signs first
> and then Q if no Z sign is available. The military rule is to never use
> plain language when a Z or Q sign can be used.

When did they start this? I was a radio jockey (31V/31K)in the Army for 3
(87 - 90) years and never heard of Q or Z signs untill I got into ham. I
was operating in Batallion and Division TOCs as well as with field units and
retrans stations. We often used Lima Charlie (loud and clear) to respond to
signal strength queries and sometimes this was perverted into Lickin'
Chicken but that was the extent of any abreviations and no form of the Q or
Z or any other signs was used. In fact the rule was to always use plain
english and be as understandable as possible. If anything needed to be sent
"non standard" to help hide its meaning it was to be encoded using the
proper encryption and authentication for the day. No exceptions. Other
than that the encryption hardware took care of security.

So......I dont think there is
> a meaning for QSO other than a quick way to say "Can you communicate with
> ______ direct?" or to designated a direct communication. But, I'm often
> wrong. Mike-KA7CGI
>
> <mcduffie.spamcop@nospam.actcom.net> wrote in message
> news:27tv0t0tfo4dpc2evk8jhg9vm3dnvd4ec7@4ax.com...
> >
>
>

2290. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "wayne N3TNS"
Message-ID: <3A11E743.F301C65E@attglobal.net>
Source record: 176434

That was a brilliant and profound post. I like the way you came up with it out of the clear blue sky.... at the least, extremely un-original, and more to the point, deliberately hurtful, rude, and looking to pick a fight, so back off!

primecase@my-deja.com wrote:

> Someone once said to me, "Never argue with an idiot, they drag you down
> to their level and then beat you with experience" Phd or not, the guy
> is still an idiot and more to the point he thinks we care about his so
> called intellectual property. You never see Mr Yagi yelling on these
> newsgroups. Grow up and get a life!
>
> Kevin J Wren
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

email wgvideo at attglobal dot net

2291. Antenna Tuner for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Boyd <boyd@humboldt1.com>
Message-ID: <9IlQ5.16$gp_.1573042@news.randori.com>
Source record: 176435
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Have a Yaesu FC-901 500 watt Antenna Tuner - Watt-Meter
for sale. Comes with original book. 160 through 10 meters.
Tunes coax or open wire, 4 inputs with bypass. Watt meter
25 watt, 250 watt & 500 watt. Duo SWR Meter.
8 1/4" wide X 6" tall X 12 1/2" deep.
JPG Picture on request.

$125.00 shipped US

Reply to: boyd@humboldt1.com

Boyd W6DSB

2292. Antenna Analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Harold H. Fink" <hhfink@bellsouth.net>
Message-ID: <3A11F128.5C5F623D@bellsouth.net>
Source record: 176436

Is anyone aware of an objective comparison of the MFJ 259B analyzer
and the Autek Research VA1 analyzer? Anyone ever operate them on
a side-by-side basis?

Harold
WA4KBB

2293. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7438-3A11F54B-101@storefull-112.iap.bryant.webtv.net>
Source record: 176437

Jim, AC6XG wrote:
"I`ll bet the flashlight would be even brighter were you to hold it
right up to your eye."

I`d bet with you on that. Every experiment with a flashlight involves
the very far field.

The behavior of an antenna and the ground under it is declared to be for
practical purposes exactly the same as it would be in cooperation
between an antenna and its image in the ground, with the ground removed.

Coupling between parallel antennas decreases as the antennas are moved
apart.

Parallel elements used as parasitic directors or reflectors in a
2-element beam are usually spaced no more than 1/4-wavelength from the
driven element so that they receive enough energy to be effective. When
a director`s spacing is increased from 0.2 wavelength to 0.4 wavelength,
the power gain drops by 3 db or more. Doubling the separation halves the
power gain.

raising the horizontal dipole above ground must induce less current in
the ground and thus reduce lobe amplitude and null depth, just as
increased element separation would in a parasitic array which had no
affiliation with the ground.

Best regards, Richard Harrison, KB5WZI

2294. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A11F887.25C25B3D@IEEE.org>
Source record: 176438

W2WX wrote:
>
> Am looking for lengths and construction/hanging suggestions for a delta loop
> for 75/80 meters. Have no experience with one. Please email a reply. Thanks,
> Steve, W2WX w2wx@aol.com

How about a 75m loop that fits in the space of a G5RV and has a 50 ohm
feedpoint impedance? http://people.delphi.com/cecilmoore/rect80m.htm
--
http://www.mindspring.com/~w6rca

2295. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7438-3A11FB74-104@storefull-112.iap.bryant.webtv.net>
Source record: 176439

Jim Bromley, K7JEB wrote:
"What the hell was this thread originally about anyway?"

Actually, a questioner asked the dimensions for a 10-meter rhombic. I was foolish enough to supply the dimensions.

Someone else opined that the size was excessive, how could he fit it on his lot? I replied to scale it down by a factor of 100, but to leave it up at 60 feet to get the free space gain of 11 dbd. Roy then opined that was wrong. The free space gain was not to be expected.

Best regards, Richard Harrison, KB5WZI

2296. Kansas City Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Richard Rosenthall <rosenthallr@claven.fanshawec.on.ca>
Message-ID: <8ut1nu$ni7$1@panther.uwo.ca>
Source record: 176440

Can anyone give me some technical information on the Kansas City Dipole ant.

Tnx. Richard VE3MG

2297. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29763-3A120982-28@storefull-111.iap.bryant.webtv.net>
Source record: 176441

I know there were too many words in my last posting. I wrote:
"Doubling the separation halves the power gain." Delete the word "gain".
We don`t exactly know what the power gain is but we do know it takes a 3
db hit.

Bet regards, Richard Harrison, KB5WZI

2298. Antenna Tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: WE0H <mikereid1@uswest.net>
Message-ID: <SVoQ5.2346$y24.394488@news.uswest.net>
Source record: 176442

Is the MFJ 969 tuner a good tuner? How about the Yaesu FC 901?
Thanks, Mike.

--
Mike Reid
WE0H
mikereid1@qwest.net

2299. Re: Antenna Tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <jZpQ5.202$594.57836@nntp2.onemain.com>
Source record: 176443

WE0H <mikereid1@uswest.net> wrote in message
news:SVoQ5.2346$y24.394488@news.uswest.net...
> Is the MFJ 969 tuner a good tuner? How about the Yaesu FC 901?
> Thanks, Mike.
>

I have had pretty good luck with my 969 tuner.....for what
it's worth.

Pat WB7FFI

2300. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <Sy4LpLAP5bE6EwgC@ifwtech.demon.co.uk>
Source record: 176444

David Ackrill wrote:
>
>As soon as I get chance, I'm going to get another analyser, probably the
>MFJ259B, but maybe this CIA-HF, if they are sold in the UK.....
>

Dave, please e-mail me from your real address.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2301. Re: how close can I stack my 70cm beam above my 2m and my 2m above my 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <RCHLVQAw8bE6EwCT@ifwtech.demon.co.uk>
Source record: 176445

N1RZ wrote:
>I'm trying to locate some data on how close my yagi's can be placed next to
>eachother without greatly effecting the others on the mast?
>
>I have a:
>
>5 ele 6m beam with about a 12' boom.
>a Long Boom K1FO 2m yagi (12 ele I think)
>a Long Boom K1FO 70cm yagi (22 ele?)
>
>Anyway...I'm just trying to find a guideline for how close they can be on
>the vertical mast....they will all be mounted Horizontally....on a Vertical
>mast.
>
>I was considering adding a second 70cm and phasing them together....and
>wondering how I should configure them all to get this done...I'm not sure I
>have enough mast currently to do this.
>
>What are some thoughts on distances from each yagi to the next....(without
>the phased extra 70cm beam)?
>
>The 6m will be on the bottom then the 2m and then the 70cm. I was thinking
>about having it go like 6m, 70cm (lower phased), 2m, 70cm (upper phased)
>
>What do you folks think....maybe you can point me to some good sources on
>this as well....I've been out of the hobby about 6 years, and most of this
>has left my brain....(ooppps).

There's information on my web site... hey, you're already there ahead of
me!

It doesn't specifically mention your proposal about putting the 2m yagi
between two 70cm beams, but I think you'll now see it is a bad idea.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2302. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <qly1MZAmFcE6EwW0@ifwtech.demon.co.uk>
Source record: 176446

'Doc wrote:
>
>
>Pete Holden wrote:
>>
>> I have a 20 meter, 1/4 wave ground plane mounted on my roof with 4 radials
>> sloping down from it's base. The SWR ranges at less than 1.4:1.
>>
>> Should I use a balun? Should it be a 1:1 or a 4:1? Would a balun in this
>> situation improve antenna performance? Would it reduce TVI and RFI? I'm
>> concerned about this now as I'm thinking of getting a linear and want my
>> antenna to be as good as it can get.
>>
>> Thanks, Pete KA0TZK
>
>Pete,
>1. You don't, and shouldn't use a balun.
>2. Baluns do not stop RFI/TVI.
> 'Doc

1. You don't need a balun, strictly speaking, because both sides
(antenna and coax) are unbalanced. However, you *do* need a feedline
choke to keep surface currents from flowing onto the coax and down into
the shack. The type of antenna you're using is one of the worst for that
problem.

Exactly the same feedline choke could also be used as a 1:1 "current
balun" in a balanced/unbalanced transition. It can be as simple as a
flat coil of the coax that you're using already. Details are in the ARRL
Antenna Handbook and probably the main Handbook too.

2. I have no idea why Doc says that baluns do not stop RFI/TVI.
Thousands of people have proved that they do.

If the RFI/TVI wasn't going to happen anyway, a feedline choke can still
be useful in reducing RF noise pickup. At the very least, you'll have
the satisfaction of knowing that your feedline isn't behaving as part of
your antenna.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2303. Re: One More Question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Alan Hackett <hacketta@iinet.net.au>
Message-ID: <qe821t0q3t59707l50rnrha9db72i10rqt@4ax.com>
Source record: 176536
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

On Mon, 13 Nov 2000 21:01:43 -0800, "Lloyd" <VE7LWB@rac.ca> wrote:

>Does anyone know of any company or companies that make cavity cans for
>ham bands? Most of all cavity cans for 6M {50~54Mhz} and 10M {29~30Mhz}??

Try TxRx Systems

http://www.txrx.com

Regards
Alan
++
Jenal Communications
Manufacturers and Suppliers of HF Selcall
P O Box 1108, Morley, WA, 6943
Tel: +61 8 9370 5533 Fax +61 8 9370 5106
Web Site: http://jenal.com
e-mail: alan@jenal.com
++

2304. Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a112440$1_2@news2.vip.uk.com>
Source record: 176537

I'm spending some time staying in hotels, and have started to take some Amateur gear away with me.

This week I've come up against a few problems though.

I'm in a ground floor room in a hotel in the middle of London where, presumably for security reasons, the window wont open. The window is also double glazed, so I cant even use the old trick of a couple of squares of tin foil each side of the glass as a way of capacitively coupling a wire through the window.

I've looked at trying to work a wire through between the window and the frame (although the window is locked, and there's no key issued to me to open it) but its a modern, double glazed unit with a tight seal. Great for avoiding drafts, and so that the air-conditioning works, but not for getting any wire through.

There are no other holes available from within the room to the outside world either. There may well be ventilation bricks, but not available within the room, as I say.

I've also tried using small verticals inside the room, with very poor results, not surprisingly, and a random wire across the room loaded via an Antenna System Tuning Unit (ASTU), again with poor results. Even on receive these did not perform very well last night.

I suppose that I could ask for the window to be opened for me but, although I have nothing to hide, obviously this is going to need a fairly long and involved explanation of Amateur Radio, antennas and why they need to be run outside and as high as possible.....

I could always give up on this week, and hope that I get a none ground floor room with a window that opens next week. HI!

Oh, and sitting out in the car is out of the question as well, it's getting colder at nights, and I really *don't* want to be sat in the car in the middle of London at night. Especially as my preferred mode of operation is CW. I can quite see why people give strange looks to people using a Morse code key in a car. Fortunately, though, I do use an Iambic Key and not a 'pump handle'. ;-)

Thanks - Dave (G0DJA)
Please reply to the group, as I try to avoid letting the Spammers get easy access to my email address, not always with much success....

2305. Re: Cushcraft R8 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Richard Arnold <k8rja@flashcom.net>
Message-ID: <t12aj1gklg6rfa@corp.supernews.com>
Source record: 176538

Sheet metal screws (assuming stainless) won't make any difference in performance, but why would you do it? The clamps supply sufficient pressure to keep tubes secure and if you want to retune or disassemble the antenna, the burrs caused by the screws might make it very difficult. If you are having problems with the antenna and think the screws will solve it, think again. I had an R 8000 which after a mind numbing season of problems, fixed it by cutting it up, throwing away the traps and assembled a 20 meter monopole with the pieces. Good luck.

--
Dick
k8rja@flashcom.net
"trout" <trout@cityusa.net> wrote in message
news:i3a01t812qu288tnvebje2s81h739im8u7@4ax.com...
>
>
>
> The R8 has stainless straps holding together different
> parts of this antenna. Would drilling the tubes and using
> small sheet metal screws in addition to the straps cause
> performance problems ???
>
>
>
>
>
>

2306. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001114071201.21824.00000168@ng-fm1.aol.com>
Source record: 176539

Hi Ed--

The only thing you missed is the problem of going from an unbalanced line to a balanced antenna. The outer surface of the coax will "think" it is a third wire connected in parallel with one side of the dipole (has little to do with matching, wire angle, or antenna pattern). The outer surface of the shield is just a big fat added wire connected directly in parallel with the antenna leg. If you're lucky and it's electrical length happens to present a high impedance compared to the (approximately) 25-ohm impedance presented by the resonant leg, you many never notice a problem--it won't "rob" much power and carry it back down to your shack. If you're not lucky, then it will give you some "in your face" RF problems in the shack!

A RF choke or balun at the feedpoint "breaks" this path with a high-impedance barrier against the flow of RF current. If you also add some ferrites or coil some coax near the rig, this adds a second checkpoint against residual RF current that may be picked up by induction.

Hope that helps.

73

Rick K1BQT

2307. Re: Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <T0bQ5.3823$925.142825@news.direcpc.com>
Source record: 176540

Hello Dave:

You didnt mention what frequency you were trying to operate on, so I'll assume that the operating frequency is >28Mhz. Is this is true you may want to construct a folding wire loop antenna that can be easily taped to the pane glass window. The antenna itself will be very directional however depending on the room location, will probably be better than an "Rubber Duck" antenna.

Good luck and 73

2308. Re: Question: buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <V0bQ5.3824$925.142825@news.direcpc.com>
Source record: 176541

GREAT POST! What you've stated in eight paragraphs has been previously written in eight chapters.

73

2309. Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Darryl Lonowski <darryl@chorus.net>
Message-ID: <3A1141C6.A335A89E@chorus.net>
Source record: 176542

Hi All,

Does anyone know a source for Hardened aluminum fence wire in bulk, 1000 feet+?

I have heard of stations using it for LPA's and exremely long, random wires etc?

tnx

Darryl
KB9NAO

2310. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A113D30.2BD92D79@hiwaay.net>
Source record: 176543

Darryl-
One of the best sources for lots of hardware and related stuff is
'Tractor Supply"- despite the name, they are one of the most complete
suppliers for Farm-Ranch goodies I know. They are nationwide, and are at
http://www.tractorsupplyco.com

good luck-Bill-W4BSG

Darryl Lonowski wrote:
>
> Hi All,
>
> Does anyone know a source for Hardened aluminum fence wire in bulk, 1000
> feet+?
>
> I have heard of stations using it for LPA's and exremely long, random
> wires etc?
>
> tnx
>
> Darryl
> KB9NAO

2311. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <3a1151e5.35110098@news.erols.com>
Source record: 176544

On Mon, 13 Nov 2000 10:46:42 -0800, Bill Turner <w7ti@jps.net> wrote:

>On Mon, 13 Nov 2000 10:55:37 -0600, Mark Keith <nm5k@wt.net> wrote:
>
>>Usually most hams after QSO will SWO. But some only SOP.
>--
>And if they don't, you're SOL.
>
>73, Bill W7TI

That's why, for any QSO, whether you end with SWO or SOP,
If you end up SOL you should've done some CYA.

Andrew
KG4JBM

2312. Re: Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a115039_1@news2.vip.uk.com>
Source record: 176545

Paul wrote in message ...

>You didnt mention what frequency you were trying to operate on, so I'll
>assume that the operating frequency is >28Mhz. Is this is true you may want
>to construct a folding wire loop antenna that can be easily taped to the
>pane glass window. The antenna itself will be very directional however
>depending on the room location, will probably be better than an "Rubber
>Duck" antenna.

Thanks for the suggestion Paul.

I should have been more specific about the frequency to be used.

The location of the room, as I say, ground floor, middle of a large city, is not very good for VHF. Though, as an aside, I do have a vertical for 2M/70cm which gets the local repeaters. More than that, it's a case of 1. Lack of VHF/UHF activity in the UK (even in London) and 2. A poor VHF/UHF location as well. I did try some APRS on VHF last night, but nothing heard on 144.800MHz (the designated Unconnected Nets/APRS frequency in the UK). I have tried loops made of tinfoil, with the middle cut out, but they don't stand up to much moving from one place to another, and wire loops are OK, but we are back to the poor location, plus the computer hash on the VHF bands. As well as the hotels computers, and other guests computers, there are the computers in the restaurants, offices and the banks. Plus the automatic bank teller machines, the fluorescent lights and the passing taxis and Police/Ambulance/Fire brigade vehicles to contend with. Not a place to try any 'serious' VHF operating........

No, I was trying to use H.F.. Working on the idea that I might work 'someone' (anyone!) on the H.F. bands. Hence the endfed wire (about 10 metres long) with a counterpoise. I have a much longer piece of wire, but I can't get it through the window. Which brings us in a circle to my original problem. HI. ;-)

I did hear a couple of stations on 40M, 30M and 20M. But these were very local European and Scandinavians and, I guess, were some of the higher power stations, as even 40M was very quiet. Not a 'normal' situation in Europe at night.......

80M can be good, for inter UK, but the problem there is that the 10 metres of wire is just long enough to go across the room. Any longer, and it would need to double back, which may cause signal cancelling on some frequencies, of course. It's also an inverted L shape, with the vertical part only some 1.5 to 2 metres (5 or 6) feet high.

The verticals I referred to were a 40M partly helical wound 'mobile' antenna and a converted 11M helically wound 'mobile' antenna. The 11M one being

modified by taking the small adjusting rod out of the top, and replacing it with a much longer whip. This was cut for the 20M band. It has worked well on the car. The problems with both of them in the hotel, of course, are that they are inside the building, and are not fed against a particularly good ground (though I could cut up the counterpoise and make a better RF ground, I guess).

I'll have a go again tonight, when I get back to the hotel, and see if I can actually work one or other of the stations which I can, at least, hear. Although, I'm still of the opinion that I'd really need to get the antenna outside the room, at least.

Cheers - Dave (G0DJA)

2313. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a115af8_1@news2.vip.uk.com>
Source record: 176546

George, W5YR wrote in message <39F7C051.6CA19498@att.net>...
>Kirby, you mentioned price range . . .
>
>Consider spending a little more and get the AEA/Tempo CIA-HF analyzer.

To save me having to wade through pages of unrelated sites after doing a web search for 'CIA', does any one have a URL that would take me to the specs and information on this unit please? ;-)

Also, my opinion of AEA is tainted by my dislike of their TNCs, if this is the same company that made the 'PK' range of units? Plus, their 2 metre band vertical, that looked like a knights lance, didn't seem to catch on, well, this side of the Pond anyway.....

My two-pennies worth on the MFJ units, I had one of the ones that went up to VHF, but not one of the latest that goes up to UHF. The only reason I don't have it now is that it was stolen, whilst in 'safe keeping' with some other gear, from a hotel in London a couple of years ago. They eventually paid up for the lost kit, but I've not yet got around to replacing the antenna analyser.

As soon as I get chance, I'm going to get another analyser, probably the MFJ259B, but maybe this CIA-HF, if they are sold in the UK.....

Cheers de Dave (G0DJA)

2314. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: CJ <cjr@visi.com>
Message-ID: <3A115F09.E6FBB8FC@visi.com>
Source record: 176547

Here in Minnesota, Fleet Farm sells fence wire in pretty big rolls.
Guage and length of rolls seems to depend on store location.

73, CJ K0CJ

Darryl Lonowski wrote:
>
> Hi All,
>
> Does anyone know a source for Hardened aluminum fence wire in bulk, 1000
> feet+?
>
> I have heard of stations using it for LPA's and exremely long, random
> wires etc?
>
> tnx
>
> Darryl
> KB9NAO

2315. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a116332$1_2@news1.vip.uk.com>
Source record: 176548

David Ackrill wrote in message <3a115af8_1@news2.vip.uk.com>...

>To save me having to wade through pages of unrelated sites after doing a
web
>search for 'CIA', does any one have a URL that would take me to the specs
>and information on this unit please? ;-)

Ah, found it! Alta Vista had an old link, which was why I got a broken
link, and the option to visit the 'other' CIA websites. ;-)

For anyone else interested, the URL is http://www.aea-wireless.com/via.htm

Not much in the way of details of UK distributors, I'm loath to send my
email to companies these days, as it often is seen as 'permission' to send
many more unwanted emails on a regular basis......

Cheers de Dave (G0DJA)

2316. how close can I stack my 70cm beam above my 2m and my 2m above my 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: N1RZ <n1rz@timhavens.com>
Message-ID: <xYdQ5.11460$Ds3.127118@e420r-sjo3.usenetserver.com>
Source record: 176549

I'm trying to locate some data on how close my yagi's can be placed next to eachother without greatly effecting the others on the mast?

I have a:

5 ele 6m beam with about a 12' boom.
a Long Boom K1FO 2m yagi (12 ele I think)
a Long Boom K1FO 70cm yagi (22 ele?)

Anyway...I'm just trying to find a guideline for how close they can be on the vertical mast....they will all be mounted Horizontally....on a Vertical mast.

I was considering adding a second 70cm and phasing them together....and wondering how I should configure them all to get this done...I'm not sure I have enough mast currently to do this.

What are some thoughts on distances from each yagi to the next....(without the phased extra 70cm beam)?

The 6m will be on the bottom then the 2m and then the 70cm. I was thinking about having it go like 6m, 70cm (lower phased), 2m, 70cm (upper phased)

What do you folks think....maybe you can point me to some good sources on this as well....I've been out of the hobby about 6 years, and most of this has left my brain....(ooppps).

Tim (N1RZ)

2317. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2534-3A11654F-34@storefull-115.iap.bryant.webtv.net>
Source record: 176550

Roy Lewallen wrote:
"But again, the image antenna doesn`t depend on mutual coupling for its current, we impose its current. After all, we conjured the image antenna, so we can conjure the current just as handily."

Faraday showed the voltage induced in a conductor is proportional to the rate of change of a quantity of magnetic flux which links it.

Ampere showed that current creates a magnetic field. If current is changing, so is the magnetic field which induces a voltage, and this creates a changing electric field.

So, an alternating current produces an alternating magnetic field and an alternating electric field in the neighborhood of the conductor.

There may be no other conductor in the neighborhood of our current carrying conductor but current can flow in a void. This current is not conduction current, but it is called displacement current. Displacement current allows a-c to flow through a capactor`s dielectric, which can be air or a vacuum. Displacement current is proportional to the dielectric strain caused by an electric field. In a capacitance, the displacement current must equal the conduction current in the wires.

J.C. Maxwell proposed that a magnetic field would be caused by a displacement current, just as a magnetic field is caused by a conduction current. Maxwell produced an equation quantifying the electric field that would be caused by a changing magnetic field. He also produced another equation quantifying the magnetic field that would be produced by a changing electric electric field.

An alternating current in a wire produces an alternating magnetic field in the space around the wire. This creates an alternating electric field which causes a displacement current in space which produces yet another alternating magnetic field surrounding the displcement current. Each alternation exceeds the distance from the wire of the previous alternation and this can go on forever.

But, as the radiation spreads farther from the wire, the same amount of energy is spread more thinly over a larger area. The amount that can be captured by a distant conductor depends on how close it is to the source.

Roy may conjure an image antenna, but he can`t conjure reflected radiation which produces an actual interference pattern with radiation from an actual antenna. Radiation from the ground reflection requires actual current tnduced in the ground which in turn becomes another actual source of radiation. Strong current makes strong radiation. Weak

current makes weak radiation. (from earth)

Strong direct radiation is little affected by a weak reflection from the ground.

The height of an antenna above ground is significant to the strength of the reflection from the ground.

Best regards, Richard Harrison, KB5WZI

2318. Re: how close can I stack my 70cm beam above my 2m and my 2m above my 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: N1RZ <n1rz@timhavens.com>
Message-ID: <2oeQ5.12578$r63.167920@e420r-sjo2.usenetserver.com>
Source record: 176551

http://www.ifwtech.demon.co.uk/g3sek/stacking/stack3.htm#4.

Here is some good info....I've found....

2319. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <10880-3A1176A0-7@storefull-113.iap.bryant.webtv.net>
Source record: 176552

Terman says on page 883 of "Electronic and Radio Engineering": "For purposes of calculation, it is convenient to consider that the reflected wave is generated, not by reflection, but rather by an "image" antenna located below the surface of the ground.--- When the earth can be considered as having a reflection coefficient of approximately unity, an assumption that is very commonly made, the currents in the corresponding parts of the actual and image antennas (i.e., in parts lying on the same vertical line and at the same distance from the earth`s surface) are of the same magnitude."

That is the argument some are making for an antenna at 180 wavelengths above ground.

On page 836, Terman says: "Consider the antenna that is far enough from ground that the total power reflected by a given set of antenna currents is independent of the presence or absence of ground.--- This condition corresponds to an antenna height great enough to make the mutual impedance between the antenna and its image small."

This is exactly the proposition I`ve been arguing from the start of this thread.

Best regards, Richard Harrison, KB5WZI

2320. Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <cbfQ5.196861$g6.89848052@news2.rdc2.tx.home.com>
Source record: 176553

I have a 20 meter, 1/4 wave ground plane mounted on my roof with 4 radials sloping down from it's base. The SWR ranges at less than 1.4:1.

Should I use a balun? Should it be a 1:1 or a 4:1? Would a balun in this situation improve antenna performance? Would it reduce TVI and RFI? I'm concerned about this now as I'm thinking of getting a linear and want my antenna to be as good as it can get.

Thanks, Pete KA0TZK

2321. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A118DFD.AEC8A871@dvol.com>
Source record: 176554

Dick Carroll wrote:

> > such as RTTY and facsimile. The Z code, therefore, gradually went out
> > of fashion and slowly disappeared. Examples of the Z code include
> > ZAA you are not observing circuit discipline, ZAN we can receive
> > absolutely nothing, ZST send slips twice, ZAP acknowledge please
> > and there were lots of others.
> >
> > More on Z-Codes and X-Codes at URL:
> > http://webhome.globalserve.net/rlacroix/
> >

>
Boy, I'd hate to have to memorize that list! - tnx.
>

> I have a couple of APCO (Associated Police Communications Officers)
> handbooks from 1945 and 1951 which detail the network, its member
> stations and the systems and procedures used, including a listing of the
> Z codes.
>
> Anyone who would like to read a first-person account given by one of
> the CW operators who worked at a station on that net can do so at:
>
> http://metronet.com/~nmcewen/police_radio.html

>
Great story, tnx for the URL Dick.
>
I'll tellya how far back I go, I remember when the local gendarmes were on AM just above our 160m band with big base-loaded whips.
>

>
> Dick Carroll W0EX

>
w3rv

2322. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <JIfQ5.118$g5.520207@news.ntplx.net>
Source record: 176555

Richard Harrison <richardharrison@webtv.net> wrote:

> Roy may conjure an image antenna, but he can`t conjure reflected
> radiation which produces an actual interference pattern with radiation
> from an actual antenna. Radiation from the ground reflection requires
> actual current tnduced in the ground which in turn becomes another
> actual source of radiation. Strong current makes strong radiation. Weak
> current makes weak radiation. (from earth).

I will let Roy address this one. Suffice it to say that at a great distance, the signal reflected off of a mirror is at the same level as the light bulb and the level of the signal reflected off the mirror does not appear less bright than the bulb if the distance between the bulb and the mirror is changed, as long as the observation point is >> the distance between the bulb and the mirror...

> Strong direct radiation is little affected by a weak reflection from the
> ground.

> The height of an antenna above ground is significant to the strength of
> the reflection from the ground.

Yes, it is, but that is the very reason that one must be in the far field to make any reasonable calculations or measurments.

Let's put an imaginary half-wave dipole 100 wavelengths above ground. Now, go to a point 1wavelengths above the antenna and make a measurment or do a calculation. Whoops -- at this point, the value of the fields are determined primarily by the antenna itself. If the direct wave creates a field of 1 V/m at a point 1 wavelength above the antenna, the influence of the reflected wave will be negligible. One is not equidistant from the energy radiated by the antenna and the energy reflected from the earth. If, at this point, the signals are out of phase, they are not of equal amplitudes, so there will be no cancellation of the signal at that point. I believe that this is how you are thinking of antennas. So far so good.

Now, let's go to a point 1E+6 wavelengths above the antenna. Okay, at this point, the direct signal has traveled 1E+6 wavelenghts and the reflected signal has traveled 1.01E+6 wavelengths -- they are at virtually the same intensity. If the fields are in phase at that point, they will add (+6 dB); if they are out of phase, they will cancel. If the antenna is at a height that is an integral wavelength above ground, at any distant point above the antenna, the signals will be out of phase and at approximately the same amplitude, so they will cancel.

At points above the antenna that are not distant, the signals are still out of phase, but will not be at equal amplitude. Let's look at a point that is

100 wavelengths above the antenna. The direct signal has traveled 100 wavelengths; the reflected signal has traveled 200 wavelengths; they are out of phase alright, but not of equal amplitude. In fact, the direct signal is 20log(200/100) stronger than the reflected signal -- 6 dB stronger. There will be some cancellation, it will not be significant.

Now, lets go 200 wavelengths away. At this point, the direct signal is 3.5 dB stronger than the reflected. At 1000 wavelengths away, the difference is 0.8 dB. Etc. At what point do you need to be to measure the gain of the antenna? At what point would you have to be to measure a 10 dB null in the far-field pattern caused by reflection off of an imperfect ground? I would imagine that the direct and fields were of equal amplitude within less than a dB, one would have a reasonable accuracy for a 10 dB null. At what point would you have to be to measure a 60 dB null in the pattern?

Yes, you can make a measurement at any point and have a measurement valid for that point, but if you are trying to measure the pattern of an antenna, and want a far-field pattern that is valid for any distance (the basic definition of far field), one must be very far from the antenna to measure deep nulls in the pattern caused by the ground reflection. And, very far from the antenna, the depth of those nulls is not influenced by the height of the antenna above ground.

73,
Ed Hare, W1RFI

.

Thus, even at very distant points, the pattern of an antenna over ground is determined by the direct signal from the antenna and the signal reflected off of earth, even if that antenna is very high, presuming that one is in the far-field of the radiating system.

Best regards, Richard Harrison, KB5WZI

2323. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8us1ml$n4r$1@iac5.navix.net>
Source record: 176556

In the 50's I had a big old black Buick, I was stopped for speeding. The police officer walked up to the car and seeing the antenna and type of car simply said "Constable we would appreciate it if you slowed down in our jurisdiction". Needless to say I did not correct him on his mistake (Grin)

"Brian Kelly" <kelly@dvol.com> wrote in message > Great story, tnx for the URL Dick.
> >
> I'll tellya how far back I go, I remember when the local gendarmes were on AM just above
> our 160m band with big base-loaded whips.
>

2324. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A1189E9.51E93B71@GTE.net>
Source record: 176557

Pete Holden wrote:

> I have a 20 meter, 1/4 wave ground plane mounted on my roof with 4 radials
> sloping down from it's base. The SWR ranges at less than 1.4:1.
>
> Should I use a balun? Should it be a 1:1 or a 4:1? Would a balun in this
> situation improve antenna performance? Would it reduce TVI and RFI? I'm
> concerned about this now as I'm thinking of getting a linear and want my
> antenna to be as good as it can get.
>
> Thanks, Pete KA0TZK

BALUN stands for BAlanced to UNbalanced. Coax is unbalanced, A groundplane is unbalanced- .So you do not need a balun. Since a vertical has a theoretical feed Z of 37 Ohms- it will present a VSWR of (50/37)-1.4:1. A 4:1 would make the Z= 4X37=148 Ohms yielding a VSWR of (148/50=3:1. If anything you might want a 1.4:1 UNUN (Unbalance to UNbalanced). But the difference in signal strength between 1:1 and 2:1 is virtually unmeasurable.

Get a copy of the ARRL Handbook- this will answer all of your questions.

Dale W4OP

2325. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A119764.1A4F@wt.net>
Source record: 176558

Ed Beroset wrote:

>
> The particular inverted V I'm installing is tuned to 80m and has,
> according to the books, a characteristic impendence of 50 ohms in that
> band. Since I'm using RG-213 (I think I mistakenly said RG-8 in my
> message), it seems like that would be pretty much a perfect match and
> no balun or choke would be required as long as I kept to that band on
> that antenna. Have I missed anything?

You can still have common mode currents with a perfect match. The match
has no bearing. You would still want a 1:1 ratio balun or a choke to
reduce feedline radiation. Also 213 and rg8 basically the same thing
with the same electrical specs. Just 213 is direct buryable and has a
non contaminating jacket.
>
> >I also disconnect my
> >feedlines and master power when I'm not using the station to avoid problems
> >from thunderstorms or severe snow static.
>
> I'm told that North Carolina, where I live, is the #3 state in the
> nation for lightning damage. That's why I'm particularly interested
> in getting the grounding system and lightning protection in place and
> done correctly.

#1 The best thing to do is have your antenna support "mast or tower" as
well grounded as possible. You want to direct the strike to ground at
that point with as little resistance as possible. This is 85% of the
whole game.
Myself, I use no ground in the shack except for the plug in safety
grounds. When bad weather is around I totally unhook all the antennas
and ground them out outside the window to the ground which is tied
together with the "mast" ground. I have no ground in the shack which is
connected to this outside ground. Myself, I prefer to be isolated from
it. If you use a ground inside, you must tie all connections together in
a star pattern,which is connected to the ground bulkhead. Don't use a
bus. If left connected, you will need to suppresss every line coming in
with gas tube suppressors"includes power, phone line". I don't do this,
so I just ground out outside. Accomplishes about the same thing, except
it's a pain in the rear to worry about. I took a direct strike on the
mast with no problems with my setup. And was sitting 15 ft away from the
mast when it hit. As one said, there is a ton of lightning info in the
deja news, and you also might want to look at the polyphaser web site.
MK
--

http://web.wt.net/~nm5k

2326. has anyone built the G3JVL 6 meter vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: primecase@my-deja.com
Message-ID: <8us64cjau1@nnrp1.deja.com>
Source record: 176559

I'm just asking to see if it's a well behaved antenna as well as
effective ????

thanks

Kevin J Wren

Sent via Deja.com http://www.deja.com/
Before you buy.

2327. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A11998A.546C92A0@uci.edu>
Source record: 176560

"Ed Hare, W1RFI" wrote:
>
> Now, let's go to a point 1E+6 wavelengths above the antenna. Okay, at this
> point, the direct signal has traveled 1E+6 wavelenghts and the reflected
> signal has traveled 1.01E+6 wavelengths -- they are at virtually the same
> intensity.

Hi Ed,

Nice discourse. I understand that it helps illustrate the point here,
but in practice how reasonable is it to assume that 100% of the incident
RF enery is reflected? What is a practicable reflection coefficient at
HF for example?

73 de AC6XG

2328. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <g5hQ5.120$g5.524562@news.ntplx.net>
Source record: 176561

Jim Kelley <jwkelley@uci.edu> wrote in message
news:3A11998A.546C92A0@uci.edu...

> "Ed Hare, W1RFI" wrote:

> > Now, let's go to a point 1E+6 wavelengths above the antenna. Okay, at
this
> > point, the direct signal has traveled 1E+6 wavelenghts and the reflected
> > signal has traveled 1.01E+6 wavelengths -- they are at virtually the
same
> > intensity.

> Hi Ed,

> Nice discourse. I understand that it helps illustrate the point here,
> but in practice how reasonable is it to assume that 100% of the incident
> RF enery is reflected? What is a practicable reflection coefficient at
> HF for example?

This very much depends on soil type, and the grazing angle of the
reflection, etc. The FCC's OET Bulletin 65, as based on some estimates by
EPA, suggests that an antenna would show about 4 dB of ground gain. If
true, this would mean that the reflected field had a voltage or current of
about 60% of the incidental field, which, if adding in phase, would give a
voltage of 1.6 times the voltage that would exist in free space at that
particular point, thus, if in far-field conditions, a power density 4 dB
stronger than the antenna would show in free space. (This is offset by the
fact that the reflections cancel at other angles.)

If one looks at the EZNEC-calculated antenna pattens of a half-wave dipole
over ground, if the dipole is 1 wavelength above imperfect earth of
"average" conductivity and dielectric constant, the null straight up is -12
dB and the null at 30 degrees is about -17 dB. I lack the skills and
knowledge to calculate the phase of the reflection, so I cannot tell you
what percentage of the signal actually gets reflected, but if the phase
were -180 degrees from the incidental, the -12 dB null would be caused by
reflected field with a voltage of about 75% of the incidental field.

I am sure there are some folks here who can express this much better than I,
and certainly more completely, so I will kick back and learn a bit from what
they offer. :-)

73,
Ed Hare, W1RFI

2329. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <8us96n$q01$1@nnrp1.phx.gblx.net>
Source record: 176562

Richard Harrison posted (in part):

> On page 836, Terman says: "Consider the antenna that is far enough from
> ground that the total power reflected by a given set of antenna currents
> is independent of the presence or absence of ground.--- This condition
> corresponds to an antenna height great enough to make the mutual
> impedance between the antenna and its image small."
>
> This is exactly the proposition I`ve been arguing from the start of this
> thread.

Just to quibble with this a bit, the above quote is on page 886, not 836.

The complete quote is:

"Consider the antenna that is far enough from
ground that the total power reflected by a given
set of antenna currents is independent of the
presence or absence of ground. Then a ground
reflection that reinforces the main lobe will
double the field strength of the main lobe and
so will increase directive gain of the antenna
by a factor of 4.* This condition corresponds
to an antenna height great enough to make the
mutual impedance between the antenna and its
image small."

* "This assumes that the free-space directional
pattern of the transmitting antenna has a
maximum in the direction in which the ground
reflected wave reinforces the direct radiation."

So the condition Terman is writing about is still where the
direct and reflected waves add vectorially. Otherwise, how
could one get the 4X increase in directive gain? But also
noted is the statement concerning the negligible effect of the
mutual impedance between the radiator and ground. I contend
that the the 2D^2/lambda criterion (where D is the distance
to the centroid of the radiator/image combination) still holds
for *accurate* far-field pattern measurements because of the
vectorial addition taking place between the direct and reflected
waves, even though there is negligible mutual impedance between
the direct radiator and any ground image.

The point lies in that adjective *accurate*. The difference
between measuring a pattern inside and outside the criterion is

just a slight shifting of the pattern nulls for most practical
cases.

What the hell was this thread originally about, anyway???

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

2330. Re: SLV (Saint Louis Vertical)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Max Grigg <k7maxgrigg@home.com>
Message-ID: <6FhQ5.9394$15.2512926@news1.rdc1.az.home.com>
Source record: 176563

Hi Mike: go to www.superantennas.com. You will find the kit you're looking for.

Best 73's
Max Grigg
K7MAX

"WE0H" <mikereid1@uswest.net> wrote in message news:OyrP5.2126$hn2.554850@news.uswest.net...
> I am looking for the adjustable coil for the SLV. I have the 20' Black Widow
> already, but need the rest of the parts to build the antenna. Can anyone
> help? Thanks, Mike.
>
> --
> Mike Reid
> WE0H
> mikereid1@qwest.net
>
>
>

2331. Re: has anyone built the G3JVL 6 meter vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A119DAA.1D31FF73@hiwaay.net>
Source record: 176564

let me plead ignorance- just what does a G3JVL look like? does it have
gain over a simple 1/4 wave ground plane?

I ask because I'm in the market for a 6M omni-directional.

Bill-W4BSG

primecase@my-deja.com wrote:
>
> I'm just asking to see if it's a well behaved antenna as well as
> effective ????
>
> thanks
>
> Kevin J Wren
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2332. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A11AB9D.E3BB675F@tir.com>
Source record: 176565

Dear Group: When I was at Ohio State I made the acquaintance of the
head of the communications department for the Highway Patrol - sure
wish that I could remember his call. He took me out into the country
to the HF site. They had long, high dipoles. The CW transceivers
(rack mounted inside of a cement building) were run by a microwave
link from the downtown HQ - as the boss said "a mighty long IF
strip."
I kept a Model 15 TTY machine running in my little appartment
(covered by a box to make it more quiet). That was "high tec."
What changes I too have seen.
73 Mac

>
> It doesn't seem to be all that widely known, but there was a Interstate
> Police HF Radiotelegraph Network in service from the thirties well into
> the 1970's that used the Z codes extensively. Prior to deregulation of
> telephone line rates the use of radiotelegraph systems was much more
> cost effective than rented wireline TTY, in times when public
> expenditures were much less liberal. So the HF police CW net persisted
> long after available technology would normally have replaced it.
>
> I have a couple of APCO (Associated Police Communications Officers)
> handbooks from 1945 and 1951 which detail the network, its member
> stations and the systems and procedures used, including a listing of the
> Z codes.
>
> Anyone who would like to read a first-person account given by one of
> the CW operators who worked at a station on that net can do so at:
>
> http://metronet.com/~nmcewen/police_radio.html
>
> Dick Carroll W0EX

--
J. Mc Laughlin n8tt@tir.com Michigan ~

2333. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a507d12.1717613297@news.seanet.com>
Source record: 176566

On Tue, 14 Nov 2000 13:40:29 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>
>Now, lets go 200 wavelengths away. At this point, the direct signal is 3.5
>dB stronger than the reflected. At 1000 wavelengths away, the difference
>is 0.8 dB. Etc. At what point do you need to be to measure the gain of the
>antenna? At what point would you have to be to measure a 10 dB null in the
>far-field pattern caused by reflection off of an imperfect ground? I would
>imagine that the direct and fields were of equal amplitude within less than
>a dB, one would have a reasonable accuracy for a 10 dB null. At what point
>would you have to be to measure a 60 dB null in the pattern?
>

Hi All,

Richard's logic seems to consist of equal parts experience and book
references with the hedge toward experience.

In regard to the statement above, experience would have us leave off
with the "perfect" ground scenario, especially in the microwaves where
both the experience and book references would converge.

The variation in terrain, even in Kansas, at microwaves would
guarantee a lack of coherent reflection to allow for any accurate
development of a 10 (much less 60) dB null. In other words, the
variation of terrain height (we are talking inches now) from the
perspective of the radiator's wavelength guarantees some nulls would
be filled and some lobes to be leveled - on average.

If we were to revisit this at the original 10M Subject line, then that
variation in terrain would have to be substantial (now meters instead
of inches) to blur these lobes and nulls.

73's
Richard Clark, KB7QHC

2334. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: Mike Zerbe <zerbe@pioneer-net.com>
Message-ID: <ewiQ5.22$%Z2.1493@sea-read.news.verio.net>
Source record: 176567

Q signs are just abbreviated ways to say things to make conversations take up less air time. Amateurs use Q signs and the military uses Z signs first and then Q if no Z sign is available. The military rule is to never use plain language when a Z or Q sign can be used. So......I dont think there is a meaning for QSO other than a quick way to say "Can you communicate with _____ direct?" or to designated a direct communication. But, I'm often wrong. Mike-KA7CGI

<mcduffie.spamcop@nospam.actcom.net> wrote in message news:27tv0t0tfo4dpc2evk8jhg9vm3dnvd4ec7@4ax.com...
>

2335. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A11B763.82FFBA95@oio.net>
Source record: 176568

Pete Holden wrote:
>
> I have a 20 meter, 1/4 wave ground plane mounted on my roof with 4 radials
> sloping down from it's base. The SWR ranges at less than 1.4:1.
>
> Should I use a balun? Should it be a 1:1 or a 4:1? Would a balun in this
> situation improve antenna performance? Would it reduce TVI and RFI? I'm
> concerned about this now as I'm thinking of getting a linear and want my
> antenna to be as good as it can get.
>
> Thanks, Pete KA0TZK

Pete,
1. You don't, and shouldn't use a balun.
2. Baluns do not stop RFI/TVI.
'Doc

2336. Re: Question: buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 01:30:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8uq4ea$80r$2@plutonium.btinternet.com>
Source record: 176524

George, perhaps 'connection' is a poor choice of word. It is more applicable to two well-defined conductors which join at a single point.

Nevertheless, the purpose of a radial wire is to transfer the antenna current to the soil with the lowest possible 'contact' resistance. Note that the required direction of current in the soil is the same as in the radial. The soil resistance is in parallel with the wire resistance and inductance - not at right angles to it.

Most of the soil resistance in the circuit is due to the thin layer of soil which is very close to the radial wire. The current has to cross this thin innermost layer obliquely to get into the soil. As the distance from the wire increases the cross-sectional area of soil in a layer of the same thickness increases and so the resistance of a layer decreases in inverse proportion to its radial distance from the wire.

The total resistance of all the layers in parallel up to a given radial distance from the wire decreases rapidly. Eventually, of course, the resistance is less than that of the copper wire. At not too great a distance from the wire the resistance of the soil is certainly less than the wire's inductive reactance and most of the current then flows in the soil. At some axial distance along the wire there is so little current in the wire it becomes redundant. The length at which a radial wire becomes redundant is often overestimated.

Returning to the radial dimensions, it is not too difficult to see that the wire diameter is of consequence. The greater the wire diameter the lower the resistance of the soil in the innermost layer. For the process described above to get going it is necessary only for the burial depth of the wire to be very much greater than wire diameter. The previously mentioned depth of 6" foots the bill. I prefer 10" - it allows back garden cultivation to be carried on down to a spade depth without affecting the DX.

Insulated radials have no more loss at HF than the bare wire variety. That's because insulating materials such as enamel and pvc have a very good dissipation factor. Furthermore, the diameter over the insulation is greater than that of the bare wire and so the innermost layer of soil has a lower

resistance than with the bare wire.

Looking into the electrode system we end up, therefore, with a similar loss resistance but with a capacitance in series. The capacitance is that of a coaxial structure with inner and outer diameters and is calculable. Not that this matters very much - it is tuned out by the tuner simultaneously with the antenna reactance from which it is indistinguishable.

The foregoing is a simplification. Radials are transmission lines with lossy dielectrics and have such nuisances as Zo, propagation velocities, etc.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
George, W5YR <w5yr@att.net> wrote in message
news:3A102DEB.A2985970@att.net...
> Interesting comment, Reg . . .
>
> I thought that any ohmic contact between buried radials and the soil was
> strictly incidental and played no role in the operation of the radials:
> return current collection.
>
> If "connection between wire and soil" is involved in radial operation
> and is of importance, why is it that insulated radial wire seems to work
> well? Or are such radials sub-par?
>
> 72/73, George W5YR - the Yellow Rose of Texas
NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L
1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99)
IC-765 (6/90)
>
>
> Reg Edwards wrote:
> >
> > Steve, from where do you get the idea RF currents 'stop' at

> > 3 to 4" below the surface ?
> >
> > It is not that radials greater than 6" deep 'defeat the
> > purpose', it is just that there is not much more benefit
to
> > be obtained by digging deeper.
> >
> > Compared with wire diameter, 6" is quite deep enough to
> > obtain an adequate connection between wire and soil.

2337. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 03:09:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uqae6mus0@208.207.71.159>
Source record: 176525

Brian Kelly wrote:

> Which in a nutshell is why you put towers up by the book and don't get stupid and
> try to outguess the pros who designed the tower by pushing their published loading
> and installation envelopes.

Nutshell/thumbnail, the weight of all that ice, probably a lot more
than the tower itself, moving in the same direction as the wind gust
that broke it, just proved too much load, and at the fulcrum, at the
base, it gave way. No way I could have forseen that, but I DID plan it
to be far enough away from the house to miss it if it did come down.
Except for the raingutter, I was right on that score.

> In the case of a freestander the primary function of the (much larger) base is to
> act as a sort of counterweight which balances out the wind load at the tipover
> pivot point. Gets into soil mechanics, etc. In all cases more concrete deeper is
> always better.

Outfit I used to work for had a 350 footer, wide base freestanding,
that was hit by a tornado on the other end of the state. For a long time
I kept a photo of the hunk of concrete that one leg pulled out of the
ground. Helluva a chunk it was, too. MANY cubic yards. Then it laid the
tower across US36.

> >
> > While such weather events are rare in this part of the world, I am
> > lucky that it wasn't situated where it could come through the middle of
> > the roof - mine or someone else's. No more freestanding rigs for me.
>
> >
> You got bit too hard. Lotsa freestanders out there which can take the loads.
> Lookit all the freestanding cell phone poles. Ya just don't push the numbers.
> >

After all my towering experiences, it just seems natural to ask- just
how much are these installations professionally overengineered? I think
its a given that any vendor or engineer would make absolutely,
positively sure that no one ever could, for any concievable reason, be
able to point the finger backward after any tower came down, so that
naturally means "overdone". By how much?

> Hey, Dick - Put another set of guys on that tower willya?
>

I would've bet that was coming <BSEG>. Point is, the darn thing has
stood there 15 years, through some hellacious Midwestern winds, without
flinching. And after previously closely watching the freestander that

the iceload took down, I really believe *it* would still be there
without the ice storm. So really, What's the deal?
In fact, if I read your detailed info right, another set of guys would
add more vertical compression. I know that they would also stabilize the
middle and forestall twisting - but thats why I put them at 50 ft
instead of the top (60), and I haven't detected anything that looks like
a deficiency or any hint of problem. A middle set wouldn't keep it up if
one of the top guys failed. Explain for us all, pse. Us backyard
injuneers want to know.

BTW I did a bit of reading back when working about how towers fail in
earthquakes, since I had New Madrid in my area of responsibility. Turns
out that the freestanders fare better than guyed types, which suffer
slackening in one set of guys as the first earthquake wave arrives, and
the opposite guys, still tight, pull the beast down. The freestander
just sways and stays put....some of the time, anyway.

tnx, Brian

Dick

> >
> >
> > Dick
>
> >
> w3rv

2338. Re: dipole help needed !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 03:35:37 UTC
From: klocko@toad.net
Message-ID: <8uqbua$3nu$1@nnrp1.deja.com>
Source record: 176526

In article <B635A77D.19E0C%K3USC@att.net>,
Brian Hemmis <K3USC@att.net> wrote:
> I'm rebuilding my all band dipole- cut for 80m , fed with balanced
line.
> I've heard of some people making longer dipoles- say 180'- any
advantage to
> this ? I have the room for this but not enough for a 160m dipole. Any
> expert opinions out there ? Thanks Brian K3USC
>
Hi Brian,
I currently have a 200' dipole which I can tune on all bands from 160m through 10m. With this length, it is shorter than a half-wave on 160m, but longer than a half-wave on 80m and all other bands. I picked 200' mostly because it fit my lot. I haven't done the full-blown analysis but I suspect (actually hope) that this length improves the chances for impedance matching. On 160m, the 200' length should result in a relatively small capacitive reactance and a relatively large resistance so that my tuner is able to find an impedance match. On 80m, this same length should also result in a relatively small inductive reactance (a half-wave on 160m results in about a full-wave and potentially very high impedance on 80m). This is all subjective, but if you put up a 180' dipole, it should work. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2339. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 04:10:12 UTC
From: beroset@mindspring.com
Message-ID: <3a109a3e.913373@news.mindspring.com>
Source record: 176527

Stephen Verbil <sverbil@usa.net> wrote:

>I am very concerned about one part of Ed's letter: I believe he is looking for a
>way to tie the building electrical ground system together with the antenna ground
>system. I would guess, Ed, this is because you have learned somewhere about the
>problems that ensue when you have different, independent grounds.

Yes, I have a recent copy of the ARRL Antenna book which mentions that
the grounds must be connected for safety reasons.

>Rick did a good
>job dealing with the RF issues, I'll just stick with safety...

Thanks. The safety issue is particularly what I wanted to know more
about.

>However, the way to accomplish that is *not* to pick up a 'ground' at an outlet
>that happens to be nearby the coax' entrance to the building. The safety ground
>available there is designed to provide a path to ensure (among other things) that
>the protection for that circuit will trip. It is not designed to carry antenna
>discharge currents!
>
>Excerpted from the National Electric Code, Chapter 8, Section 810 which covers,
>among other things, amateur radio transmitting and receiving equipment,

That helps already -- I can read more about this in the local
library's copy of the NEC.

>the ground connection from an "antenna discharge unit" :
>
>(f) Electrode. The grounding conductor shall be connected as follows.
>1. To the nearest accessible location on the following:
>a. The building or structure grounding electrode system as covered in Section
>250-50
>b. The grounded interior metal water piping system as covered in Section 250-104(a)
>
>c. The power service accessible means external to enclosures as covered in Section
>250-92(b)
>d. The metallic power service raceway
>e. The service equipment enclosure, or
>f. The grounding electrode conductor or the grounding electrode conductor metal
>enclosures; or

Unfortunately, the service entrance of the building (and the location
of the main grounding rod) is 110' away on the far side of the house,
so I think that shoots 1a. The pipes are PVC, so 1b is out. There is
a ground that's only about 40' away on a subpanel in the garage, but a

route to it would be somewhat difficult, since I'd have to go all the
way around the garage.

>(h) Size. The grounding conductor shall not be smaller than No. 10 copper, No. 8
>aluminum, or No. 17 copper-clad steel or bronze.

That's useful info, because the wiring to the outlet is only No. 12.
I was going to use solid No. 8 copper to bond to the ground rod.
Anything much bigger and I'm not sure I could bend it!

>So... your connection goes to a grounding electrode (your rod driven into the
>ground. You should interconnect it, and when you run the interconnection you need
>to make a straight run to the point you use (lots of folks use the service entrance
>enclosure and its associated ground connection). Normal house wiring doesn't use
>#10 sized ground conductors.

Yep. If I ran #10 wire all the way 'round the garage to from the
subpanel to the electrode, would there be any problem with that?

>In summary, connecting to the ground available in an outlet won't accomplish what
>you want. And. being a GFI outlet, there's a good chance that if any stray RF is
>on the outside of your coax, you'll trip the GFI and turn off anything attached to
>that outlet.

I figured that it was inadequate but I needed more specific info to
figure out what would make it adequate. You've given me just what I
needed, I think.

>Might be interesting with Christmas lights plugged in there in the winter :-) ...

As long as the flashing red lights are decorative and not on an
ambulance or fire truck, I'll be of good cheer! Thanks for the help.

Ed
AF4YN

2340. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 04:10:13 UTC
From: beroset@mindspring.com
Message-ID: <3a10ab21.5237599@news.mindspring.com>
Source record: 176528

k1bqt@aol.com (Rick Littlefield) wrote:

>Grounding for DC from the second floor is easy, but grounding for RF at 28 MHz
>is nearly impossible because the wire will be too long in terms of wavelength.

Yes, I'd read that but the materials I have here seem to have more
warning than practical help. I'm a relatively new ham (since 1998) so
maybe there is a resource I've overlooked. Is there a definitive
article like "How to Plan Your Grounding System" that's available
somewhere?

>To prevent what are called "common-mode RF currents" from returning to your
>shack, make sure you use a balun of some sort at the antenna's feedpoint
>(ferrite sleeves, coils of coax, or something), and also wrap a few coils of
>coax at the back of your rig and tape them up. If no RF current can come back
>down the outside of you feedline, the chassis RF potential on your rig should
>remain "cold" and you can then connect a wire to ground rods that will act as a
>DC ground without radiating RF. That's the condition you want to create.

The particular inverted V I'm installing is tuned to 80m and has,
according to the books, a characteristic impendence of 50 ohms in that
band. Since I'm using RG-213 (I think I mistakenly said RG-8 in my
message), it seems like that would be pretty much a perfect match and
no balun or choke would be required as long as I kept to that band on
that antenna. Have I missed anything?

>I also disconnect my
>feedlines and master power when I'm not using the station to avoid problems
>from thunderstorms or severe snow static.

I'm told that North Carolina, where I live, is the #3 state in the
nation for lightning damage. That's why I'm particularly interested
in getting the grounding system and lightning protection in place and
done correctly.

Thanks for the advice, Rick.

Ed
AF4YN

2341. Re: Mounting bracket for pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 04:10:15 UTC
From: Chuck Costa <cvcosta@home.com>
Message-ID: <HW2Q5.419619$i5.7165007@news1.frmt1.sfba.home.com>
Source record: 176529
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I have a 2000 Tahoe and had the same dilemma. My solution was an L bracket mounted between the hood and fender. There is sufficient clearance so as not to interfere with opening and closing the hood.You still have to drill three small holes on the inside of the fender but you'll never see them. Most ham stores carry these brackets and are available in NMO mounts.Not the best solution but it works pretty well and it's better than tearing up your new truck.

"K0HB" <K0HB@arrl.org> wrote in message news:8up6p1$3ms$1@nnrp1.deja.com...
> Have a one-month-old 2001 Chev Silverado LT that I just don't want to
> drill holes in, nor do I want to put scratches in the clearcoat with a
> mag-mount.
>
> Anyone have a favorite way of mounting a dual-band antenna (2M/440),
> maybe on the bed rails or in a stake pocket?
>
> Thanks in advance for any bright ideas.
>
> 73, Hans, K0HB
>
> --
> ~~~
> If you make people think they're thinking, they'll love you;
> but if you really make them think, they'll hate you.
>
>
>
>
>
>
>
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2342. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 05:50:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uqjq9$9kk$1@208.207.71.159>
Source record: 176530

AC6V wrote:
>
> Brian Kelly wrote:
>
> > AC6V wrote:
> >
> > >
> > >
> > > In the context that hams use QSO -- it does NOT mean Quasi Sinusoidal
> > > Oscillation.
> > > QSO as used in communications was taken from the Q-Signal lists of the old
> > > telegraph/wireless radio days.
> > > On 1st July 1913 the Q code became an official international information code,
> > >
> > > updated as changing circumstances demanded to include new codes relating to
> > > such matters as aviation and maritime. Amateur Radio Operators used it also
> > > since
> > > many of them were radio/telegraph operators as well.
> >
> > >
> > Where did the "Z" codes come into play, the military?
> > >
> > w3rv
>
> ==========
> From the article by Kenneth Brown G0PSW at URL:
> http://www.ac6v.com/pagear.html#QZ
>
> Some time later (after 1913) came the Z code, running in parallel with the Q code.
> This originated as a company code of Cable and Wireless with
> application limited, in the main, to high speeds machine morse
> operating at speeds of typically 120wpm. Widely used by many
> countries, including Germany, the Q code and Z code continued in use
> throughout the war. After the war high-speed morse became less
> widely used and was replaced by other forms of traffic communication
> such as RTTY and facsimile. The Z code, therefore, gradually went out
> of fashion and slowly disappeared. Examples of the Z code include
> ZAA you are not observing circuit discipline, ZAN we can receive
> absolutely nothing, ZST send slips twice, ZAP acknowledge please
> and there were lots of others.
>
> More on Z-Codes and X-Codes at URL:
> http://webhome.globalserve.net/rlacroix/
>

It doesn't seem to be all that widely known, but there was a Interstate Police HF Radiotelegraph Network in service from the thirties well into the 1970's that used the Z codes extensively. Prior to deregulation of telephone line rates the use of radiotelegraph systems was much more cost effective than rented wireline TTY, in times when public expenditures were much less liberal. So the HF police CW net persisted long after available technology would normally have replaced it.

I have a couple of APCO (Associated Police Communications Officers) handbooks from 1945 and 1951 which detail the network, its member stations and the systems and procedures used, including a listing of the Z codes.

Anyone who would like to read a first-person account given by one of the CW operators who worked at a station on that net can do so at:

http://metronet.com/~nmcewen/police_radio.html

Dick Carroll W0EX

2343. Re: grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 06:08:18 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uqksi$9kk$2@208.207.71.159>
Source record: 176531

Ed, if you want to read all you'll ever want to know on the subject of grounding and lightning, and how to deal with them, do a Dejanews search of the archives of this NG using the words "antenna, Lightning and Ground". You should be able to get enough good information to shed some light on a complex subject that at first doesn't seem like it should be one.

73, Dick W0EX

Ed Beroset wrote:
>
> Stephen Verbil <sverbil@usa.net> wrote:
>
> >I am very concerned about one part of Ed's letter: I believe he is looking for a
> >way to tie the building electrical ground system together with the antenna ground
> >system. I would guess, Ed, this is because you have learned somewhere about the
> >problems that ensue when you have different, independent grounds.
>
> Yes, I have a recent copy of the ARRL Antenna book which mentions that
> the grounds must be connected for safety reasons.

2344. Re: dipole help needed !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 06:26:59 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A10DB33.170A@wt.net>
Source record: 176532

Brian Hemmis wrote:
>
> I'm rebuilding my all band dipole- cut for 80m , fed with balanced line.
> I've heard of some people making longer dipoles- say 180'- any advantage to
> this ? I have the room for this but not enough for a 160m dipole. Any
> expert opinions out there ? Thanks Brian K3USC

Not worth it. To me anyway. Might help if you try 160m, but if you don't
, I wouldn't bother. Mk
--
http://web.wt.net/~nm5k

2345. Re: HELP NEEDED !! CAVITY CANS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 06:36:25 UTC
From: budgie <budgie@nowhere.cantech.net.au>
Message-ID: <3a10dd55.1354615@news.cantech.net.au>
Source record: 176533
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

On Mon, 13 Nov 2000 17:19:22 -0800, "Lloyd" <VE7LWB@rac.ca> wrote:

>Hi I have a question for all. I am about to build my own 6M {50 ~ 54 Mhz}
>cavity
>cans, but I need some help big time. The building of the can is not a
>problem, however
>the size of the coupling loop is ! Does anyone have a 6M or 10M cavity can
>that
>that they could give me details on size and all that good stuff for the
>making of
>the loops? Please no, I guess it's this big or stuff like that, but real
>facts on size
>in one.

Why not scale it off a 70-85 MHz unit?
>
>
>

2346. Re: One More Question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 06:37:13 UTC
From: budgie <budgie@nowhere.cantech.net.au>
Message-ID: <3a10dd80.1398555@news.cantech.net.au>
Source record: 176534
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

On Mon, 13 Nov 2000 21:01:43 -0800, "Lloyd" <VE7LWB@rac.ca> wrote:

>Does anyone know of any company or companies that make cavity cans for
>ham bands? Most of all cavity cans for 6M {50~54Mhz} and 10M {29~30Mhz}??
>

Not aware of any in Canada. In Australia, another matter entirely ...

2347. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 07:23:40 UTC
From: "W.Dixon" <willie@blues.net>
Message-ID: <8uqpdn$s33$1@news.kolumbus.fi>
Source record: 176535

Something new must definitely be cooking, that's for sure! Guys, gimme a break: is it the new 16 dBd gain 2 meter antenna with a 3 ft boom everyone's talking about? Does Yagimax accept the parameters? Willie

2348. Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-14 19:49:05 UTC
From: primecase@my-deja.com
Message-ID: <8us4ve$i7m$1@nnrp1.deja.com>
Source record: 176447

Someone once said to me, "Never argue with an idiot, they drag you down to their level and then beat you with experience" Phd or not, the guy is still an idiot and more to the point he thinks we care about his so called intellectual property. You never see Mr Yagi yelling on these newsgroups. Grow up and get a life!

Kevin J Wren

Sent via Deja.com http://www.deja.com/
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2349. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <3a130432$0$83487$45beb828@newscene.com>
Source record: 176369

I agree. But, let me say, I have been a firm beliver in the application
of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
while a scientist for IBM in (I think) 1984/85.

While I disagree with the tone an type of posts by Dr. Cohen I hope this
newsgroup does not write off this interesting application of fractals.

Are they better or worse than other antennas? I have no idea. But what ham
radio is all about is testing, experimenting, improving and let others know
about the results.

I for one say lets keep on hearing about these interesting developments, but
lets keeps it at a scientific level, without insults, threats, etc. from all
party's concerned.

I would hate for this newsgroup to translate its fustration with Dr. Cohen into
the belief that there is no merit in fractal technology. There may be, but
sometimes the most interesting advances come from such disruptive/different
viewpoints.

--jeffrey steinberg, KC2GUC, Scarsdale, NY

In article <8ut381boc1@nnrp1.deja.com>, primecase@my-deja.com says...
>
>
>
>Ok, a little harsh maybe, but just as you have all expressed opinions
>about trolling,abuse,baiting etc, I'm still entitled to an opinion and
>I'll stick to it, right or wrong(just for the curious,this isn't more
>bait). Yes I'm aware Mr Yagi isn't with us anymore(shame as he has
>probably forgotten more than we'll ever learn) and it was meant as a
>metaphor. In the cold light of day my previous post looks worse than
>any of Mr Cohen's so I'm guilty too I guess, which just goes to prove
>that maybe posting your immediate thoughts aren't wise when you are
>p***ed off!.
>
>No more will be said on the matter
>
>g'night
>
>Kevin J Wren
>
>
>In article <8us4ve$i7m$1@nnrp1.deja.com>,
> primecase@my-deja.com wrote:
>> Someone once said to me, "Never argue with an idiot, they drag you

>down
>> to their level and then beat you with experience" Phd or not, the guy
>> is still an idiot and more to the point he thinks we care about his so
>> called intellectual property. You never see Mr Yagi yelling on these
>> newsgroups. Grow up and get a life!
>>
>> Kevin J Wren
>>
>> Sent via Deja.com http://www.deja.com/
>> Before you buy.
>>
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

2350. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: ham <no@sp.am>
Message-ID: <3A1304FB.8C39D270@sp.am>
Source record: 176370
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Aren't Cushcraft and support mutually exclusive terms?

Why shouldn't a competitor point out the shortcomings of a competitor by commenting on their competitor's public statement of fact???

Gee I suppose you also expect politicans to run a fair campaign!!!

plmills@attglobal.net wrote:

> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2351. Re: Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Stephen Verbil <sverbil@usa.net>
Message-ID: <3A1305DB.AC682EB9@usa.net>
Source record: 176371

David Ackrill wrote:

> john hurst wrote in message <3A12152A.ABA54607@gte.net>...
> >David, I was in a similar situation in a hotel room 10 years ago at Disney
> >world. I used capacity coupling through the glass using about a square foot
> of
> >aluminum foil on both sides of the window
>
> Thanks for the reply John,
>
> I did consider this idea, as per my second post, but there were two problems
> which I could see immediately;
>
> 1. I didn't bring too many tools, so making up the foil capacitor idea might
> prove a challenge and;
> 2. The windows are double glazed, so the air gap, plus two sheets of glass,
> will increase the capacitance quite a bit.....
>

...actually, it will *decrease*

> I may pop by the supermarket on the way back to my hotel tonight for some
> foil, and see if I can find a way of attaching my copper wire to the
> aluminium foil.
>
> As I used to be an engineer with one of the electricity utility companies, I
> don't underestimate that problem.......
>
> Cheers de Dave (G0DJA)

2352. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a130300.47713554@news.akorn.net>
Source record: 176372

On Wed, 15 Nov 2000 16:04:16 -0500, "greg" <greg@valkyrie.net> wrote:

>i had 1/4" arc's comming off of a vhf/uhf discone during a heavy snowfall
>
>that's why i like my DC grounded antennas or baluns

If the arc is corona, it won't matter if the element is dc grounded or not.

Corona comes from the charge gradient between earth and the area around the antenna.

SHAPE of the antenna, where the antenna doesn't have sharps points sticking up in the open, reduces corona by increasing distribution of charges along the surface of the antenna. In some cases, this can reduce noise during storms.

DC grounding prevents arcs internal to the feedline and antenna, not external. The main effect of lack of DC grounding is occasional "pops" as something in the matching system, feedline, or antenna breaks down.

Quads are quieter only for two reasons. They often don't have a sharp point sticking way out in space, instead having a long length of wire. They also generally have a lower impedance part of the antenna exposed to the strong electric fields where corona occurs. These effects reduce the amount of "rain or snow static".

Any antenna can be cured of the "DC ground" defect by adding a leak resistance or choke across the feedpoint. Curing corona requires only a change in height or shape.

73 Tom

2353. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1304f5.48214356@news.akorn.net>
Source record: 176373

On Wed, 15 Nov 2000 11:19:36 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>Richard Harrison <richardharrison@webtv.net> wrote:
>
>> Actually, a questioner asked the dimensions for a 10-meter rhombic. I
>> was foolish enough to supply the dimensions.
>
>You were kind enough to supply the dimensions. The ensuing discussion has
>been quite enjoyable for me.
>
>73,
>Ed Hare, W1RFI

I'm a bit late on this, but I hope someone pointed out that ground
losses as well as current reduction in the wire with distance limits
the useful gain of a Rhomic and other longwire arrays.

Gain peaks at about 3.3 to 4 WL per leg, and then actually falls off
in a Rhombic that is 1/3 it's leg length in height above earth. It's
pretty easy to get more gain from much smaller antennas, especially if
the longwire array is not high above earth compared to it's size.

Most of the gain figures in books ignore real world losses and effects
of earth, and greatly over estimate gain.

73 Tom

2354. Re: Mounting R7 on Fire Escape

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: njradiodude@aol.com
Message-ID: <20001115175725.21144.00001461@ng-fc1.aol.com>
Source record: 176374

>unfortunately landlords are
>not always cooperative

Well, I can only guess, but if your landlord or superintendant is willing to allow your antenna on the fire escape which might be more visible than the roof, he might just let you put it on the roof, as long as you display to him you know what you're doing and can assure him it will be safer and would be less intrusive into the lives of other tennants (RFI, asthetics, etc.)

Good luck,

Tom KB2FIK
NJRadioDude@aol.com
Bloomfield, New Jersey

2355. ? on Stealth Ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K4JDP@webtv.net
Message-ID: <316-3A1311C7-5@storefull-137.iap.bryant.webtv.net>
Source record: 176375

If any one has used or is using any stealth antenna for HF work please
e-mail me privately with your experience and details of them.

Sincerely,
John

2356. gro

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Hilins Family <hilins@ispchannel.com>
Message-ID: <3A131B2E.EB680839@ispchannel.com>
Source record: 176376
Cross-posted to:
rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.antenna,rec.radio.amatuer.homebrew,rec.radio.shortwave
Body handling: Binary attachment payload not displayed: hilins.vcf

[One or more binary attachments are retained only in the source text.]

2357. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-1511001512340001@a3a05603.sympatico.bconnected.net>
Source record: 176377

In article <3A12B0AE.F9CA8203@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Brian Kelly wrote:
> > Tuning around with my aunt's big old Philco "all-wave" console rcvr at
a tender age was
> > definitely the genesis point of ham radio for me.
>
> Me too, Brian. I learned to copy CW on an old Philco like that. It didn't have
> a BFO but I learned to copy the Shussssssssh and Shush.

My aunt had an RCA console receiver that went up to about 18 Mc/s (as they said in those days). Shortly after the end of WW2 I started listening to the ham bands on it. I soon got tired of what I heard on the phone bands -- some things never change -- and I wanted to try to learn to copy code. I solved the BFO problem by putting an all-American 5-tuber on top of the RCA and tuning the little radio so that a harmonic of its local oscillator would beat against the CW signal I wanted to copy. The only trouble was that if I wanted to QSY I had to tune both receivers. Eventually I saved up enough money to buy a beat-up used Hallicrafters S20R and I said goodbye to the big old RCA (which was built about the same time as I was). Soon thereafter in 1949 I got my class B (what they used to call General class) ticket, and my Extra in 1955.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

2358. looking for used tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: don lewellen <dlewelle@leru.net>
Message-ID: <HZEQ5.599$xb1.36086@eagle.america.net>
Source record: 176378
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.ham-radio,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.swap

hi just found this great group am looking for used tower iam in mo thanks
don

--

,
>
>
> >
> >
> >
>
>
>
>

2359. Re: Cushcraft R-6000 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001115183301.06976.00001730@ng-fy1.aol.com>
Source record: 176379

Jesper--

The R6000 won't work on the ground. It can't work on the ground because it isn't designed to work on the ground. The counterpoise rods have to be about 8-10 feet above the ground. Put it on a 10-foot pole, and unless it's broken or assembled incorrectly, it ought to work okay!
Of course, if it's set up 5-10 feet away from a house with aluminum siding or some similar scenario, then it will be de-tuned by all that metal.

Don't try to redesign unless you're extremely savvy about those things.

Rick K1BQT

2360. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A13185F.3946@pacbell.net>
Source record: 176380

Jeffrey Steinberg wrote:
>
> I agree. But, let me say, I have been a firm beliver in the application
> of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
> while a scientist for IBM in (I think) 1984/85.
>
> While I disagree with the tone an type of posts by Dr. Cohen I hope this
> newsgroup does not write off this interesting application of fractals.
>
> Are they better or worse than other antennas? I have no idea. But what ham
> radio is all about is testing, experimenting, improving and let others know
> about the results.
>
> I for one say lets keep on hearing about these interesting developments, but
> lets keeps it at a scientific level, without insults, threats, etc. from all
> party's concerned.
>
> I would hate for this newsgroup to translate its fustration with Dr. Cohen into
> the belief that there is no merit in fractal technology. There may be, but
> sometimes the most interesting advances come from such disruptive/different
> viewpoints.
>
> --jeffrey steinberg, KC2GUC, Scarsdale, NY
>

It's a bit difficult to carry on a discussion about anything when
one of the disputants threatens the others with lawsuits, and
links their posts with Nazi propaganda. If both sides don't agree
to disagree in good faith, then any discussion will eventually
deteriorate into childish chaos.

Attempts have been made, believe it or not, to investigate the
nature of fractal antennas by some contributors to this newsgroup.
You may want to look in dejanews to see how they were rewarded for
their efforts. Some of us would like to see more serious discussion
of all types of new antennas, but the future looks bleak in this regard
due to the infestation of trolls.

Tom Donaly KA6RUH

2361. 160/80 Dipole Parallel or Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Birken Vogt <vogt@oro.net>
Message-ID: <3A1328C5.1AA8C304@oro.net>
Source record: 176381

I have been considering an antenna for 160. I have been modeling different ones with EZNEC/Demo. I had been considering an inverted L but the nulls bug me and the gain doesn't seem that good, even though I can only get the dipole up about 50 feet. Then the idea struck me to do some kind of combination. I have a trap modeling program (called TRAPDIP) but EZNEC gives me very odd impedances and patterns on 80 off of center frequency which I have as 3.795. The parallel dipole solution seems better but I don't know how to construct it, what to use for spacers.

Any hints?

Birken
KE6DLT

2362. Re:PrimeCase (was Nathan Cohen)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A132776.979634FE@hiwaay.net>
Source record: 176382

Chip is right- lets change the subject to PrimeCase, the real lowlife in
this thread. His TROLL was pretty stupid, ill-timed, and worthless,
while being very irritating.

Bill-W4BSG

Fractenna wrote:
>
> I request that you cease and desist invoking me in said public discussion.
>
> Thank you for your assistance in this matter.
>
> Nathan Cohen, Ph.D.

2363. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <ntGQ5.31434$Ds3.282868@e420r-sjo3.usenetserver.com>
Source record: 176383

Jokes are jokes, but don't forget that the three letter code groups known as "Q" signals are defined by international treaty.
They have the advantage that they translate thw same in any language. QRM means " I am being interfered with" around the world.
w4mb

2364. Re: Cushcraft R-6000 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8uvcd0$9bj$1@iac5.navix.net>
Source record: 176384

The 6000 won't work on the ground.

<jkristia@my-deja.com> wrote in message news:8uucm2bfh1@nnrp1.deja.com...
> I have recently purchased a R-6000 from Cushcraft. The reason I decided
> to go for a vertical is that I only have 5x6 meters on my patio, and
> thats all the space I have available.
>
> The antenna is placed directly on the ground, and it doesn't work at
> all. It is absolutely dead. The interesting think though is that if I
> connect the cable directly to the antenna instead of through the
> matching network, I have a fine (everything is relative, right !!)
> signal, but through the network and it is dead. So I blamed it on the
> network and returned it to Cushcraft for replacement. Yesterday I
> received a new network, and this time I was sure it was gonna work, but
> big big disappointment, dead dead dead.
>
> Now my question is, shouldn't it be at least as good a signal as when
> the cable is connected directly to the antenna ?, and should it work
> (not good, but still work) when it is placed directly on the ground ?.
>
> I will appreciate you answer.
>
> Jesper - W6KTO
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2365. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8uvcbj$24b$1@slb2.atl.mindspring.net>
Source record: 176385

He did nothing to provoke your post. I have my own feelings about the man, but NOTHING has been posted other than a (now)successful troll to start things back up. In this case you are the problem as NC has made no statement warranting this new attack. And yes, I do see this as an unprovoked attack. The guy hasn't even been posting for a week other than to comment (quite civilally I might add) about the cost of keeping extra antenna parts and now to ask that he be left alone. If he 'acts up' and you feel you must comment on something he said then do so. Don't try to pick a fight after things calm down.just so you can show how tough you are behind a keyboard using events that are over to justify your actions.

2366. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8uvd7otcg1@slb3.atl.mindspring.net>
Source record: 176386

"KB9WFK" <KB9WFK@mindspring.com> wrote in message
news:8uvcbj$24b$1@slb2.atl.mindspring.net...
> He did nothing to provoke your post. I have my own feelings about the
man,
> but NOTHING has been posted other than a (now)successful troll to start
> things back up. In this case you are the problem as NC has made no
> statement warranting this new attack. And yes, I do see this as an
> unprovoked attack. The guy hasn't even been posting for a week other than
> to comment (quite civilally I might add) about the cost of keeping extra
> antenna parts and now to ask that he be left alone. If he 'acts up' and
you
> feel you must comment on something he said then do so. Don't try to pick
a
> fight after things calm down.just so you can show how tough you are behind
a
> keyboard using events that are over to justify your actions.
>
Civilly.. Ok so I forgot to spell check.......Stand back or I'll do it
again! :-)

2367. Re: Pseudoscience and CFA Supporter Chris Trask

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8uvf0c$g4o$1@slb6.atl.mindspring.net>
Source record: 176387

Oh well.. I tried. Let the sniveling and flaming commence.

2368. Re: Sharing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8uvil6$hk4$1@slb7.atl.mindspring.net>
Source record: 176388

Mark:

Quoting Nathan, Ward and June might say that it is "snake oil".

-Peter K1PO

"Mark Keith" <nm5k@wt.net> wrote in message news:3A0B8C99.9B@wt.net...
> OPSEC@opsyhopsy.com wrote:
> >
> > x-no-archive:yes
> >
> > The students at BU might be interested in this discussion. There
> > was an article on the subject in the campus newspaper. It's in the
> > archives at - -
> >
> > http://www.bu.edu/bridge/archive/1998/12-11/features3.html
> >
> > The campus newspaper is The Bridge. You can email them at <bridge.
> > bu.edu>
>
>
> Hummmmm, Looks like the beaver to me. I wonder what Ward and June would
> think about all this. MK
> --
> http://web.wt.net/~nm5k

2369. Re: Jan Anker

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <4akvu8.c6o.ln@mail.specsol.com>
Source record: 176389

Fractenna <fractenna@aol.com> wrote:

<big snip>

> From now on I will create a thread with each person's name, who declines
> earlier request NOT to use Nathan Cohen' as a thread name.

> Thank you.

> NC

That would be interesting to say the least. However, you haven't a clue
what a thread is; you have not started a new one.

And I agree the guy that started this thread should be whipped with a
fractal antenna for rousing the sleeping dog.

Jim Pennino

2370. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: gervais <gfillio1@globetrotter.qc.ca>
Message-ID: <fNIQ5.806$Bm.13786@news.globetrotter.net>
Source record: 176390
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Well,i just happen to have an AP8 VERTICAL HF.
it is suppose to support big winds and this week end it turn his nose down.
it has been build fragile .
i bought used i must say,but i thaught i have a good antenna,i am
dasapointed.

if i kwew ,i would havebaught another one from ,other co.

gervais,ve2ckn

thay are built fragile for my region.
Easter Quebec,cold and windy

2371. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A135E3D.4600@bellsouth.net>
Source record: 176391
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I have the same antenna, Gervais. This is the one I called about some years ago. The fellow was surly, a smart aleck, condescending, and by the time I got off the phone I was so mad, if I'd have been at his counter in person, I'd have snatched him over that counter and smacked him up against the wall! He was THAT bad! I just hung up. BTW, I have the antenna on the roof, guyed with rope, and I only use it as a receiving antenna for my standard 24 hr clock!

Jerry
K4KWH

gervais wrote:
>
> Well,i just happen to have an AP8 VERTICAL HF.
> it is suppose to support big winds and this week end it turn his nose down.
> it has been build fragile .
> i bought used i must say,but i thaught i have a good antenna,i am
> dasapointed.
>
> if i kwew ,i would havebaught another one from ,other co.
>
> gervais,ve2ckn
>
> thay are built fragile for my region.
> Easter Quebec,cold and windy

2372. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A136517.A9608431@IEEE.org>
Source record: 176392

BarryG wrote:
> How high off the ground is that bottom wire of the loop Cecil?

The height of the antenna minus 30ft. Mine was about 10ft off
the ground. Note that the two current maximum points are about
25ft off the ground. One voltage maximum point (mostly electric
field) is ten feet off the ground.
--
A Real Man shouldn't need to depend on pregnant chads.

73, Cecil, W6RCA

2373. FS: Jennings Vacuum Variable

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Boyd <boyd@humboldt1.com>
Message-ID: <UZJQ5.243$JU31.11927878@news.randori.com>
Source record: 176393
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

I have a Jennings USLS 465 Vacuum Variable. Comes
with bell and mounting bracket.

$85.00 Shipped & insured "US"

Reply to: boyd@humboldt1.com

Boyd W6DSB

2374. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <C3MTOu=8Mp7N3aFaHdz3NSTC2s5Z@4ax.com>
Source record: 176394

On Wed, 15 Nov 2000 12:26:23 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Richard Harrison wrote:
>
>> Jim, AC6XG wrote:
>> "I`ll bet the flashlight would be even brighter were you to hold it
>> right up to your eye."
>
>> I`d bet with you on that. Every experiment with a flashlight involves
>> the very far field.
>
>Your point is actually somewhat valid, but not for that reason. The
>mirrorred reflector behind the lamp, and the baffling at the front of
>the flashlight help to collimate the light into a beam. So in effect
>the lamp filament does not act as a true point source, and it's light
>intensity does not fall off as rapidly with distance as it would
>otherwise (in the far field).
>
>> The behavior of an antenna and the ground under it is declared to be for
>> practical purposes exactly the same as it would be in cooperation
>> between an antenna and its image in the ground, with the ground removed.
>
>> Coupling between parallel antennas decreases as the antennas are moved
>> apart.
>
>> Parallel elements used as parasitic directors or reflectors in a
>> 2-element beam are usually spaced no more than 1/4-wavelength from the
>> driven element so that they receive enough energy to be effective. When
>> a director`s spacing is increased from 0.2 wavelength to 0.4 wavelength,
>> the power gain drops by 3 db or more. Doubling the separation halves the
>> power gain.
>
>> raising the horizontal dipole above ground must induce less current in
>> the ground and thus reduce lobe amplitude and null depth, just as
>> increased element separation would in a parasitic array which had no
>> affiliation with the ground.
>
>My comment referred only to your experiment. Any amount of light lost
>in reflection would certainly not be detectable by eye.
>
>73, Jim AC6XG

Hi Jim, All,

I love it when light is drug into the wave phenomenon of RF.

Having design many photometers, one of the principal pains in the *** was fresnel loss (mostly because I worked with pulsed systems). Like earlier debates of the mismatched source line and load, there is absolutely no such thing as a perfect absorber (load) and there is absolutly no such thing as a perfect transmitter (interface or lossless transmission line). The upshot of this all is in response to the last line quoted above. All interfaces reflect some power, even the best could qualify as quite bright in reflection depending upon the amount of light illuminating it.

As to being detectable to the eye. If there someway to correlate that light, or other wise reduce distracting illumination; some of the faintest of sources could be seen in reflection. 1 uW/mm^2 with a Lambertian field is very bright in a dark room. One would need only a 1 W bulb directed through an exquisitely transparent pane to see a red filament in reflection.

The eye is quite capable of coping with reducing that power several orders of magnitude and observing that reflection still being visible. The threshold of perception easily eclipses much of science's best equipment.

73's
Richard Clark, KB7QHC

2375. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <c5V47AA51wE6EwQU@ifwtech.demon.co.uk>
Source record: 176395

Reg Edwards wrote:
>What about the number of occasions when there's TVI with a choke which
>disappears when the choke is removed ?
>
How often does this happen, compared with the much larger numbers of RFI problems that chokes can cure?

>If you don't suffer from TVI do nothing. If you do suffer then just
>move something. First try moving the TV.

Is it justifiable to wait until the family and/or the neighbours complain, before fixing the interference by methods that *could* have prevented it?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2376. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: gcouger <gcouger@NoXSPAM.mercury.rfdata.net>
Message-ID: <xlsQ5.564$vn5.1787@newsfeed.slurp.net>
Source record: 176460

Chip may be extremely abrasive but he is far form a fool. It take two to make an argument so Chip is not the only one causing the problem. All parties seem ready to go.
--
Gordon W5RED
G. C. Couger gcouger@provlue.net Stillwater, OK

<primecase@my-deja.com> wrote in message
news:8us4ve$i7m$1@nnrp1.deja.com...
: Someone once said to me, "Never argue with an idiot, they drag you down
: to their level and then beat you with experience" Phd or not, the guy
: is still an idiot and more to the point he thinks we care about his so
: called intellectual property. You never see Mr Yagi yelling on these
: newsgroups. Grow up and get a life!
:
: Kevin J Wren
:
:
: Sent via Deja.com http://www.deja.com/
: Before you buy.

2377. How has Ham radio helped you?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: gcouger <gcouger@NoXSPAM.mercury.rfdata.net>
Message-ID: <4FsQ5.569$vn5.1965@newsfeed.slurp.net>
Source record: 176461

I am trustee for W5YJ the club station for Oklahoma State University. We find ourselves about out of student members as is happening more and more often. In looking for reasons for kids to get their ticket several of us got to talking about what ham radio had done for us. My son got he first job in Silicone Valley because the guy that was going to be his boss was a ham. The faculty adviser jumped two grades when he joined the navy. I found it helped me a lot in developing wireless computer links.

I would greatly appreciate short emails that give examples of how ham radio help you in you professional lives. Particularly recent grads. But stories from the old war horses on the group are welcome as well. The will be posted to a web the club web page temporally located at www.couger.com/W5YJ since the owner of the proper page has gone trucking and taken the passwords with him. It will find a proper home as soon a possible.

I know ham radio help in the professional world. The greater the effort in ham radio the greater the pay off in the real world. I want to show the kids that there is something that they can do that is not difficult, fun, a service to the community and valuable to their careers. We are facing a real crisis competing wiht the internet for the kids and even the old farts our local nets have dropped to 25 to 50% of what they were PN(Pre Net). The station started out as 5YJ and I don't want to see it die on my watch.

The pages and testimonials I put together will be available for all to use. And if anyone has any ideas on how to recruit new kids I am all ears.

I know this not the right group but it is the only one I follow any more.

Thanks
--
Gordon W5RED
G. C. Couger gcouger@provlue.net Stillwater, OK

2378. Re: Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a126519_2@news1.vip.uk.com>
Source record: 176462

john hurst wrote in message <3A12152A.ABA54607@gte.net>...
>David, I was in a similar situation in a hotel room 10 years ago at Disney
>world. I used capacity coupling through the glass using about a square foot
of
>aluminum foil on both sides of the window

Thanks for the reply John,

I did consider this idea, as per my second post, but there were two problems
which I could see immediately;

1. I didn't bring too many tools, so making up the foil capacitor idea might
prove a challenge and;
2. The windows are double glazed, so the air gap, plus two sheets of glass,
will increase the capacitance quite a bit.....

I may pop by the supermarket on the way back to my hotel tonight for some
foil, and see if I can find a way of attaching my copper wire to the
aluminium foil.

As I used to be an engineer with one of the electricity utility companies, I
don't underestimate that problem.......

Cheers de Dave (G0DJA)

2379. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Fred <Fredmp@megsinet.net>
Message-ID: <3a127208$0$93849$1dc6e903@news.corecomm.net>
Source record: 176463
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bought an R-7000 a couple of years ago at Hamvention in Dayton. Never could
get it to tune. No help from Cushy on that one either. It still don't
work. Been laying up in the attic in the original box for a year now.
Never again will I buy one of their products, after buying many of them over
the years. Terrible customer service and equally terrible attitude when you
try to get an answer from them.
Nuff said
Fred KE8TQ
plmills@attglobal.net wrote in message <3A11C2D3.A8A62890@attglobal.net>...
>Hello to all,
>
>First let me say that up until now I've been a happy camper
>using Cushcraft products. However, I've just learned something
>that may be of interest to anyone considering purchasing a
>new Cushcraft antenna.
>
>I recently bought an R-8 vertical. It was just damaged by
>lightning and I e-mailed Cushcraft tech support regarding
>parts availability....the answer was 2 sentences that suggested
>I buy a new antenna and try to collect on insurance. Needless
>to say, I was not happy with that so I wrote a letter to the
>Cushcraft manager of amateur products. This gentleman was kind
>enough to telephone me today. Essentially, the conversation
>focused on the fact that the parts I needed would be so expensive
>as to make buying a new antenna more practical. However, one
>interesting fact did come to light. Parts for the R-8 vertical
>had not been "priced" yet and were thus unavailable. Further,
>Cushcraft does not "price" replacement parts until the product
>has been out for 9 to 12 months. I'd suggest you keep this
>in mind....if you drop your new R-8 or new whatever, you may
>not be able to get parts for it for up to a year!!
>
>thanks & 73,
>Phil
>W5BVB

2380. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: david_j_windisch@my-deja.com
Message-ID: <8utteg$um4$1@nnrp1.deja.com>
Source record: 176464

Aluminum welding wire works fine and may be
easier to find in urban areas.

K3BHJ

In article <3A1141C6.A335A89E@chorus.net>,
darryl@chorus.net wrote:
> Hi All,
>
> Does anyone know a source for Hardened aluminum
fence wire in bulk, 1000
> feet+?
>
> I have heard of stations using it for LPA's and
exremely long, random
> wires etc?
>
> tnx
>
> Darryl
> KB9NAO
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2381. Re: Mobile antenna mount on hood

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: zeppss <zeppss@hotmail.com>
Message-ID: <DuvQ5.598$vn5.2781@newsfeed.slurp.net>
Source record: 176465

I'll be getting a longer antenna because my mobile rig also has 6 meters,
and I'm hoping the antenna gain will more than compensate for the lower
mount location. The fold-over feature solves the garage problem. Thanks
for the info.

Martin Walker <mbwalker@netonecom.net> wrote in message
news:3a0f7010$0$83473$45beb828@newscene.com...
> I have a setup like you describe on my Ranger pickup. It's a lip mount at
> the left/rear edge of the hood with a 49" dual band MFJ-1412 antenna. It
> allows me to pull in my garage and just barely hit the 7' tall door
opening
> with the antenna. Performance is good but not necessarily any better than
> what others in this area get (on 2m) using a simple 1/4 wave antenna
mounted
> in the roof.
>
> Martin
> KC8CFP
>
> zeppss <zeppss@hotmail.com> wrote in message
> news:k2pP5.397$Bi3.639@newsfeed.slurp.net...
> > I have an S-10 pickup truck, the new style without drip rails, and have
> been
> > using a magmount (6m, 2m, 70cm). I plan to get a 60" antenna soon, and
> don't
> > want a bigger magmount to hold it. A hole through the roof is not
> > acceptable,
> > the bed has a fiberglass lid on it, and a hitch mount looks like it is
too
> > low relative to the body. I am thinking of using a lip mount somewhere
on
> an
> > edge of the hood, maybe the back edge. (RF exposure would not seem to be
a
> > problem: most of my mobile use is of short duration at 5 watts,
> > max. 50w and 35w, and the antenna would extend well above the
roofline.)
> >
> > Anyone have a similar setup, or care to make suggestions?
> >
> >
> >
> >
>

>

2382. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A128FB1.C7436E32@IEEE.org>
Source record: 176466

"Ian White, G3SEK" wrote:
> 1. You don't need a balun, strictly speaking, because both sides
> (antenna and coax) are unbalanced. However, you *do* need a feedline
> choke to keep surface currents from flowing onto the coax and down into
> the shack. The type of antenna you're using is one of the worst for that
> problem.
>
> Exactly the same feedline choke could also be used as a 1:1 "current
> balun" in a balanced/unbalanced transition. It can be as simple as a
> flat coil of the coax that you're using already. Details are in the ARRL
> Antenna Handbook and probably the main Handbook too.
>
> 2. I have no idea why Doc says that baluns do not stop RFI/TVI.
> Thousands of people have proved that they do.
>
> If the RFI/TVI wasn't going to happen anyway, a feedline choke can still
> be useful in reducing RF noise pickup. At the very least, you'll have
> the satisfaction of knowing that your feedline isn't behaving as part of
> your antenna.

Very nice posting, Ian. A 1:1 choke can be used as a balun or a unun
to reduce common-mode currents.
--
http://www.mindspring.com/~w6rca

2383. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Richard Miner <ab2aj@fcc.net>
Message-ID: <t156cbrr5eej77@corp.supernews.com>
Source record: 176467
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Cushcraft tech support and warranty is on better. Do not even think about a warranty claim cushcraft will run you around and do nothing until you file a legal claim, which most people will not do for a couple hundred dollar product..
K4RGM
<plmills@attglobal.net> wrote in message
news:3A11C2D3.A8A62890@attglobal.net...
> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2384. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: k5dh@raytheon.com
Message-ID: <iOwQ5.61$y23.1755@dfw-service2.ext.raytheon.com>
Source record: 176468
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
cholloway14@home.com says...
>
>Check out this "Important notice" on Benchers (Butternut) page;
>http://www.bencher.com/notice.html
>Sounds like "if you break it you buy a new one" policy applies for other
>Cushcraft antennas as well.

As they point out on the above-referenced page... parts are
still available for every Butternut antenna model they've
ever made! Their customer service is excellent. I've had
an HF-6V for over 15 years, and on the rare occasions that
I've needed parts or advice, they have been there for me.
Based on everyone else's experiences with Cushcraft, looks
like they'll never get any of my money.

73,
Dean, K5DH
Visit my amateur radio web site at http://www.qsl.net/k5dh

2385. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A12ACCE.6C015C1F@dvol.com>
Source record: 176469

Dick Carroll wrote:

> Brian Kelly wrote:
>
>
> > I'll tellya how far back I go, I remember when the local gendarmes were on AM just above
> > our 160m band with big base-loaded whips.
>
> Lots of the old BC AM radios had that frequency marked at the top of
> the dial.

>
Tuning around with my aunt's big old Philco "all-wave" console rcvr at a tender age was definitely the genesis point of ham radio for me.
>

> That was the station-to-car frequency, of course.

>
Strictly the neighborhood patrol guys.
>
Off on an aside here the big advantage of that old system was that everybody could hear everybody, there were no municipal or jurisdictional borders on the radios, perps crossing municipal and county lines couldn't beat the radio, the next jurisdiction simply picked up the
pursuit, etc. As you know eventually they moved it all to separate departmental vhf freqs and
all of a sudden the only connections between departments were the dispatchers with telephones
which introduced a lot of time delays and frustration, etc. Went on for decades. In this sense
the old AM freqs were much better than the new-fangled vhf FM systems. Around here today everybody is now trunked to everybody else with 6 inch antennas and it's finally back to what
usta be a half century ago. I guess, I haven't paid any attention to it for years.
>

> The CW net
> operated behind the scenes, handling the interdepartmental traffic both
> near and far, and lots of relaying took place.
> When I hired on to the Missouri Highway Patrol in early '65 to work in
> a district HQ, we still had all the CW gear in place and functional,
> although a newly installed Model 28ASR TTY now handled the traffic that
> had long been handled by CW. The Chief Op fired up the Collins autotune
> xmtr and tested it ever couple weeks with the state HQ station, which

> itself still handled lots of CW traffic routinely, since Missouri was a
> primary relay station for traffic headed both east and west and many
> other departments had not yet made the transistion to wireline TTY.

>
None of that would fly today, the bean counters and budgeteers would go nuts because money did not change hands for services rendered.
>

> I
> was tested on my CW skills as a part of my employment testing but was
> never assigned where it was in current use.
> After a year or so of proving the viability of the wireline TTY
> circuit, the CW transmitter and its antenna were removed, but we
> retained the console mounted receivers (two National RCL's) and the
> receive antennas (dipoles on 50 ft utility poles out back). We still
> used the receivers to check time signals from WWV. (And on boring late
> night shifts when things were quiet, some of us were known to tune in a
> ham CW band to help while away some of the slow hours <g>).

>
Whatta big surprise. I got into the radio room of the USS America late one nite on a shakedown
cruise around 1965 and sure enough there was a CPO beeping away on 40m.
>

> The upright Collins transmitter (can't remember the model number but it
> ran an 813 tube in the autotuned final) stood tall behind the dispatch
> console and fed a longwire which came right into the radio room through
> a insulated feedthrough directly to the top of the transmitter. Outside
> the radio room, the longwire sloped up to an attach point on the side of
> the 350 ft freestanding tower.

>
Ew, that antenna should have "talked".
>

>
> The HQ station in the state capitol ran two large Wilcox transmitters
> which used 750TH tubes in the finals and used several variations of
> Hammarlund receivers with dipole antennas. I was a part of the crew that
> removed all the CW equipment and antennas from that station in 1976. At
> the time it never occured to me to note how the old CW net came to a
> close, who was the last to use CW, and all that. Now I wish I had payed
> more attention.

>
Hindsight is always 20-20 a quarter century later.
>
Somebody gotta pick your brain and document your experiences, too.
>
Tnx

>

> Dick

>
Brian

2386. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A12ACFC.342F17DE@dvol.com>
Source record: 176470

J1aguiar wrote:

> >
> Some years ago I had a three element Cubex quad using a Q match, lengh of 72
> ohm coax, and had many instances when static charges would build up on the coax
> inside the house. So bad it was impossible to get near the coax as these blue
> balls of fire would strike out at me.

>
I never saw anything like that, musta been a whole bunch of fun!
>

> I solved the problem by installing a
> gamma match to the driven element " plumbers delight", the driven element was
> now at ground dc ground. Jim

>
OK, good. I'm about to become a quadhead and this is good input. I think Cecil also
has a good solution with his RF choke suggestion.
>
w3rv

2387. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8uu7b0lrq1@iac5.navix.net>
Source record: 176471

Nathan has absented himself from the group in recent days, your attempt to stir him up is despicable.

<primecase@my-deja.com> wrote in message news:8us4ve$i7m$1@nnrp1.deja.com...
> Someone once said to me, "Never argue with an idiot, they drag you down
> to their level and then beat you with experience" Phd or not, the guy
> is still an idiot and more to the point he thinks we care about his so
> called intellectual property. You never see Mr Yagi yelling on these
> newsgroups. Grow up and get a life!
>
> Kevin J Wren
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2388. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <qna51t85i63unn2f4vjjo8hsgarc1blobm@4ax.com>
Source record: 176472

On Tue, 14 Nov 2000 20:44:23 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>W2WX wrote:
>>
>> Am looking for lengths and construction/hanging suggestions for a delta loop
>> for 75/80 meters. Have no experience with one. Please email a reply. Thanks,
>> Steve, W2WX w2wx@aol.com
>
>How about a 75m loop that fits in the space of a G5RV and has a 50 ohm
>feedpoint impedance? http://people.delphi.com/cecilmoore/rect80m.htm

Cecil, I didn't see a ground plane of any sort in your model. Is it
implied?

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2389. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8uual9$na4$1@iac5.navix.net>
Source record: 176473

"Fractenna" <fractenna@aol.com> wrote in message
news:20001114210706.20396.00001434@ng-bj1.aol.com...
You are absolutly correct, the problem is , as you have so aptly pointed
out, the high cost of labor. The mimimum wage is now higher than my starting
wage out of engineering school. It is easy to make comments about customer
service! I wonder if any of those so outraged ever owned a business.

> I imagine the 'high price' for distinct parts is not meant to 'rip off' or
> discourage anyone, but is a true reflection of the costs to keep these
parts on
> hand. The lack of availability, until a year or more has gone by,
represents a
> realistic sense of a minimum number of parts in inventory to keep even
those
> expensive prices from being astronomical. In other words, you must have a
NEED
> to even think of making an inventory.
>
> Its not 1965 anymore, and the labor costs in China, Mexico, and Asia are
so
> much lower that even paying (just)someone stateside to keep parts
inventory
> costs $70-100K per year overall. Now figure out how many traps or hose
clamps
> or tubing sections you need to sell , even at high costs, to break even.
And
> that's just for the costs of one employee!
>
> 73
> Chip N1IR

2390. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uubnd$ao6$1@nnrp1.deja.com>
Source record: 176474
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <KblQ5.65$Z3.66949@newsfeed.intelenet.net>,
"dentronman" <w9jcm@.reno.quik.com> wrote:

> on that note i think i will go with the HY-Gain Verticl

HyGain is now owned by MFJ (Mighty Fine Junk).

Sent via Deja.com http://www.deja.com/
Before you buy.

2391. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uuc2oaub1@nnrp1.deja.com>
Source record: 176475
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
"Cliff Holloway" <cholloway14@home.com> wrote:

> Check out this "Important notice" on Benchers (Butternut) page;
> http://www.bencher.com/notice.html

Misleading and underhanded slam at their competitor. Bencher gets no
more business from me.

73, Hans, K0HB

--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2392. Re: Antenna Tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8uubclnke1@news.kabelfoon.nl>
Source record: 176476

Check this out:

http://www.eham.net/reviews/products/3

I hope it can help you to make the right choice.

Adam

WE0H <mikereid1@uswest.net> schreef in berichtnieuws
SVoQ5.2346$y24.394488@news.uswest.net...
> Is the MFJ 969 tuner a good tuner? How about the Yaesu FC 901?
> Thanks, Mike.
>
> --
> Mike Reid
> WE0H
> mikereid1@qwest.net
>
>
>

2393. Cushcraft R-6000 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: jkristia@my-deja.com
Message-ID: <8uucm2bfh1@nnrp1.deja.com>
Source record: 176477

I have recently purchased a R-6000 from Cushcraft. The reason I decided to go for a vertical is that I only have 5x6 meters on my patio, and thats all the space I have available.

The antenna is placed directly on the ground, and it doesn't work at all. It is absolutely dead. The interesting think though is that if I connect the cable directly to the antenna instead of through the matching network, I have a fine (everything is relative, right !!) signal, but through the network and it is dead. So I blamed it on the network and returned it to Cushcraft for replacement. Yesterday I received a new network, and this time I was sure it was gonna work, but big big disappointment, dead dead dead.

Now my question is, shouldn't it be at least as good a signal as when the cable is connected directly to the antenna ?, and should it work (not good, but still work) when it is placed directly on the ground ?.

I will appreciate you answer.

Jesper - W6KTO

Sent via Deja.com http://www.deja.com/
Before you buy.

2394. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A12B0AE.F9CA8203@IEEE.org>
Source record: 176478

Brian Kelly wrote:
> Tuning around with my aunt's big old Philco "all-wave" console rcvr at a tender age was
> definitely the genesis point of ham radio for me.

Me too, Brian. I learned to copy CW on an old Philco like that. It didn't have a BFO
but I learned to copy the Shussssssssh and Shush.
--
http://www.mindspring.com/~w6rca

2395. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A12B2CE.95A72F43@IEEE.org>
Source record: 176479

Jake Brodsky wrote:
> Cecil, I didn't see a ground plane of any sort in your model. Is it
> implied?

Unlike a monopole, it doesn't require a wire ground for operation
because it is a full-wave loop. Of course, the better the ground
the better the performance. It was modeled over average ground
using EZNEC. In its favored directions, it has more gain than
a 1/4WL monopole with radials, a lower take off angle than a
dipole at the same height, and fits in the space of a G5RV.
--
73, Cecil, W6RCA, OOTC http://www.mindspring.com/~w6rca

2396. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: ham <no@sp.am>
Message-ID: <3A12B61E.65ACA8FE@sp.am>
Source record: 176480
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I tried a year or two ago to get parts or even information about the matching box at the bottom of an R7 Cushcraft. Since I bought it used, it would never work on other than the two highest bands. Couldn't even get an SWR minimum anywhere else. I finally, in disassembling it in disgust heard a rattle in the box as I moved it and discovered a broken toroid in the matching box.

Over a couple of weeks after several attempts to contact their service department both by phone and by e-mail I finally received a phone call from a gentleman. The bottom line was that they would give me NO information about the broken toroid, would NOT sell me a toroid, could/would NOT test traps or other parts which which he said might be bad and they'd be glad to sell me the WHOLE MATCHING BOX for well over $100. They "used to" have a test rig to test traps but they moved it to "production" now and can't test traps.

Cushcraft used to be a very fine company to deal with and if one had a problem they'd go out of their way to help and even have sent me parts free for antennas out of warranty. Now they have a DEAL FOR YOU and it's going to cost you LOTS OF MONEY and you aren't likely to want to take advantage THEIR DEAL FOR YOU when you call with a problem.

I will NEVER AGAIN buy anything made by Cushcraft. They just plain don't care anymore about customer satisfaction or whether or not their products live up to their advertising hype.

Richard Miner wrote:

> Cushcraft tech support and warranty is on better. Do not even think about a
> warranty claim cushcraft will run you around and do nothing until you file a
> legal claim, which most people will not do for a couple hundred dollar
> product..
> K4RGM
> <plmills@attglobal.net> wrote in message
> news:3A11C2D3.A8A62890@attglobal.net...
> > Hello to all,
> >
> > First let me say that up until now I've been a happy camper
> > using Cushcraft products. However, I've just learned something
> > that may be of interest to anyone considering purchasing a
> > new Cushcraft antenna.
> >
> > I recently bought an R-8 vertical. It was just damaged by
> > lightning and I e-mailed Cushcraft tech support regarding
> > parts availability....the answer was 2 sentences that suggested
> > I buy a new antenna and try to collect on insurance. Needless
> > to say, I was not happy with that so I wrote a letter to the

> > Cushcraft manager of amateur products. This gentleman was kind
> > enough to telephone me today. Essentially, the conversation
> > focused on the fact that the parts I needed would be so expensive
> > as to make buying a new antenna more practical. However, one
> > interesting fact did come to light. Parts for the R-8 vertical
> > had not been "priced" yet and were thus unavailable. Further,
> > Cushcraft does not "price" replacement parts until the product
> > has been out for 9 to 12 months. I'd suggest you keep this
> > in mind....if you drop your new R-8 or new whatever, you may
> > not be able to get parts for it for up to a year!!
> >
> > thanks & 73,
> > Phil
> > W5BVB

2397. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A12B672.B9A13547@oio.net>
Source record: 176481

W2WX wrote:
>
> Am looking for lengths and construction/hanging suggestions for a delta loop
> for 75/80 meters. Have no experience with one. Please email a reply. Thanks,
>
> Steve, W2WX
> w2wx@aol.com

Steve,
The 'quick and dirty' answer is to find the total length
required for a full wave at the frewquency you want to
operate on. Divide that length by three, and you have the
lengths of the sides of a 'delta' loop. Divide by four to
get the lengths of the sides for a 'quad' loop. You don't
have to be exact, a little difference in the lengths of the
sides doesn't make a lot of difference one way or the other.
'Doc

2398. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <aJyQ5.128$g5.579587@news.ntplx.net>
Source record: 176482

Richard Harrison <richardharrison@webtv.net> wrote:

> Ed Hare, W1RFI wrote:

> "Suffice it to say that at great distance, the signal reflected off a
> mirror is at the same level as the light bulb and the level of the
> signal reflected off the mirror does not appear less bright than the
> bulb if the distance between the bulb and the mirror is changed, as long
> as the observation point is >> the distance between the bulb and the
> mirror."

> It`s true that the energy reflected from a perfect reflection point is
> the same energy that strikes the point. There is no loss.

> But, when the source is far away from the reflection point, the image in
> the reflector is small. Little energy arrives at a reflector to be
> reflected. The combined energies from the radiator and reflector are
> mainly those of the radiator.

IF one is close to the system being considered. As you say in the next
paragraph:

> Something different happens when the reflector is at great distance from
> the radiator. The paths from the direct and reflected rays can be about
> the same length as happens at the grazing point on a microwave path.
> Depending on phasing, the two rays can combine to produce as much as a 6
> db gain or a complete cancellation. The reflection is weak, but the
> direct ray is just as weak.

The latter sentence is key to this discussion -- in the far field (ie, very
far from the mirror), the reflected ray, which does attenuate slightly going
toward the reflector (the mirror) and the direct ray are at about the same
level. What counts, with a lossless reflection, is the total path length.
The total path length differs by 2h, where h is the distance from the
radiator to the reflector. If, as you say, the reflection is lossless
(remember, this discussion involves perfect ground), then the strength of
both signals is determined only by the total path lengths involve. Whether
they are additive or destructive depends on the phase relationship between
them.

> I just tried an experiment with a flashlight and a mirror which was
> inconclusive. The light reflected from the mirror was stronger with the
> flashlight closer to the mirror, but the total pathlength was changing
> considerably. The wavelength is very short indeed.

Yes, you must be far enough away that the path length does not change. You
must also ensure that the reflecting plane is large enough that all of the

energy from the flashlight illuminates the reflector. Do note, for the record, that becuase the total path length was changing, the effects you were seeing are not the same as if you were in the far field. Could this mean that you are in the radiating near field of the system when taken as a whole? :-) What is 2D^2/lambda of a flashlight? :-)

73,
Ed Hare, W1RFI

>
> Best regards, Richard Harrison, KB5WZI
>

2399. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fKyQ5.129$g5.579603@news.ntplx.net>
Source record: 176483

Richard Harrison <richardharrison@webtv.net> wrote:

> Actually, a questioner asked the dimensions for a 10-meter rhombic. I
> was foolish enough to supply the dimensions.

You were kind enough to supply the dimensions. The ensuing discussion has
been quite enjoyable for me.

73,
Ed Hare, W1RFI

2400. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A12AD75.1DD4@pacbell.net>
Source record: 176484

primecase@my-deja.com wrote:
>
> Someone once said to me, "Never argue with an idiot, they drag you down
> to their level and then beat you with experience" Phd or not, the guy
> is still an idiot and more to the point he thinks we care about his so
> called intellectual property. You never see Mr Yagi yelling on these
> newsgroups. Grow up and get a life!
>
> Kevin J Wren
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

While this may be an adequate troll on other newsgroups, it doesn't sink to the depths commonly found acceptable here. I suggest, that, if you want to stir something up, you do a little more research on past trolls to get a better idea of what works.

Tom Donaly KA6RUH

2401. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A12BD02.B63BD54C@earthlink.net>
Source record: 176485
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

hi phil
when it comes to lighting damage it is cost effective to replace the
antenna due to EM damage that may not show up right away as for the
fact that cushcraft doesnt have replacement parts for a new antenna its
the same way with most things i know GM and ford are that way with a new
car try and find a replacement part for a new production model car till
its been on the market awhile
good luck
oh and this comes from someone who is still waiting ion cushcraft to
send replacement parts for a 10 year old ant its been 4-5 weeks

73
plmills@attglobal.net wrote:

> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2402. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29346-3A12B799-31@storefull-117.iap.bryant.webtv.net>
Source record: 176486

A horizontal rhombic near ground and parallel to the ground produces an interference pattern with its image in the same manner as a horizontal dipole.

A 4-wavelengths per side rhombic may produce a main lobe at 12.5 degrees elevation angle when the rhombic is 1.18 wavelengths above ground, according to Ed Laport in "Antenna Engineering" (page 325).

The elevation angle of radiation from a horizontal rhombic comes down as its height in wavelengths above ground goes up. Laport shows less than 10 degrees elevation angle at a height of just a few wavelengths. At 180 wavelengths, I`d expect the elevation angle to be close enough to zero for practical purposes.

At 3 GHz, the frequency of my rhombic at an elevation of 180 wavelengths, the only radiation of interest is that occuring in the plane of the antenna wires. Ionospheric propagation is unlikely.

Arnold Bailey includes a horizontal rhombic in his catalog of antennas presented in "TV and Other Receiving Antennas". Bailey`s antennas are all scaled for 200 MHz. Bailey presents free-space radiation patterns and gain figures for all antennas with the understanding that height above ground can affect performance. But it makes no sense to present an antenna in a catalog in any other way.

Bailey`s 200 MHz rhombic is almost a 15 times scaled version of my 3 GHz rhombic.

I think that at 180 wavelengths above ground, my 3 GHz rhombic is little affected by ground reflection in its neighborhood. At the grazing point of a terrestrial path a reflection could affect a received signal, but this would be classed by most concerned individuals as a path problem, which any antenna would be subject to regardless of the antenna`s type.

Roy Lewallen may have wanted to make a point that an antenna several wavelengths in height would experience an interference pattern from its ground image. But 180 wavelengths above ground for propagation to a satellite overhead or to a terrestrial target on the horizon? The earth reflection will be nearly irrelevant, and Roy`s remark was gratuitous.

Best regards, Richard Harrison, KB5WZI

2403. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a12be86.6439333@news1.pei.sympatico.ca>
Source record: 176487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Fred" <Fredmp@megsinet.net> wrote:

I'm really amazed to hear all this badmouthing of Cushcraft, mind you I have NO experience with them but you seldom hear this amount of horror stories about a commercial outfit unless they're really bad.

In my opinion it's not too brilliant of them to ruffle the feathers of a group like us...we can truly do them damage due to the nature of our hobby/service.

>Bought an R-7000 a couple of years ago at Hamvention in Dayton. Never could
>get it to tune. No help from Cushy on that one either. It still don't
>work. Been laying up in the attic in the original box for a year now.
>Never again will I buy one of their products, after buying many of them over
>the years. Terrible customer service and equally terrible attitude when you
>try to get an answer from them.
>Nuff said
>Fred KE8TQ
>plmills@attglobal.net wrote in message <3A11C2D3.A8A62890@attglobal.net>...
>>Hello to all,
>>
>>First let me say that up until now I've been a happy camper
>>using Cushcraft products. However, I've just learned something
>>that may be of interest to anyone considering purchasing a
>>new Cushcraft antenna.
>>
>>I recently bought an R-8 vertical. It was just damaged by
>>lightning and I e-mailed Cushcraft tech support regarding
>>parts availability....the answer was 2 sentences that suggested
>>I buy a new antenna and try to collect on insurance. Needless
>>to say, I was not happy with that so I wrote a letter to the
>>Cushcraft manager of amateur products. This gentleman was kind
>>enough to telephone me today. Essentially, the conversation
>>focused on the fact that the parts I needed would be so expensive
>>as to make buying a new antenna more practical. However, one
>>interesting fact did come to light. Parts for the R-8 vertical
>>had not been "priced" yet and were thus unavailable. Further,
>>Cushcraft does not "price" replacement parts until the product
>>has been out for 9 to 12 months. I'd suggest you keep this
>>in mind....if you drop your new R-8 or new whatever, you may
>>not be able to get parts for it for up to a year!!
>>
>>thanks & 73,
>>Phil
>>W5BVB

>
>

--
Gord Beaman
PEI Canada.

2404. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A12C137.F928C099@mwci.net>
Source record: 176488

Cecil wrote:

> "Ian White, G3SEK" wrote:
> > 1. You don't need a balun, strictly speaking, because both sides
> > (antenna and coax) are unbalanced. However, you *do* need a feedline
> > choke to keep surface currents from flowing onto the coax and down into
> > the shack. The type of antenna you're using is one of the worst for that
> > problem.
> >
> > Exactly the same feedline choke could also be used as a 1:1 "current
> > balun" in a balanced/unbalanced transition. It can be as simple as a
> > flat coil of the coax that you're using already. Details are in the ARRL
> > Antenna Handbook and probably the main Handbook too.
> >
> > 2. I have no idea why Doc says that baluns do not stop RFI/TVI.
> > Thousands of people have proved that they do.
> >
> > If the RFI/TVI wasn't going to happen anyway, a feedline choke can still
> > be useful in reducing RF noise pickup. At the very least, you'll have
> > the satisfaction of knowing that your feedline isn't behaving as part of
> > your antenna.
>
> Very nice posting, Ian. A 1:1 choke can be used as a balun or a unun
> to reduce common-mode currents.

When the load is unbalanced, a current (choke) balun at the load helps to assure that the current that returns from this load is forced to return via the *inside* surface of the coax. It does this by creating a potential at the braid end of the load (because of its common mode impedance) that makes this current flow possible and makes the inner surface of the braid (shield) the "preferred" conducting surface. Any current that flows on the outside of the braid is basically a common mode current that can be troublesome.

Bill W0IYH

2405. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A12C161.FFF5191@mwci.net>
Source record: 176489

Fred Hambrecht wrote:

> Nathan has absented himself from the group in recent days, your attempt to
> stir him up is despicable.

Correct.

Bill W0IYH

2406. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20001115123420.18613.00001559@ng-fk1.aol.com>
Source record: 176490

Pete -

Let me also suggest that you run your feedline straight down from the antenna as far as you can before you turn it horizontally. I had quite a bit of RFI when I ran the feed horizontal at the base of the antenna. Now I run it straight down to the ground and then go horizontal. No more RFI.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2407. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jon Johnson <Jon.Johnson@Telocity.com>
Message-ID: <3A12C932.BEC4AF0A@Telocity.com>
Source record: 176491
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote regarding an "Important notice" on Benchers (Butternut) page;
> > http://www.bencher.com/notice.html
>
> Misleading and underhanded slam at their competitor.

In what way? Sounds like the non-support for older models is a fact.

2408. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uujan$hj6$1@nnrp1.deja.com>
Source record: 176492
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <3A12C932.BEC4AF0A@Telocity.com>,
Jon Johnson <Jon.Johnson@Telocity.com> wrote:
> K0HB wrote regarding an "Important notice" on Benchers (Butternut)
page;
> > > http://www.bencher.com/notice.html
> >
> > Misleading and underhanded slam at their competitor.
>
> In what way? Sounds like the non-support for older models is a fact.
>

Cushcraft said they were *discontinuing sales* of the older models, NOT
that they would no longer support them. Bencher has twisted the
notification to suit their fancy, painting a deceiving picture of their
competition. Pretty lowlife if you ask me!

73, Hans, K0HB

--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2409. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a54bc35.1799312344@news.seanet.com>
Source record: 176493

On Tue, 14 Nov 2000 16:19:02 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Ed Hare, W1RFI wrote:
>"Suffice it to say that at great distance, the signal reflected off a
>mirror is at the same level as the light bulb and the level of the
>signal reflected off the mirror does not appear less bright than the
>bulb if the distance between the bulb and the mirror is changed, as long
>as the observation point is >> the distance between the bulb and the
>mirror."
>
>Approximately true if the bulb is close to the mirror.
>
>It`s true that the energy reflected from a perfect reflection point is
>the same energy that strikes the point. There is no loss.
>
>But, when the source is far away from the reflection point, the image in
>the reflector is small. Little energy arrives at a reflector to be
>reflected. The combined energies from the radiator and reflector are
>mainly those of the radiator.
>
>Something different happens when the reflector is at great distance from
>the radiator. The paths from the direct and reflected rays can be about
>the same length as happens at the grazing point on a microwave path.
>Depending on phasing, the two rays can combine to produce as much as a 6
>db gain or a complete cancellation. The reflection is weak, but the
>direct ray is just as weak.
>
>When the reflection point is close to the radiator but not close enough
>for the reflection to be nearly as strong as the direct ray, the
>combination of the two sources won`t be so dramatic. Nearly all the
>energy will come from the direct ray.
>
>I just tried an experiment with a flashlight and a mirror which was
>inconclusive. The light reflected from the mirror was stronger with the
>flashlight closer to the mirror, but the total pathlength was changing
>considerably. The wavelength is very short indeed.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I will quote you from an earlier post:
>
>I`ve avoided this analogy because I`d rather zero in on an agreement

>than to enlarge the argument over what the analogy means.
and you were right to worry about analogies (which like metaphors prove to be very poor instruments in closely debated issues).

The principal mode of failure when using light metaphors and analogies is the eye. Very few people have trained eyes to distinguish the physical evidence from the psycho-induced evidence.

The eye still reigns supreme over every technology that has come down the pike to replace its functions. However, the eye also introduces pre-processing before the "idea" of what is being seen even reaches the brain. Such pre-processing makes light look brighter when in fact nothing has changed physically within the experiment. There are several many means by which the eye does this processing to achieve this characteristic.

There are also the problems not associated with judgement and are directly related to the nature of measuring light power. Most of those issues relate to matters discussed in this venue, but are poorly applied or never considered.

It is an attractive argument to treat microwaves as optical beams, but such analogies must be constrained - and those constraints would introduce far more variables than those encountered for the original topic.

Richard, your fear was warranted.

73's
Richard Clark, KB7QHC

2410. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a12ce7c_1@news1.vip.uk.com>
Source record: 176494
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Gord Beaman wrote in message <3a12be86.6439333@news1.pei.sympatico.ca>...
>"Fred" <Fredmp@megsinet.net> wrote:
>
>In my opinion it's not too brilliant of them to ruffle the feathers of a
group
>like us...we can truly do them damage due to the nature of our
hobby/service.

Possibly OT, but here's a couple of thoughts.

I'm taking note of the opinions mentioned here, as I was intending to invest in a vertical. Both companies being mentioned in various posts, and especially the 'note' on the Butternut (Bencher), site has made me think again about business ethics and dealing with various companies. In fact, the knock on is that I've been looking to replace a Bencher key, which I had to claim for on insurance when it was stolen. I will probably not buy a Bencher, but then I was tending towards a different make anyway, so they probably would not count me as a 'lost sale'.

However, as to whether all this will really hurt Cushcraft and/or Bencher, I doubt it. There are more Amateurs who don't read this NG than do, and most of these companies have bigger business interests away from Amateur Radio than in. The numbers of Radio Amateurs, at least in the UK, is in decline. We're starting to become even more of a minority interest than we were a few years ago, and AR, despite what 'we' may like to think, doesn't carry much weight in the business world.

So, companies like Cushcraft and Bencher could well look at the postings here and think, perhaps privately, 'so what?'

Let's not over inflate our opinion of ourselves and our influence, eh?

de Dave (G0DJA)

2411. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Bob <Bob@bob.com>
Message-ID: <3A12EDB8.F154CD59@bob.com>
Source record: 176495

"Ian White, G3SEK" wrote:

>
> 2. I have no idea why Doc says that baluns do not stop RFI/TVI.
> Thousands of people have proved that they do.
>

Because Doc' is a CBer. For a good laugh, visit rec.radio.cb for some crazy antenna theory.

Bob.

2412. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uuj43$96p$0@208.206.142.114>
Source record: 176496

Fred Hambrecht wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001114210706.20396.00001434@ng-bj1.aol.com...
> You are absolutly correct, the problem is , as you have so aptly pointed
> out, the high cost of labor. The mimimum wage is now higher than my starting
> wage out of engineering school. It is easy to make comments about customer
> service! I wonder if any of those so outraged ever owned a business.
>

Economic reality is whatever it is. But a part of is that consumers
will factor those points into their buying decisions. I'd be a little
reluctant to buy an expensive antenna when I knew in advance that I
would have problems getting replacement parts for it.

> > I imagine the 'high price' for distinct parts is not meant to 'rip off' or
> > discourage anyone, but is a true reflection of the costs to keep these
> parts on
> > hand. The lack of availability, until a year or more has gone by,
> represents a
> > realistic sense of a minimum number of parts in inventory to keep even
> those
> > expensive prices from being astronomical.

2413. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uuj8e$96p$1@208.206.142.114>
Source record: 176497
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote:
>
> In article <KblQ5.65$Z3.66949@newsfeed.intelenet.net>,
> "dentronman" <w9jcm@.reno.quik.com> wrote:
>
> > on that note i think i will go with the HY-Gain Verticl
>
> HyGain is now owned by MFJ (Mighty Fine Junk).

Hey, some of that Junk *IS* mighty fine, as opposed to some other
brands of junk that isn't so fine.

2414. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uujdp$96p$2@208.206.142.114>
Source record: 176498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote:
>
> In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
> "Cliff Holloway" <cholloway14@home.com> wrote:
>
> > Check out this "Important notice" on Benchers (Butternut) page;
> > http://www.bencher.com/notice.html
>
> Misleading and underhanded slam at their competitor. Bencher gets no
> more business from me.

That's not the way I see it. Informing prospective customers of your own product support policy as opposed to the competition is just good business. Maybe Cushcraft will be moved to actually support their own products better.

2415. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A12D8FB.7707857C@home.com>
Source record: 176499

KB9WFK wrote:

> "Mike Zerbe" <zerbe@pioneer-net.com> wrote in message
> news:ewiQ5.22$%Z2.1493@sea-read.news.verio.net...
> > Q signs are just abbreviated ways to say things to make conversations take
> > up less air time. Amateurs use Q signs and the military uses Z signs first
> > and then Q if no Z sign is available. The military rule is to never use
> > plain language when a Z or Q sign can be used.
>
> When did they start this? I was a radio jockey (31V/31K)in the Army for 3
> (87 - 90) years and never heard of Q or Z signs untill I got into ham. I
> was operating in Batallion and Division TOCs as well as with field units and
> retrans stations. We often used Lima Charlie (loud and clear) to respond to
> signal strength queries and sometimes this was perverted into Lickin'
> Chicken but that was the extent of any abreviations and no form of the Q or
> Z or any other signs was used. In fact the rule was to always use plain
> english and be as understandable as possible. If anything needed to be sent
> "non standard" to help hide its meaning it was to be encoded using the
> proper encryption and authentication for the day. No exceptions. Other
> than that the encryption hardware took care of security.
>
> So......I dont think there is
> > a meaning for QSO other than a quick way to say "Can you communicate with
> > ______ direct?" or to designated a direct communication. But, I'm often
> > wrong. Mike-KA7CGI
> >
> > <mcduffie.spamcop@nospam.actcom.net> wrote in message
> > news:27tv0t0tfo4dpc2evk8jhg9vm3dnvd4ec7@4ax.com...
> > >
> >
> >

If you didn't use CW, you didn't need Q or Z signals!

--

Please delete NOSPAM from e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2416. Want Palstar AT4K

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: w4th@webtv.net
Message-ID: <13040-3A12CF52-24@storefull-108.iap.bryant.webtv.net>
Source record: 176500

I am looking for an Palstar AT4K antenna tuner. It must be in mint
condition inside and out.
73
Tom
W4TH

==========
Be sure to visit my web sites.
Tom's Tubes, Svetlana Amateur Radio Amp Tubes.
http://msnhomepages.talkcity.com/ClassifiedsCt/tomstubes/index.html

Ham Radio Homepage.
http://www.geocities.com/bamagramps/

2417. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uul6h$jg2$1@nnrp1.deja.com>
Source record: 176501
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <8uujdp$96p$2@208.206.142.114>,
Dick Carroll <dixie@townsqr.com> wrote:
> K0HB wrote:
> >
> > In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
> > "Cliff Holloway" <cholloway14@home.com> wrote:
> >
> > > Check out this "Important notice" on Benchers (Butternut) page;
> > > http://www.bencher.com/notice.html
> >
> > Misleading and underhanded slam at their competitor. Bencher gets
no
> > more business from me.
>
> That's not the way I see it. Informing prospective customers of your
> own product support policy as opposed to the competition is just good
> business.

So far, so good.

But they completely distorted the Cushcraft statement.

Cushcraft states they have discontinued the SALE of certain old
antennas.

Cushcraft did not state that they would no longer SUPPORT existing
owners of those antennas.

The Bencher notice is outright fraud.

73, Hans, K0HB

--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2418. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uuliijmv1@nnrp1.deja.com>
Source record: 176502
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <8uujan$hj6$1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:
> In article <3A12C932.BEC4AF0A@Telocity.com>,
> Jon Johnson <Jon.Johnson@Telocity.com> wrote:
> > K0HB wrote regarding an "Important notice" on Benchers (Butternut)
> page;
> > > > > http://www.bencher.com/notice.html
> > > >
> > > Misleading and underhanded slam at their competitor.
> >
> > In what way? Sounds like the non-support for older models is a
fact.
> >
>
> Cushcraft said they were *discontinuing sales* of the older models,
NOT
> that they would no longer support them.

Nevermind. I misread the notice. I still think it is sleazy.

73, Hans, K0HB

--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2419. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uull7jpe1@nnrp1.deja.com>
Source record: 176503
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <8uul6h$jg2$1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:

> Cushcraft did not state that they would no longer SUPPORT existing
> owners of those antennas.

Never mind. I misread the notice. I still think the Bencher 'notice'
is sleazy.

73, Hans, K0HB

--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2420. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13417-3A12D81B-3@storefull-111.iap.bryant.webtv.net>
Source record: 176504

In a nutshell, reflector radiation depends on current in the reflector. The reflector may be a conductive wire, sheet, corner, screen, parabola, the earth, etc. But, no current, no radiation. A reflector with no current has no effect on a radiated signal.

The farther a reflector is from a radiator, the less induced current flows in the reflector.

At 180 wavelengths from a radiator, the field strength is attenuated about 60 db. That means a wire 180 wavelengths from a radiating wire can only have about one-millionth of the current flowing in the radiator without special tricks. (The image antenna is 360 wavelengths away, but that`s only 6 additional db of attenuation.)

Best regards, Richard Harrison, KB5WI

2421. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jon Johnson <Jon.Johnson@Telocity.com>
Message-ID: <3A12DB1D.30FA3836@Telocity.com>
Source record: 176505
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote:
>
> Cushcraft said they were *discontinuing sales* of the older models, NOT
> that they would no longer support them. Bencher has twisted the
> notification to suit their fancy, painting a deceiving picture of their
> competition. Pretty lowlife if you ask me!

From the Bencher site:

"Also please note to your customers that parts for the following older
obsolete antennas are no longer available: AP8, AP8A, R4, R5 & R7"

Which part of "parts" do you not understand??

2422. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <8uun6fmmm1@uranium.btinternet.com>
Source record: 176506

What about the number of occasions when there's TVI with a choke which
disappears when the choke is removed ?

If you don't suffer from TVI do nothing. If you do suffer then just
move something. First try moving the TV.

Reg.

2423. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jon Johnson <Jon.Johnson@Telocity.com>
Message-ID: <3A12E380.18776D4A@Telocity.com>
Source record: 176507
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote:

> Hans' Second Law of Thermodenial:
>
> "In any closed mind the quantity of ignorance
> remains constant or increases."

Take heed.

2424. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8uuof4$q22$1@slb7.atl.mindspring.net>
Source record: 176508

"Irv Finkleman" <finkirvNOSPAM@home.com> wrote in message
news:3A12D8FB.7707857C@home.com...
> KB9WFK wrote:
>
> > "Mike Zerbe" <zerbe@pioneer-net.com> wrote in message
> > news:ewiQ5.22$%Z2.1493@sea-read.news.verio.net...
> > > Q signs are just abbreviated ways to say things to make conversations
take
> > > up less air time. Amateurs use Q signs and the military uses Z signs
first
> > > and then Q if no Z sign is available. The military rule is to never
use
> > > plain language when a Z or Q sign can be used.
> >
> > When did they start this? I was a radio jockey (31V/31K)in the Army for
3
> > (87 - 90) years and never heard of Q or Z signs untill I got into ham.
I
> > was operating in Batallion and Division TOCs as well as with field units
and
> > retrans stations. We often used Lima Charlie (loud and clear) to
respond to
> > signal strength queries and sometimes this was perverted into Lickin'
> > Chicken but that was the extent of any abreviations and no form of the Q
or
> > Z or any other signs was used. In fact the rule was to always use plain
> > english and be as understandable as possible. If anything needed to be
sent
> > "non standard" to help hide its meaning it was to be encoded using the
> > proper encryption and authentication for the day. No exceptions. Other
> > than that the encryption hardware took care of security.
> >
> > So......I dont think there is
> > > a meaning for QSO other than a quick way to say "Can you communicate
with
> > > _____ direct?" or to designated a direct communication. But, I'm
often
> > > wrong. Mike-KA7CGI
> > >
> > > <mcduffie.spamcop@nospam.actcom.net> wrote in message
> > > news:27tv0t0tfo4dpc2evk8jhg9vm3dnvd4ec7@4ax.com...
> > > >
> > >
> > >

>
> If you didn't use CW, you didn't need Q or Z signals!

ok..That makes sense.

2425. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13415-3A12DFA8-51@storefull-111.iap.bryant.webtv.net>
Source record: 176509

Richard Clark wrote:
"---you were right to worry about analogies (which like metaphors prove to be very poor instruments in closely debated issues)."

I like to eschew obfuscation.

Richard Clark is a most skilled writer and I admire his way with words.
He also wrote:
"However, the eye also introduces pre-processing before the idea of what is being seen even reaches the brain,"

I`ve "seen" somewhere a report that images in our eyes are inverted but set upright by the brain. I`d thought of using a light bulb power output indication to shed light on the subject of subjective measurement, but the idea dimmed because it really wasn`t a bright idea.

Best regards, Richard Harrison, KB5WZI

2426. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <8uur0nosb1@nnrp1.deja.com>
Source record: 176510

In article <8us4ve$i7m$1@nnrp1.deja.com>,
primecase@my-deja.com wrote:

> Phd or not, the guy is still an idiot and more to the point
> he thinks we care about his so called intellectual property.

The Armenian judges gave this a 9.8 on the Olympic Troll-O-Meter, but they were over-ruled by the umpires in instant replay, who award it a 2.6.

The Armenian judges lodged a formal protest!

It was sufficiently trollish, of course, but way too obvious. It was poorly written, poorly executed, and was so incredibly lame as to lack the true drawing power of a really masterful troll. Maybe as high as a 3.3 for the sheer stupidity of the premise, but a 9.8? Never! The Armenian judges tear their hair out, throw their balalaikas down in dismay, and perform the traditional Armenian Dismay Chant! They demand a recount!

73, de Hans, K0HB
--
~~~
Hans' Second Law of Thermodenial:

"In any closed mind the quantity of ignorance
remains constant or increases."

Sent via Deja.com http://www.deja.com/
Before you buy.
~~~

2427. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A12ECAD.9B1789A9@bellatlantic.net>
Source record: 176511

Agreed. Not only despicable, but repugnant, uncalled for and
totally out of line.

Fred Hambrecht wrote:

> Nathan has absented himself from the group in recent days, your attempt to
> stir him up is despicable.
>
> <primecase@my-deja.com> wrote in message news:8us4ve$i7m$1@nnrp1.deja.com...
> > Someone once said to me, "Never argue with an idiot, they drag you down
> > to their level and then beat you with experience" Phd or not, the guy
> > is still an idiot and more to the point he thinks we care about his so
> > called intellectual property. You never see Mr Yagi yelling on these
> > newsgroups. Grow up and get a life!
> >
> > Kevin J Wren
> >
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

2428. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <8uurc9$3ke$1@nnrp2.phx.gblx.net>
Source record: 176512

Ed Hare, W1RFI <w1rfi@arrl.net> asked:

:-) What is 2D^2/lambda of a flashlight? :-)

Well, lambda = 600 nm for the yellow light my flashlight
puts out and D = 1.5 inches = 3.81e+7 nm,
so D^2 = 1.45161e+15 (nm)(nm) and 2D^2 = 2.90322e+15 (nm)(nm).

2D^2/lambda = (2.90322e+15)/600 nm
= 4.8387e+12 nm
= 4.8387 kilometers
= 3 miles give or take a couple of feet

Aren't you glad you asked!

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

2429. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A12F16F.776878D2@uci.edu>
Source record: 176513

Richard Harrison wrote:

> Jim, AC6XG wrote:
> "I`ll bet the flashlight would be even brighter were you to hold it
> right up to your eye."

> I`d bet with you on that. Every experiment with a flashlight involves
> the very far field.

Your point is actually somewhat valid, but not for that reason. The mirrorred reflector behind the lamp, and the baffling at the front of the flashlight help to collimate the light into a beam. So in effect the lamp filament does not act as a true point source, and it's light intensity does not fall off as rapidly with distance as it would otherwise (in the far field).

> The behavior of an antenna and the ground under it is declared to be for
> practical purposes exactly the same as it would be in cooperation
> between an antenna and its image in the ground, with the ground removed.

> Coupling between parallel antennas decreases as the antennas are moved
> apart.

> Parallel elements used as parasitic directors or reflectors in a
> 2-element beam are usually spaced no more than 1/4-wavelength from the
> driven element so that they receive enough energy to be effective. When
> a director`s spacing is increased from 0.2 wavelength to 0.4 wavelength,
> the power gain drops by 3 db or more. Doubling the separation halves the
> power gain.

> raising the horizontal dipole above ground must induce less current in
> the ground and thus reduce lobe amplitude and null depth, just as
> increased element separation would in a parasitic array which had no
> affiliation with the ground.

My comment referred only to your experiment. Any amount of light lost in reflection would certainly not be detectable by eye.

73, Jim AC6XG

2430. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: greg <greg@valkyrie.net>
Message-ID: <3a12fa4e$1_2@athena.netset.com>
Source record: 176514

> > Some years ago I had a three element Cubex quad using a Q match, lengh
of 72
> > ohm coax, and had many instances when static charges would build up on
the coax
> > inside the house. So bad it was impossible to get near the coax as these
blue
> > balls of fire would strike out at me.
>

i had 1/4" arc's comming off of a vhf/uhf discone during a heavy snowfall

that's why i like my DC grounded antennas or baluns

> >
> I never saw anything like that, musta been a whole bunch of fun!
> >
>
> > I solved the problem by installing a
> > gamma match to the driven element " plumbers delight", the driven
element was
> > now at ground dc ground. Jim
>
> >
> OK, good. I'm about to become a quadhead and this is good input. I think
Cecil also
> has a good solution with his RF choke suggestion.
> >
> w3rv
>

2431. Re: CORRECTION Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13415-3A12F4D1-68@storefull-111.iap.bryant.webtv.net>
Source record: 176515

In my "nutshell" posting, I made a dumb mistake. I said a power ratio of 60 db would produce a current ratio of 1,000,000 to 1. That is the power ratio, not the current ratio. The current or power ratio is only 1000 to 1 because the power ratio is the square of either the voltage or current ratio. One thousandth is very small (0.1%) and the current in the reflector is still insignificant, just not so insignificant.
Sorry!

Best regards, Richard Harrison, KB5WZI

2432. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A130086.DA5A903F@oio.net>
Source record: 176516

Bob wrote:
>
> "Ian White, G3SEK" wrote:
>
> >
> > 2. I have no idea why Doc says that baluns do not stop RFI/TVI.
> > Thousands of people have proved that they do.
> >
>
> Because Doc' is a CBer. For a good laugh, visit rec.radio.cb for some crazy
> antenna theory.
>
> Bob.

Bob,
Your right, the 'CB' NGs are fun. By your being there
does that make you a CB'er too?
'Doc

2433. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: j1aguiar@aol.com
Message-ID: <20001115163243.05571.00000255@ng-me1.aol.com>
Source record: 176517

>Subject: Re: Static noise from rain or snow
>From: Brian Kelly kelly@dvol.com
>Date: 11/15/00 9:35 AM Eastern Standard Time
>Message-id: <3A12ACFC.342F17DE@dvol.com>
>
>
>
>J1aguiar wrote:
>
>> >
>> Some years ago I had a three element Cubex quad using a Q match, lengh of
>72
>> ohm coax, and had many instances when static charges would build up on the
>coax
>> inside the house. So bad it was impossible to get near the coax as these
>blue
>> balls of fire would strike out at me.
>
>>
>I never saw anything like that, musta been a whole bunch of fun!
>>
>
>> I solved the problem by installing a
>> gamma match to the driven element " plumbers delight", the driven element
>was
>> now at ground dc ground. Jim
>
>>
>OK, good. I'm about to become a quadhead and this is good input. I think
>Cecil also
>has a good solution with his RF choke suggestion.
>>
>w3rv
>

Anyone considering a quad will be happey once they get it up. As far as I am concerned a quad out performs a yagi when the going gets touch and they work a lot better than a yagi at the lower hieght. I would however suggest using a gamma match on the quad. Perhaps Cecil has a better solution to keeping that static charge under control, but for me the fix was easy and made impedance matching a snap. Jim

2434. Re: CORRECTION Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13415-3A12FD5A-81@storefull-111.iap.bryant.webtv.net>
Source record: 176518

The current or VOLTAGE ratio is only 1000 to 1 when the power ratio is 60 db. Some days I just can`t shoot straight.

Best regards, Richard Harrison, KB5WZI

2435. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 00:57:14 UTC
From: dentronman
Message-ID: <KblQ5.65$Z3.66949@newsfeed.intelenet.net>
Source record: 176448
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

on that note i think i will go with the HY-Gain Verticl
<plmills@attglobal.net> wrote in message
news:3A11C2D3.A8A62890@attglobal.net...
> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2436. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 01:52:32 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A11FA3C.77EBAB61@dvol.com>
Source record: 176449
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Jerry Oxendine wrote:

> Yup!
>
> Sounds familiar! I had the same trouble with Cushcraft when calling
> about repair parts. The guy was surly, not at all helpful, and acted
> as if I were an idiot. I just slammed the phone down and never contact-
> Cushcraft again!
>
> Jerry
> K4KWH
>

>
Whatta shame. I had an old long-boom Cush 3-el 10/15 duobander at 80 ft. and it bored holes right thru any pileup in any dx contest back when with just an SB-200, the thing was just plain spooky, best pileup buster I ever used by far. But I had some problems with the original plastic standoff insulators they designed into supporting the driven element. Cush shipped me a whole bag of their improved versions along with a with a longwinded technical discussion and apologies. Took it down two years ago after thirtysome years up in the elements and it went back up about a year ago elsewhere and it's back cranking. Something good has gotten lost, shame.
>
w3rv

2437. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 02:07:06 UTC
From: fractenna@aol.com
Message-ID: <20001114210706.20396.00001434@ng-bj1.aol.com>
Source record: 176450

>i couldent get parts for a a3s. they wouldent call back on there phone game
>and wouldent email/phone me back on there website game so i now own a brand
>new force12 :)
>
>N8TDL
>
>< Parts for the R-8 vertical
>> had not been "priced" yet and were thus unavailable. Further,
>> Cushcraft does not "price" replacement parts until the product
>> has been out for 9 to 12 months. I'd suggest you keep this
>> in mind....if you drop your new R-8 or new whatever, you may
>> not be able to get parts for it for up to a year!!
>>
>> thanks & 73,
>> Phil
>> W5BVB

I can't and won't define what is right for Cushcraftor anyone else. I will say that the margins on large aluminum antennas are small--when made in the US. And when extra parts are needed, this requires a separate attainment and maintaining of a physical inventory. This ends up being very expensive, relatively.

I imagine the 'high price' for distinct parts is not meant to 'rip off' or discourage anyone, but is a true reflection of the costs to keep these parts on hand. The lack of availability, until a year or more has gone by, represents a realistic sense of a minimum number of parts in inventory to keep even those expensive prices from being astronomical. In other words, you must have a NEED to even think of making an inventory.

Its not 1965 anymore, and the labor costs in China, Mexico, and Asia are so much lower that even paying (just)someone stateside to keep parts inventory costs $70-100K per year overall. Now figure out how many traps or hose clamps or tubing sections you need to sell , even at high costs, to break even. And that's just for the costs of one employee!

73
Chip N1IR

2438. 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 02:28:53 UTC
From: w2wx@aol.com
Message-ID: <20001114212853.10783.00003992@ng-md1.aol.com>
Source record: 176451

Am looking for lengths and construction/hanging suggestions for a delta loop for 75/80 meters. Have no experience with one. Please email a reply. Thanks,

Steve, W2WX
w2wx@aol.com

2439. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 02:48:30 UTC
From: Robert John <RAJohnGM@worldnet.att.net>
Message-ID: <2QmQ5.683$522.50138@bgtnsc07-news.ops.worldnet.att.net>
Source record: 176452
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I had problems with them when my R7 fell apart at the base. My next antenna will be from another manufacture.
Bob, AA8X

2440. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 03:05:26 UTC
From: k1bqt@aol.com
Message-ID: <20001114220526.00539.00000606@ng-cr1.aol.com>
Source record: 176453

>Something good has gotten lost<.

You're right, but Les Cushman didn't grow that business on good will. What got lost was the contents of your wallet--probably at the local computer store. Good things only get lost when more interesting things get found.

Rick K1BQT

2441. Re: Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 03:42:09 UTC
From: john hurst <hurstjsj@gte.net>
Message-ID: <3A12152A.ABA54607@gte.net>
Source record: 176454

David, I was in a similar situation in a hotel room 10 years ago at Disney world. I used capacity coupling through the glass using about a square foot of aluminum foil on both sides of the window. I ran a 1/2 wavelength of wire on 40 (about 65 feet) from the "outside foil" to a tree. I connected the "inside foil" to the hot side of my tuner and tied ground using a short lead to the window frame. I may have added a 33 ft counterpoise lying on the ground to the frame as well. This setup worked great, worked into Europe fairly easily with 100 Watts.
73, John, KU6X

David Ackrill wrote:

> I'm spending some time staying in hotels, and have started to take some
> Amateur gear away with me.
>
> This week I've come up against a few problems though.
>
> I'm in a ground floor room in a hotel in the middle of London where,
> presumably for security reasons, the window wont open. The window is also
> double glazed, so I cant even use the old trick of a couple of squares of
> tin foil each side of the glass as a way of capacitively coupling a wire
> through the window.
>
> I've looked at trying to work a wire through between the window and the
> frame (although the window is locked, and there's no key issued to me to
> open it) but its a modern, double glazed unit with a tight seal. Great for
> avoiding drafts, and so that the air-conditioning works, but not for getting
> any wire through.
>
> There are no other holes available from within the room to the outside world
> either. There may well be ventilation bricks, but not available within the
> room, as I say.
>
> I've also tried using small verticals inside the room, with very poor
> results, not surprisingly, and a random wire across the room loaded via an
> Antenna System Tuning Unit (ASTU), again with poor results. Even on receive
> these did not perform very well last night.
>
> I suppose that I could ask for the window to be opened for me but, although
> I have nothing to hide, obviously this is going to need a fairly long and
> involved explanation of Amateur Radio, antennas and why they need to be run
> outside and as high as possible.......
>
> I could always give up on this week, and hope that I get a none ground floor
> room with a window that opens next week. HI!

>
> Oh, and sitting out in the car is out of the question as well, it's getting
> colder at nights, and I really *don't* want to be sat in the car in the
> middle of London at night. Especially as my preferred mode of operation is
> CW. I can quite see why people give strange looks to people using a Morse
> code key in a car. Fortunately, though, I do use an Iambic Key and not a
> 'pump handle'. ;-)
>
> Thanks - Dave (G0DJA)
> Please reply to the group, as I try to avoid letting the Spammers get easy
> access to my email address, not always with much success....

2442. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 03:54:06 UTC
From: "Mike W0RSR"
Message-ID: <3a12088c.8977414@news.supernews.com>
Source record: 176455
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Had exactly the same problem with my A4S. Very disappointing customer
service.

On Tue, 14 Nov 2000 20:22:34 -0500, "greg" <greg@valkyrie.net> wrote:

>i couldent get parts for a a3s. they wouldent call back on there phone game
>and wouldent email/phone me back on there website game so i now own a brand
>new force12 :)
>
>N8TDL
>
>< Parts for the R-8 vertical
>> had not been "priced" yet and were thus unavailable. Further,
>> Cushcraft does not "price" replacement parts until the product
>> has been out for 9 to 12 months. I'd suggest you keep this
>> in mind....if you drop your new R-8 or new whatever, you may
>> not be able to get parts for it for up to a year!!
>>
>> thanks & 73,
>> Phil
>> W5BVB
>
>

2443. Re: has anyone built the G3JVL 6 meter vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 04:06:49 UTC
From: primecase@my-deja.com
Message-ID: <8ut24m$as6$1@nnrp1.deja.com>
Source record: 176456

Bill
It's like a minature 5/8 10m/11m CB etc. It uses the aluminium
bracket like the cheap 1/2 & 5/8 wave CB antennas, it's around 12'9"
total length before trimming and has 4 radials about 4'2" long on the
base. It's loaded with a seriess coil a the base with the fed tapped in
about half way up.

take a look www.uksmg.org/vertical.htm

Kevin

In article <3A119DAA.1D31FF73@hiwaay.net>,
Bill Aycock <baycock@hiwaay.net> wrote:
> let me plead ignorance- just what does a G3JVL look like? does it have
> gain over a simple 1/4 wave ground plane?
>
> I ask because I'm in the market for a 6M omni-directional.
>
> Bill-W4BSG
>
> primecase@my-deja.com wrote:
> >
> > I'm just asking to see if it's a well behaved antenna as well as
> > effective ????
> >
> > thanks
> >
> > Kevin J Wren
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2444. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 04:25:42 UTC
From: primecase@my-deja.com
Message-ID: <8ut381boc1@nnrp1.deja.com>
Source record: 176458

Ok, a little harsh maybe, but just as you have all expressed opinions about trolling,abuse,baiting etc, I'm still entitled to an opinion and I'll stick to it, right or wrong(just for the curious,this isn't more bait). Yes I'm aware Mr Yagi isn't with us anymore(shame as he has probably forgotten more than we'll ever learn) and it was meant as a metaphor. In the cold light of day my previous post looks worse than any of Mr Cohen's so I'm guilty too I guess, which just goes to prove that maybe posting your immediate thoughts aren't wise when you are p***ed off!.

No more will be said on the matter

g'night

Kevin J Wren

In article <8us4ve$i7m$1@nnrp1.deja.com>,
primecase@my-deja.com wrote:
> Someone once said to me, "Never argue with an idiot, they drag you
down
> to their level and then beat you with experience" Phd or not, the guy
> is still an idiot and more to the point he thinks we care about his so
> called intellectual property. You never see Mr Yagi yelling on these
> newsgroups. Grow up and get a life!
>
> Kevin J Wren
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2445. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 04:32:42 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <KloQ5.11163$mq1.747285@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176457

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:g5hQ5.120$g5.524562@news.ntplx.net...
>
> This very much depends on soil type, and the grazing angle of the
> reflection, etc. The FCC's OET Bulletin 65, as based on some estimates by
> EPA, suggests that an antenna would show about 4 dB of ground gain. If
> true, this would mean that the reflected field had a voltage or current of
> about 60% of the incidental field, which, if adding in phase, would give a
> voltage of 1.6 times the voltage that would exist in free space at that
> particular point, thus, if in far-field conditions, a power density 4 dB
> stronger than the antenna would show in free space. (This is offset by the
> fact that the reflections cancel at other angles.)
>
> If one looks at the EZNEC-calculated antenna pattens of a half-wave dipole
> over ground, if the dipole is 1 wavelength above imperfect earth of
> "average" conductivity and dielectric constant, the null straight up
is -12
> dB and the null at 30 degrees is about -17 dB. I lack the skills and
> knowledge to calculate the phase of the reflection, so I cannot tell you
> what percentage of the signal actually gets reflected, but if the phase
> were -180 degrees from the incidental, the -12 dB null would be caused by
> reflected field with a voltage of about 75% of the incidental field.
>
> I am sure there are some folks here who can express this much better than
I,
> and certainly more completely, so I will kick back and learn a bit from
what
> they offer. :-)
>
> 73,
> Ed Hare, W1RFI
>

Great summary Ed.

The level of reflected signal is both a function of soil conditions and
grazing or reflection angle as Ed points out.

As an example, consider the earth conditions to be dielectric constant = 15
and conductivity = 12 x 10^-3.

At 1 MHz, the amplitude of signal reflection is about 90% and the phase
angle of signal reflection is about -185 deg for all grazing angles.

At 12 MHz, the amplitude of signal reflection varies from 85% at 10 degrees
grazing angle to about 65% at 90 degrees grazing angle. The phase angle of

reflection is about -185 degrees at 10 degrees grazing angle to about -195 degrees at 90 degrees grazing angle.

There is not much difference in the values from 12 to 100 MHz (at least for these soil conditions).

The formula to calculate these values is as follows:

A = grazing angle
e = soil dielectric constant
s = soil conductivity

X = 18 * 10^3 s / (frequency in MHz)

T = sin(A) - sqrt[(e - jX) - cos^2(A)]

B = sin(A) + sqrt[(e - jX) - cos^2(A)]

Reflection Coefficient = T / B

Note that this is a complex number with magnitude and phase.

Steve, VE9SRB

2446. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-15 06:19:26 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>
Source record: 176459
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Check out this "Important notice" on Benchers (Butternut) page;
http://www.bencher.com/notice.html
Sounds like "if you break it you buy a new one" policy applies for other
Cushcraft antennas as well.
73 Cliff N0HC
<plmills@attglobal.net> wrote in message
news:3A11C2D3.A8A62890@attglobal.net...
> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,
> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2447. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A14447B.BA5A46DB@IEEE.org>
Source record: 176269

VE9SRB wrote:
> 130 watts = 100 watts + 30 watts is only true when the
> 100 watts and 30 watts are 90 degrees out of phase.

Power is a scalar and has no phase. How about talking about
voltage phases and current phases instead?
--
http://www.mindspring.com/~w6rca

2448. Re: dB adding question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j4h1v8.87r.ln@mail.specsol.com>
Source record: 176270

hkj@wer.com wrote:
> Can I add dBm to dBm?

Not in general; dBm is an absolute amount of power relative to a milliwatt,
so unless you are talking about some sort of power combiner, no.

> Can I add dBm to dB?

Yes, and you get dBm, since dB is a relative gain (or loss if negative).

Jim Pennino

2449. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <G6YQ5.2025$S43.138186@bgtnsc06-news.ops.worldnet.att.net>
Source record: 176271

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A14447B.BA5A46DB@IEEE.org...
> VE9SRB wrote:
> > 130 watts = 100 watts + 30 watts is only true when the
> > 100 watts and 30 watts are 90 degrees out of phase.
>
> Power is a scalar and has no phase. How about talking about
> voltage phases and current phases instead?
> --
> http://www.mindspring.com/~w6rca

Hi Cecil,

You are correct, power is a scalar. I should have said: 130 watts = 100 watts + 30 watts is only true when the voltages and currents associated with the 100 watts and 30 watts are 90 degrees out of phase.

In a 50 ohm transmission line, 100 watts of power has an associated voltage magnitude of 70.711 V and a current magnitude of 1.414 A. 30 watts of power has an associated voltage magnitude of 38.73 V and a current magnitude of 0.775 A. 130 watts of power has an associated voltage magnitude of 80.623 V and a current magnitude of 0.62 A. This all based on the relationship that P = |V| |I| cos(theta), where theta is the phase angle difference between V and I. V and I both being in a 50 ohm system.

In the transmission line, the two forward complex voltages and currents add to become the total forward voltage and current. Recognizing that both magnitude and phase are factors in complex addition, the only condition under which a voltage with a magnitude of 70.711 V adds to a voltage with a magnitude of 38.73 V to result in a total voltage having a magnitude of 80.623 V is when the two voltages are 90 degrees out of phase.

Steve

2450. Re: Antenna Tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001116170445.15393.00000080@ng-bh1.aol.com>
Source record: 176272

>Is the MFJ 969 tuner a good tuner? How about the Yaesu FC 901?
>Thanks, Mike.
>
>--
>Mike Reid
>WE0H
>mikereid1@qwest.net
>
>
>
>
Mike,
I can't help you with the FC 901 but I do have a 969 and have found it to be a very good and reliable tuner. It tunes my G5RV from 6-160 mts. Great tuner for my situation!
73 de KG4FET Sandor

2451. Re: Using 2 paralell 50ohm coax's instead of 1 for 25

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8v1nul$6ek$1@nnrp1.deja.com>
Source record: 176273
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

If I understand correctly, your cable is only 50cm long, total. With so short a cable run at 13.56MHz, there's very little advantage to bothering with two cable runs. Since the length is far less than 1/4 wavelength, the key advantage would be to lower the power dissipated in the line; that's a benefit you'd not get if the line was long, but it does apply for lines which are very short (and loaded with high current). But whether you use one line or two, the load presented to the RF generator will be very nearly the same, and very nearly the value at the plasma-chamber end of the line. So in either case, it's important that the RF generator can be tuned properly into that load. If not, you can gain some advantage by using a matching network (at either end of the line, but slightly better if it's at the load end of the line) to cause the correct load at the RF generator.

Cheers,
Tom

In article <3A140DA4.E912A1EF@gravitywell.org>,
Ash <ash@gravitywell.org> wrote:
> This isn't really an amateur radio question but almost :) ,
> at work we have a standard industrial rf generator for 13.56MHz,
> operates at powers from 5W to ~800W.
> This macine produces a gas plasma inside a vacuum chamber.
> This plasma is closer to 25ohms and the manual recommends using 25ohm
> cabling instead of 50.
> At this point we have a little mismach resulting in some reflected
> power.
> Someone suggested using two paralell 50ohm cables but I am somewhat
> sceptical.
> Still, it's pretty low frequency (not exactly microwave :) and the
cable
> isn't taller than
> say 50cm so cutting two identical lengths should pose no problem.
> But will it help? Connectors must still be 50ohms since that's all we
> can find,
> at least for RG-217 cable with hv-N connectors, and the plasma chamber
> is still matched
> for 50...
> The question is would we gain anything from doing this if it's even
> possible?
> Would appreciate a reply,
>
> Regards //Anders
>

>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

2452. Re: dB adding question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <FjZQ5.141$g5.663602@news.ntplx.net>
Source record: 176274

Jim Pennino <jimp@mail.specsol.com> wrote:

> > Can I add dBm to dBm?

> Not in general; dBm is an absolute amount of power relative to a
milliwatt,
> so unless you are talking about some sort of power combiner, no.

As an example, 0 dBm is 1 milliwatt. 1 milliwatt + 1 milliwatt = 2
milliwatts. Restated in dBm, 0 dBm + 0 dBm = 3 dBm. :-)

> > Can I add dBm to dB?

> Yes, and you get dBm, since dB is a relative gain (or loss if negative).

As long as you realize you are multiplying, not adding. 0 dBm increased by
10 dB (10X) is 10 dBm.

73,
Ed Hare, W1RFI

2453. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1465C9.C49@wt.net>
Source record: 176275

Fractenna wrote:
>
> >>From: fractenna@aol.com (Fractenna):
> >
> >>I am not a public figure.
> >
> >The number of public posts that you have made, Chip, suggest otherwise. The
> >personal life that I am sure you lead that extends significantly past the
> >content of your posts is not a news item, but the posts you have made here
> >certainly are.
> >
> >73,
> >Ed Hare, W1RFI
>
> That is not correct.

I wonder what is incorrect.

3483 rec.radio.amateur.antenna
10 uk.radio.amateur
10 rec.radio.amateur.homebrew
10 sci.fractals
10 rec.radio.amateur.misc
8 rec.radio.amateur.dx
7 rec.radio.shortwave
7 rec.radio.cb
4 sci.physics.electromag
4 rec.radio.amateur.policy
3 sci.electronics.design
3 rec.radio.swap
3 rec.radio.amateur.equipment
3 rec.radio.amateur.space
2 alt.internet.services
1 sci.electronics.components
1 sci.electronics.equipment

You send 3483 posts on this NG and you are not public? I'm reminded of
all the times you remind all that this is a public forum. Oh, sheeeeet,
I get it, this doesn't apply to you.
>
> Ask an attorney's counsel on this.

Who is the attorneys counsel? Is he any better than the attorney? About
the same, worse? Does he have a ph.d?
Is he a ham? Does he build antennas? Or is the counsel more than one? A

flock of sheep? A flock of seagulls?
Or is the counsel a big Texas bull? Huuummmm, maybe thats it...You know what they call cow doo-doo here in Texas don't you? A cow-chip.... MK

This should help, but if it doesn't, check rec.radio.cb for further instructions. MK
--
http://web.wt.net/~nm5k

2454. Re: Sharing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1467E8.7DEE@wt.net>
Source record: 176276

Peter O. Brackett wrote:
>
> Mark:
>
> Quoting Nathan, Ward and June might say that it is "snake oil".
>
> -Peter K1PO

Only Wally knows for sure. I called Eddie Haskell about it, and he said
all of Chips antenna's are a bit lumpy.
I called Wally for his comments, but he told me to @#$% off.
Wally=Phil???? Hummmmm.... :(MK
MK--
http://web.wt.net/~nm5k

2455. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v1ove$2j7$1@plutonium.btinternet.com>
Source record: 176277

A cloud or storm of charged particles have an average
potential with respect to ground. If the antenna is allowed
to float by insulating it from ground it will aquire a
potential above ground equal to the average. The noise
level impinging on the antenna will then be minimised.

A thickly insulated antenna wire, such as the inner
conductor of a coaxial line plus the polyethylene, will be
less noisy. Probably needs a few inches of pruning to
maintain the same electrical length as an uninsulated thin
wire.

Reg

2456. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v1p8s$33l$1@plutonium.btinternet.com>
Source record: 176278

Suggest you remove the balun. There's an even chance the
antenna will work better than it ever did when the balun was
fitted.

Reg, G4FGQ

2457. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26071-3A14632D-71@storefull-112.iap.bryant.webtv.net>
Source record: 176279

Cecil, W6RCA wrote:
"Power is a scalar and has no phase."

Verily, and Old Pythagoras and Old Watt must both be gyrating in their tombs. 100 + 30 = 130 only when 100 and 30 are at quadrature?
I have no right to poke fun with as many goofs as I`ve made in recent days. I welcome the company.

Best regards, Richard Harrison, KB5WZI

2458. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A146D4B.1381@wt.net>
Source record: 176280

Fractenna wrote:
>
> >>From: fractenna@aol.com (Fractenna):
> >
> >>I am not a public figure.
> >
> >The number of public posts that you have made, Chip, suggest otherwise. The
> >personal life that I am sure you lead that extends significantly past the
> >content of your posts is not a news item, but the posts you have made here
> >certainly are.
> >
> >73,
> >Ed Hare, W1RFI
>
> That is not correct.
>
> Ask an attorney's counsel on this.
>
> NC

For one month from 10/1/00 to 11/1/00...

Results for: "~g rec.radio.amateur.antenna ~a fractenna@aol.com ~dc
{2000/10/01 2000/11/01}"
SEARCH AGAIN for "~g rec.radio.amateur.antenna ~a fractenna@aol.com ~dc
{2000/10/01 2000/11/01}" Products | Northern Light

Messages
1-100 of 1700 matches
Page 1 of 17 Next >>

Date Subject Forum Author
11/01/2000 Re: Visit - www.ab7sl.com - rec.radio.amateur.ant
Fractenna
11/01/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant
Fractenna
11/01/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant
Fractenna
11/01/2000 Re: Time for rec.radio.amate rec.radio.amateur.ant
Fractenna
11/01/2000 Re: Drop on by - www.k7on.co rec.radio.amateur.ant
Fractenna
11/01/2000 NOTICE: RICHARD CLARK COPYRI rec.radio.amateur.ant
Fractenna
11/01/2000 Re: MFJ-259b @ $199.95 ? rec.radio.amateur.ant Fractenna

11/01/2000 Re: Fractal or not rec.radio.amateur.ant Fractenna
11/01/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant
Fractenna
10/31/2000 PHOTO AND SWR PLOT OF MI2 FR rec.radio.amateur.ant
Fractenna
10/31/2000 Re: Fractal Geometry Signifi rec.radio.amateur.ant
Fractenna
10/24/2000 Re: NOTICE: ENFORCEMENT OF C rec.radio.amateur.ant
Fractenna
10/24/2000 Re: NOTICE: ENFORCEMENT OF C rec.radio.amateur.ant
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10/24/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
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10/24/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
Fractenna
10/24/2000 Re: Law Suit Watch rec.radio.amateur.ant Fractenna
10/24/2000 Re: Fractanal Farce rec.radio.amateur.ant Fractenna
10/24/2000 Re: PUBLIC NOTICE Nathan is rec.radio.amateur.ant
Fractenna
10/24/2000 Re: Why does N1IR cancel NG rec.radio.amateur.ant
Fractenna
10/24/2000 Re: PIRACITY BY whocare rec.radio.amateur.ant Fractenna
10/24/2000 Re: PIRACY BY N1IR rec.radio.amateur.ant Fractenna
10/24/2000 Re: Inexpensive PDF file app rec.radio.amateur.ant
Fractenna
10/24/2000 Re: Copyright rec.radio.amateur.ant Fractenna
10/24/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
Fractenna
10/23/2000 NOTICE: ENFORCEMENT OF COPYR rec.radio.amateur.ant
Fractenna
10/23/2000 Re: Supprt Roy, get a great rec.radio.amateur.ant
Fractenna
10/23/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant
Fractenna
10/23/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
Fractenna
10/23/2000 Re: ONGOING Q RUN--10m FRACT rec.radio.amateur.ant
Fractenna
10/23/2000 Re: NOTICE: ENFORCEMENT OF C rec.radio.amateur.ant
Fractenna
10/23/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant
Fractenna
10/23/2000 PIRACY BY W7EL-EZNEC rec.radio.amateur.ant Fractenna
10/23/2000 PIRACY BY W7EL-EZNEC rec.radio.amateur.ant Fractenna
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10/23/2000 Re: NOTICE: ENFORCEMENT OF C rec.radio.amateur.ant
Fractenna

10/23/2000 Re: NOTICE: ENFORCEMENT OF C rec.radio.amateur.ant
Fractenna
10/23/2000 Re: Inexpensive PDF file app rec.radio.amateur.ant
Fractenna
10/23/2000 Re: Slopers II rec.radio.amateur.ant Fractenna
10/23/2000 Re: PIRACY BY N1IR rec.radio.amateur.ant Fractenna
10/23/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
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10/22/2000 Re: EZNEC: Copyright Violati rec.radio.amateur.ant
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Fractenna
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Fractenna
10/22/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant
Fractenna
10/22/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
Fractenna
10/22/2000 ONGOING Q RUN--10m FRACTAL Q rec.radio.amateur.ant
Fractenna
10/22/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
Fractenna
10/22/2000 Re: EZNEC: Copyright Violati rec.radio.amateur.ant
Fractenna
10/22/2000 Re: ONGOING Q RUN--10m FRACT rec.radio.amateur.ant
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10/22/2000 EZNEC: Copyright Violation rec.radio.amateur.ant Fractenna
10/22/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant
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10/22/2000 Roy Lewallen Copyright Viola rec.radio.amateur.ant

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10/22/2000 Re: m12 NEC file rec.radio.amateur.ant Fractenna
10/22/2000 Re: Supprt Roy, get a great rec.radio.amateur.ant
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10/22/2000 Re: EZNEC: Copyright Violati rec.radio.amateur.ant
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10/21/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant
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10/20/2000 Re: KB9WFK CHALLENGE!!!!! rec.radio.amateur.ant Fractenna
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10/19/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant
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10/18/2000 Re: Ig-Nobel prize to Cornel rec.radio.amateur.ant
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10/17/2000 Re: Ig-Nobel prize to Cornel rec.radio.amateur.ant
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Fractenna
10/15/2000 Re: Ig-Nobel prize to Cornel rec.radio.amateur.ant
Fractenna

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This only one page out of 17!!!! for the month of october. Yep,
cheepster, you is one private dude thats for sure. How can we argue with
your obvious superior intellect...

But lets be fair!!! How about my ugly ass? How do I compare to the
almighty frac?

Results for: "~g rec.radio.amateur.antenna ~a nm5k@wt.net ~dc
{2000/10/01 2000/11/01}"
SEARCH AGAIN for "~g rec.radio.amateur.antenna ~a nm5k@wt.net ~dc
{2000/10/01 2000/11/01}" Products | Northern Light

Messages
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Date Subject Forum Author
11/01/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant Mark
Keith
11/01/2000 Re: New job for NC [Fractal] rec.radio.amateur.ant Mark
Keith
11/01/2000 Re: Coil winding formula rec.radio.amateur.ant Mark Keith
11/01/2000 Re: 1/4 wave Vs. 1/2 wave mo rec.radio.amateur.ant Mark
Keith
10/31/2000 Re: 160M dipole feedline que rec.radio.amateur.ant Mark
Keith

10/30/2000 Re: Antenna type rec.radio.amateur.ant Mark Keith
10/30/2000 Re: 10 Meter Mobile Antenna rec.radio.amateur.ant Mark
Keith
10/30/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant Mark
Keith
10/28/2000 Re: Announcing the Frectal P rec.radio.amateur.ant Mark
Keith
10/28/2000 Re: h a t r e d DID THIS.... rec.radio.amateur.ant Mark
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10/28/2000 Re: Antenna Question rec.radio.amateur.ant Mark Keith
10/28/2000 Re: Announcing the Frectal P rec.radio.amateur.ant Mark
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10/27/2000 Announcing the Frectal Probe rec.radio.amateur.ant Mark
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10/27/2000 Re: If the Washington Monume rec.radio.amateur.ant Mark
Keith
10/26/2000 Re: wire beam design ? rec.radio.amateur.ant Mark Keith
10/26/2000 Re: Looking for monopole or rec.radio.amateur.ant Mark
Keith
10/25/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/25/2000 Re: wire beam design ? rec.radio.amateur.ant Mark Keith
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10/24/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/24/2000 Re: The Boy Genius rec.radio.amateur.ant Mark Keith
10/24/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/22/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/22/2000 Re: need some mast ideas rec.radio.amateur.ant Mark Keith
10/22/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
Keith
10/22/2000 Re: Roy Lewallen Copyright V rec.radio.amateur.ant Mark
Keith
10/22/2000 Re: EZNEC: Fine analysis of rec.radio.amateur.ant Mark
Keith
10/21/2000 Re: $1000 FRACTAL ANTENNA CH rec.radio.amateur.ant Mark

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10/21/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/21/2000 Re: EZNEC: Warning of Copyri rec.radio.amateur.ant Mark
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10/20/2000 Re: Which antenna is better? rec.radio.amateur.ant Mark
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10/19/2000 Re: External VFO Help wanted rec.radio.amateur.ant Mark
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10/19/2000 Re: Verticals without radial rec.radio.amateur.ant Mark
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10/17/2000 Re: Verticals without radial rec.radio.amateur.ant Mark
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10/16/2000 Re: Verticals without radial rec.radio.amateur.ant Mark
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10/15/2000 Re: Ig-Nobel prize to Cornel rec.radio.amateur.ant Mark
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10/13/2000 Re: inverted v rec.radio.amateur.ant Mark Keith
10/12/2000 Re: inverted v rec.radio.amateur.ant Mark Keith
10/12/2000 Re: feedline question rec.radio.amateur.ant Mark Keith
10/11/2000 Re: Other Loops rec.radio.amateur.ant Mark Keith
10/08/2000 Re: GAP antenna question rec.radio.amateur.ant Mark Keith
10/08/2000 Re: CB Antenna ChipShooter rec.radio.amateur.ant Mark
Keith
10/08/2000 Re: GAP antenna question rec.radio.amateur.ant Mark Keith
10/07/2000 Re: Long Wire rec.radio.amateur.ant Mark Keith
10/07/2000 Re: GAP antenna question rec.radio.amateur.ant Mark Keith
10/06/2000 Re: 213 vs RG8U rec.radio.amateur.ant Mark Keith
10/06/2000 Re: Beverage - To terminate rec.radio.amateur.ant Mark
Keith
10/06/2000 Re: Newby 40M Vertical Probl rec.radio.amateur.ant Mark
Keith
10/06/2000 Re: Beverage - To terminate rec.radio.amateur.ant Mark
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10/05/2000 Re: 213 vs RG8U rec.radio.amateur.ant Mark Keith
10/04/2000 Re: HF MOBILE: Some success rec.radio.amateur.equ Mark
Keith
10/04/2000 Re: BETTER than the MI2 Frac rec.radio.amateur.ant Mark
Keith
10/03/2000 Re: Indian antenna research rec.radio.amateur.ant Mark
Keith
10/03/2000 Re: ADVISORY: COPYRIGHT INFR rec.radio.amateur.ant Mark
Keith
10/03/2000 Re: 75M mobile in a Jeep Che rec.radio.amateur.ant Mark
Keith
10/02/2000 Re: Verical vs. Beam rec.radio.amateur.ant Mark Keith

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Obviously, I'm a much more public person than you are. You can tell by my 65 posts compared to your 1700. Only a pd.h would think you are more public.

Will this help? Maybe just a little? I bet it will. BTW, my counsel told me to post this. He said it would be good therapy for you. MK

--
http://web.wt.net/~nm5k

2459. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v1qgq$m58$1@uranium.btinternet.com>
Source record: 176281

I will apologise in advance for the following comments.

Reflected power doesn't go anywhere. It is just a figment of human imagination put there by unscrupulous SWR meter salesmen and other old wives. It wasn't generated in the first place.

In a sensibly lossless transmission system, which most systems are, all the RF power outputted by the transmitter is absorbed by the intended load, ie., the antenna. There's simply no-where else for it to go.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Scott M. McClements wrote ..
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.

>
>
>

2460. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26073-3A146C92-13@storefull-112.iap.bryant.webtv.net>
Source record: 176282

Cecil W6RCA wrote:
"Generated Power plus Reflected Power equals Forward Power."

True if all reflected power is bounced by the generator.

I`m only sure that the reflected power subtracts from the forward power when using the Bird wattmeter to give an indication of generated power and that is the same power which is delivered to the load. This has to be because there is no place in the transmission system for long term storage of r-f energy.

Cecil`s logic holds because when you subtract reflected power from both sides of Cecil`s equation, it`s the same as mine.

Best regards, Richard Harrison, KB5WZI

2461. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a5b4ddc.1902135796@news.seanet.com>
Source record: 176283

On Thu, 16 Nov 2000 01:30:15 +0100, on4caf@qsl.net wrote:

>Happily there are other sources:
>http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html
>It's a pity that that the technical discussion of Steve, Roy and Nathan
>ended is this mess.
>One of Nathan's creations, the FRACVERT HALFWAVE, is a clever
>vertical described by Nathan about 3 years ago, with good directional
>properties which can be made with a single pole support, good usable
>on the lower HF bands, (I don't agree with Nathan's claim on some points)
>which certainly deserves a place in ham antenna publications.
>Reading rec.radio.amateur.antenna posting of 3 years ago makes me sad.
>Hopefully this newsgroup will return to the same spirit it had.
>Jan, on4caf

Hi Jan,

You are right in most details. I reviewed that design in this group
around Feb. of 1996. I posted to this group that EVERY claim made was
supportable in the data.

If this is the spirit you find missing, then it was not for want of
trying.

73's
Richard Clark, KB7QHC

2462. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a5a070b.1884006077@news.seanet.com>
Source record: 176284

On 15 Nov 2000 15:49:05 -0600, jeffreys@cyburban.com (Jeffrey Steinberg) wrote:

>
>I would hate for this newsgroup to translate its fustration with Dr. Cohen into
>the belief that there is no merit in fractal technology. There may be, but
>sometimes the most interesting advances come from such disruptive/different
>viewpoints.
>
>--jeffrey steinberg, KC2GUC, Scarsdale, NY

Hi Jeff,

There is no inherent advantage in the claim of
>sometimes the most interesting advances come from such disruptive/different
>viewpoints.
as sometimes is not all times nor even most times (and even "sometimes" is an overstatement). It suggests that anarchy is good, but even an anarchist would blast such a statement as outside the goal of anarchy.

I can understand the basis of the statement, but even here it is a false basis in regard to the subject line being discussed. For instance I maintain a very comprehensive survey of fractal antennas at:
http://www.qsl.net/kb7qhc
that easily eclipses such material available anywhere else on the web. This site runs to some 300+ pages of data and analysis. Discussions of design merit can easily be researched from data - I provide data. The notion that this topic is new or radical is one of perception as I have investigated this line of design going on 5 years. In other words, those new to the topic find it disruptive/different perhaps, but that is simply due to a lack of exposure, not a reality of any situation.

Perhaps what you perceive as disruptive/different has been more a matter of personality and ego, not one of science and technical discussion. As always, I invite all interested parties to engage in meaningful discussion of the merits/demerits of fractals - too often it is the bloodlust and thrill of the chase that attracts attention away from this offer.

73's
Richard Clark, KB7QHC

2463. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a5c5261.1903292429@news.seanet.com>
Source record: 176285

On Thu, 16 Nov 2000 11:21:27 -0800, "Scott M. McClements"
<yetbbwa@grove.iup.edu> wrote:

>I have a few questions about reflected and antenna tuners. First off,
>where does reflected power (SWR) actually go? Is it eventually radiated
>from the antenna, dissipated by PA transistors or is it more complex
>than that?
>
>Next, if you use an antenna tuner, this will improve how well your
>antenna "couples" with the feedline, correct? It can actually improve
>how much power is put into the feedline? However, the mismatch still
>occurs at the antenna feedpoint and the percentage of reflected power is
>still constant? With the antenna tuner in place, does this effect how or
>where a reflected wave acts?
>
>I know this sounds troll'ish..but I am serious about what I am asking.
>
>Thanks,
>
>Scott McClements.
>
>
Hi Scott,

Nothing trollish about a topic that incites so many to spend so much
time responding to. Hmm, that does sound trollish doesn't it?

But, to answer your question:

Reflected power going back to the transmitter is destructive because
the transmitter will attempt to absorb it as would any load. Now the
level of destruction may simply be heat, but consider that heat can be
measured in comparison to body temperature or relative to a flame
temperature.

The principle failure mode for solid state sources strained with
mismatched loads is found in the excess current passing through the
device where its ability to support local current density is exceeded.
At this level we are talking about melting of the crystal lattice and
catastrophic destruction.

If you insert a tuner between the mismatch and the transmitter, you
are providing another mismatch (to the reflections on their way to the
transmitter) that is the reciprocal of the load mismatch. This
creates a situation wherein the power is reflected, re-reflected, and
re-re-.... you get the point. However, with each successive

reflection, some energy escapes the antenna in spite of the original mismatch (it always does) and the significance of that power sloshing back and forth diminishes with each pass back and forth (not to speak of that power lost to the transmission line supporting all this sloshing - in fact that is the major source of real loss, or in the tuner itself).

Now keep in mind the discussion above presumes a single wave to support this sloshing analogy, and if you keep in mind that every single cycle undergoes this process , independent of all cycles before it, then things will work fine.

Keep your eyes open for an announcement from Walt Maxwell, W2DU, as to when his new edition of "Reflections" becomes available, and buy a copy quick.

73's
Richard Clark, KB7QHC

2464. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v1us5$g8o$1@iac5.navix.net>
Source record: 176286

Might I presume to disagree Sir? Herr Maxwell in "Another look at reflections" Sub Chapter "Too low a SWR can kill you" said "judging from what we hear on the air, nearly everyone is looking for a VSWR of 1:1

Question why and the answer may be, I'm not getting out on this frequency because my SWR 2.5:1... there's too much power coming back and not enough getting to the antenna...or I feel a line having that much SWR, the reflected power flowing back in to the amplifier will burn it up..." He then goes on to Poo Poo any of these ideas. If interested I will be glad to post the reasons.

"Richard Clark" <rwclark@seanet.com> >
> Reflected power going back to the transmitter is destructive because
> the transmitter will attempt to absorb it as would any load. Now the
> level of destruction may simply be heat, but consider that heat can be
> measured in comparison to body temperature or relative to a flame
> temperature.
>
>

2465. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a5d6a81.1909468901@news.seanet.com>
Source record: 176287

On Thu, 16 Nov 2000 11:10:19 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>Can your ear discern the difference between
>130 dB spl and 130.2 dB spl for example?
>
>Sorry to all for belaboring a small point.

Hi Jim,

And now we drag the ear into wave phenomenon - I love it! ;-)

By the original intent of the dB, a unit of least discernible audio level change, the answer would have to be no when speaking of 1/5 of that least discernable level change. Now if you were to speak of discerning a level change between 130dB and 131dB, even then the most probable answer would be no, as the physiological limit of perception is now being taxed at the upper limit (verging on the threshold of pain). This says nothing of using the physiological scales of dBa, dBb, or dBc and the matter of the particular frequency those levels are excited at.

Here we enter into the realm of the ear applying modification to the idea of what is heard before that idea reaches the brain. The ear is not uniformly sensitive under any variation of variables (such as sound pressure, frequency, pure tones or mixed tones and so on). At certain sound pressure levels and frequency combinations, it would be arguable that you could even discern 10dB variation (which of course confounds the original intent of the meaning of dB as applied to sound).

In fact, it is probably impossible, outside of a metrology lab, to mechanistically detect an accurate differentiation of 0.2 dB spl when at the level of 130 dB (or choose any level you wish). At this degree of discrimination, too many environmental factors' variation swamp such measurements. In other words, like an antenna, this would require an anechoic chamber.

73's
Richard Clark, KB7QHC

2466. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1486DF.D7AED8D2@mwci.net>
Source record: 176288

VE9SRB wrote:

> I should have said: 130 watts = 100
> watts + 30 watts is only true when the voltages and currents associated with
> the 100 watts and 30 watts are 90 degrees out of phase.
>
> In a 50 ohm transmission line, 100 watts of power has an associated voltage
> magnitude of 70.71 V and a current magnitude of 1.414 A. 30 watts of power
> has an associated voltage magnitude of 38.73 V and a current magnitude of
> 0.775 A. 130 watts of power has an associated voltage magnitude of 80.623 V
> and a current magnitude of 1.62 A. This all based on the relationship that
> P = |V| |I| cos(theta), where theta is the phase angle difference between V
> and I. V and I both being in a 50 ohm system.
>
> In the transmission line, the two forward complex voltages and currents add
> to become the total forward voltage and current. Recognizing that both
> magnitude and phase are factors in complex addition, the only condition
> under which a voltage with a magnitude of 70.711 V adds to a voltage with a
> magnitude of 38.73 V to result in a total voltage having a magnitude of
> 80.623 V is when the two voltages are 90 degrees out of phase.

This is incorrect for the following reasons:

1) The current corresponding to 130 W is 1.613 A, not 0.62 A. But we cannot look at this problem in this manner.

2) The forward power is 130 W. In terms of the forward wave this is (V+)^2 / 50, so (V+) = 80.62 V RMS

3) The reflected power is 30 W. In terms of the reflected wave this is (V-)^2 / 50, so (V-) = 38.73 V RMS.

4) The difference between the forward and reflected power waves is (V+)^2 / 50 - (V-)^2 /50 = 130 - 30 = 100 W.

These two values are what a thermoelectric directional wattmeter measures. The phase between (V+) and (V-) is *not* specified. The phase difference between (V+) and (V-) is controlled by the reflection coefficient at the load, which can be anywhere on a certain circle on the Smith chart.

For example, at a resistive load, (V+) and (V-) can be completely in-phase (or completely out-of-phase). But as we move along the line the phase between (V+) and (V-) rotates. But the forward (130), reflected (30) and net (100) power values are constant everywhere on the line.

Bill W0IYH

2467. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <jJ%Q5.147$g5.672946@news.ntplx.net>
Source record: 176289

Fred Hambrecht <Fred@w4jle.com> wrote in message
news:8v1us5$g8o$1@iac5.navix.net...

> Might I presume to disagree Sir? Herr Maxwell in "Another look at
> reflections" Sub Chapter "Too low a SWR can kill you" said "judging from
> what we hear on the air, nearly everyone is looking for a VSWR of 1:1

Maxwell also wrote a series of QST articles. They are all available among the articles posted at:

http://www.arrl.org/tis/info/reflections.html

The Reflections series is found at http://www.arrl.org/tis/info/pdf/Reflect.pdf. It is just over a megabyte, but about 58 pages.

While I do not agree with the presentation of every single technical detail in the Reflections articles, they are great reading for those who would like a better understanding of the concepts of SWR. Walt and I have corresponded a bit and he told me that the presentation of some of the more controversial concepts in the series and his Reflections book will be improved for the upcoming new version.

73,
Ed Hare, W1RFI

2468. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A1486FE.72038AE8@uci.edu>
Source record: 176290

Richard Clark wrote:
> Hi Jim,
>
> And now we drag the ear into wave phenomenon - I love it! ;-)
>
> By the original intent of the dB, a unit of least discernible audio
> level change, the answer would have to be no when speaking of 1/5 of
> that least discernable level change. Now if you were to speak of
> discerning a level change between 130dB and 131dB, even then the most
> probable answer would be no, as the physiological limit of perception
> is now being taxed at the upper limit (verging on the threshold of
> pain). This says nothing of using the physiological scales of dBa,
> dBb, or dBc and the matter of the particular frequency those levels
> are excited at.

> Here we enter into the realm of the ear applying modification to the
> idea of what is heard before that idea reaches the brain. The ear is
> not uniformly sensitive under any variation of variables (such as
> sound pressure, frequency, pure tones or mixed tones and so on). At
> certain sound pressure levels and frequency combinations, it would be
> arguable that you could even discern 10dB variation (which of course
> confounds the original intent of the meaning of dB as applied to
> sound).

> In fact, it is probably impossible, outside of a metrology lab, to
> mechanistically detect an accurate differentiation of 0.2 dB spl when
> at the level of 130 dB (or choose any level you wish). At this degree
> of discrimination, too many environmental factors' variation swamp
> such measurements.

Exactly. Same problem is found in trying to detect by eye, the
difference in intensity between the incident and reflected light from a
flashlight bouncing off a mirror. The light loss is orders of magnitude
below the intensity. Feynman has a fun, related discussion in QED.

73, Jim AC6XG

2469. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A148EE1.50F57BA8@mwci.net>
Source record: 176291

R.P.Haviland wrote:

> Adam wrote in message <8v183g$150n$1@news.kabelfoon.nl>...
> . First of all the reflected power will be changed into heat by
> >the PA transistor or tube. As long as the PA can dissipate the heat there
> is
> >not too much danger (within limits).
>
> Not necessarily. If the source generator does not have the same impedance as
> the transmision line, part of the reflected power will be re-reflected,
> adding to the power from the generator.

This is an oversimplification. The result of load reflection is that the impedance presented to the amplifier may not be a) not resistive and b) not of the right magnitude.

In vacuum tube amplifiers the PI network can accommodate a range of impedances and transform them to the correct plate load resistance. No problem.

In solid state broadband amplifier the load presented to the transistors can be too low, too high and/or reactive, all of which are troublesome in one way or another. The transistors can overheat because the efficiency is too low, or the transistors can zap because of overvoltage on the drain/collector. Reactive load lines are bad news for transistors.

The question "Where does the reflected power go?" is a phoney baloney question anyway. Reflected power is the ratio (V-)^2 /50, where (V-) is the reflected voltage wave. At the amplifier output this reflected wave (V-) adds vectorially with the forward wave (V+) that is leaving the amplifier. These two waves establish a value of complex impedance at the amplifier output. This is the impedance that the amplifier delivers its *net* 100 watts (or whatever) to the load. The task then is to make the amplifer deliver this 100 watts into the resistive component of this coax input impedance.

Bill W0IYH

2470. Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A149677.1172@bellsouth.net>
Source record: 176292

I just wanted to thank all the folks that took the time to email me and ask for info.

73

Jerry

2471. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1496A7.7461911B@IEEE.org>
Source record: 176293

"William E. Sabin" wrote:
> For example, at a resistive load, (V+) and (V-) can be completely in-phase (or
> completely out-of-phase). But as we move along the line the phase between (V+)
> and (V-) rotates. But the forward (130), reflected (30) and net (100) power
> values are constant everywhere on the line.

Thanks Bill, I was trying to figure out how to put that into words.
--
http://www.mindspring.com/~w6rca

2472. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A14978A.248DD55D@IEEE.org>
Source record: 176294

Richard Harrison wrote:
>
> Cecil W6RCA wrote:
> "Generated Power plus Reflected Power equals Forward Power."
>
> True if all reflected power is bounced by the generator.

That was assuming a Z0-match caused by an antenna tuner where zero
reflected power reaches the transmitter (generator).
--
http://www.mindspring.com/~w6rca

2473. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1498DC.164AEFCD@IEEE.org>
Source record: 176295

Fred Hambrecht wrote:
>
> Might I presume to disagree Sir? Herr Maxwell in "Another look at
> reflections" Sub Chapter "Too low a SWR can kill you" said "judging from
> what we hear on the air, nearly everyone is looking for a VSWR of 1:1
>
> Question why and the answer may be, I'm not getting out on this frequency
> because my SWR 2.5:1... there's too much power coming back and not enough
> getting to the antenna...or I feel a line having that much SWR, the
> reflected power flowing back in to the amplifier will burn it up..." He then
> goes on to Poo Poo any of these ideas. If interested I will be glad to post
> the reasons.

But Walter Maxwell has expanded on that very subject. He was talking, in
context, ONLY about tube transmitters with built-in pi net tuner circuits.
That's about all there was when he wrote that article. He has said that he
was NOT talking about solid-state amplifiers with fixed 50 ohm outputs. He
has said that solid-state amplifiers can indeed eat enough reflected energy
to overheat or blow themselves up. "Reflections II" will probably correct
that misunderstanding.
--
http://www.mindspring.com/~w6rca

2474. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A149C3C.B7C538BD@IEEE.org>
Source record: 176296

Reg Edwards wrote:
> In a sensibly lossless transmission system, which most
> systems are, all the RF power outputted by the transmitter
> is absorbed by the intended load, ie., the antenna. There's
> simply no-where else for it to go.

Here we go again. :-) Assume a 100 joules/second transmitter with a one second long lossless transmission line and a load which causes reflected power to equal half of the forward power. Key the transmitter.

After one second, no power has reached the load and there is 100 joules in the transmission line.

After two seconds, 50 joules has reached the load, 50 joules has been reflected, and 100 joules is in the forward wave. NOTE THAT 150 JOULES EXISTS IN THE TRANSMISSION LINE, MORE THAN THE GENERATED ENERGY.

Assuming a Z0-match which blocks reflected power from reaching the transmitter, after three seconds forward energy equals 150 joules and reflected energy equals 50 joules.

After four seconds, 75 joules has reached the load, 75 joules has been reflected, etc. etc. etc.

I think you get the idea. After steady-state has been reached there is 200 joules of forward energy and 100 joules of reflected energy. The transmitter has generated 300 more joules than has been absorbed by the load. There exists 200 watts of forward power and 100 watts of reflected power. It really and truly exists because it hasn't made it to the load yet.

There **IS** somewhere else for it to go, Reg. It is *stored* in the transmission line until the transmitter is turned off. Without the reflected energy stored in the transmission line, all the generated power would not make it to the load.
--
http://www.mindspring.com/~w6rca

2475. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A149D70.31ACF089@IEEE.org>
Source record: 176297

Dick Carroll wrote:
> I'll be dipped.

I thought that was what I was smelling. :-)

> Not a word from the experts about low loss feedline
> preserving more of the power for radiation rather than dissipation,
> whether or not we're talking of the forward incident wave or a reflected
> wave.

Before we talk about lossy lines, we need to talk about lossless lines
in order to answer his question, where does the reflected power go. See
my followup posting to Reg. Even Reg forgets that the transmission line
must fill up with energy before the load can accept all the generated
power.
--
http://www.mindspring.com/~w6rca

2476. WTB: Hy-Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a14a155.0@oracle.zianet.com>
Source record: 176298

I think I am interested in finding another used (or new) Hy-Gain Hy-Tower (18HT) to phase with the one I have. All metal fittings must be included and antenna in good condition. Please EMAIL me with price, condition, location.

Thanks... Ed, W5EJ

2477. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v2as2mai1@iac5.navix.net>
Source record: 176299

They eat themselves up, do to the mismatch of impedance. Lets put a tuner in line so the impedance is matched. I think you would agree that the SWR on the line has not changed one iota, (disregarding lengths of wire in the tuner) now we are back to Maxwell's original premise.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A1498DC.164AEFCD@IEEE.org...
> Fred Hambrecht wrote:
> >
> > Might I presume to disagree Sir? Herr Maxwell in "Another look at
> > reflections" Sub Chapter "Too low a SWR can kill you" said "judging from
> > what we hear on the air, nearly everyone is looking for a VSWR of 1:1
> >
> > Question why and the answer may be, I'm not getting out on this frequency
> > because my SWR 2.5:1... there's too much power coming back and not enough
> > getting to the antenna...or I feel a line having that much SWR, the
> > reflected power flowing back in to the amplifier will burn it up..." He then
> > goes on to Poo Poo any of these ideas. If interested I will be glad to post
> > the reasons.
>
> But Walter Maxwell has expanded on that very subject. He was talking, in
> context, ONLY about tube transmitters with built-in pi net tuner circuits.
> That's about all there was when he wrote that article. He has said that he
> was NOT talking about solid-state amplifiers with fixed 50 ohm outputs. He
> has said that solid-state amplifiers can indeed eat enough reflected energy
> to overheat or blow themselves up. "Reflections II" will probably correct
> that misunderstanding.
> --
> http://www.mindspring.com/~w6rca

2478. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <G7AUOkrjz7Mjit3Wzf6mps0OgUSt@4ax.com>
Source record: 176300

On Thu, 16 Nov 2000 17:16:46 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>> In fact, it is probably impossible, outside of a metrology lab, to
>> mechanistically detect an accurate differentiation of 0.2 dB spl when
>> at the level of 130 dB (or choose any level you wish). At this degree
>> of discrimination, too many environmental factors' variation swamp
>> such measurements.
>
>Exactly. Same problem is found in trying to detect by eye, the
>difference in intensity between the incident and reflected light from a
>flashlight bouncing off a mirror. The light loss is orders of magnitude
>below the intensity. Feynman has a fun, related discussion in QED.
>
>73, Jim AC6XG

Hi Jim,

Exactly? There is no correlation between the function of the eye and
the function of the ear - especially with a brain in the middle. ;-)

73's
Richard Clark, KB7QHC

2479. Wanted: No. 8 Delhi Tower section

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: knesbitt <knesbitt@nucleus.com>
Message-ID: <3a14b634$1@news.nucleus.com>
Source record: 176301
Cross-posted to: rec.radio.amateur.antenna,rec.radio.misc,rec.radio.swap

Hi all,
looking for the bottom section (#8) for a Delhi medium duty, or heavy duty
self-supporting tower.
If you have one that you'd like to part with please email me with asking
price.

73>
Kirby, VE6IV

2480. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3a14b231_3@news.iglou.com>
Source record: 176302

Home Depot sells aluminum electric fence wire in 17ga. I've used it for a 160m horiz loop and it lasted 5 years in high winds due to it's light weight. At the feed point, smear it with dope and use wire nuts for the connection.

--
Steve
N4LQ
"Darryl Lonowski" <darryl@chorus.net> wrote in message
news:3A1141C6.A335A89E@chorus.net...
> Hi All,
>
> Does anyone know a source for Hardened aluminum fence wire in bulk, 1000
> feet+?
>
> I have heard of stations using it for LPA's and exremely long, random
> wires etc?
>
> tnx
>
>
> Darryl
> KB9NAO
>
>
>

2481. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12397-3A14BBEA-108@storefull-116.iap.bryant.webtv.net>
Source record: 176303

Yuri Blanarovich, K3BU wrote:
"Don`t work! When I designed Razor Beams, I used insulated wire for quad elements and all yagi elements were grounded to the beam and tower."

Glad you got some relief from precipitation static with an umbrella effect. I visited with Ed Laport when he was RCA International`s chief engineer. I was favorably impressed. Ed put in receiving stations as well as transmitting stations worldwide. He llikely had much experience with precipitation static. I had no serious precipitation static in my experience with receiving stations. Guess I was working in better climates. I`d bet Ed was speaking from experience in his book.

I can imagine a charged particle separating from a cloud producing a tiny capacitor with a growing separation between its plates. Lessee, Q = CE. or E = Q / C. As our charged particle moves away from its other plate, C shrinks while Q is fixed and E soars. By the time it lands on something it can produce quite a pop when it discharges unless there is a really hefty insulation to prevent immediate discharge.

Ed didn`t say how much insulation was enough in "Radio Antenna Engineering". Reg Edwards suggested coax without the shield as possibly suitable.

Maybe Yuri`s quad elements might have been more immune to precipitation static with heavier insulation. I haven`t a clue as to how much is enough. Maybe there are other reasons the static kept coming on Yuri`s insulated antenna elements. Reg Edwards had another suggestion, to let the antenna float above ground acquiring a high charge to repel rather than attract particles. Would that bring on the blue balls of fire? There probably are many stories of success and failure in the attempt to eliminate precipation static.

Best regards, Richard Harrison, KB5WZI

2482. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <LfrdSDAEiGF6EwZ7@ifwtech.demon.co.uk>
Source record: 176304

Reg Edwards wrote:
>Ian, it doesn't make sense to fit a choke if the very next
>thing to do is to take it out again to see if it is needed.
>;o)
>
"If it works, don't fix it" or "prevention is better than cure" -
choose your proverb.

>When an authorised station, complying with regulations, is
>surrounded by nearby TV receivers a choke is just as likely
>to make TVI worse as to improve it. Particularly on the 160m
>to 30m bands.
>
Why "just as likely to make TVI worse"?

>Since most of the trouble is due to TV installations being
>too sensitive to frequencies for which they are not intended
>(or authorised) to receive it is often more effective to
>cure the problem at the receiving end.

The point you're not addressing is the social one, about causing
problems to other people. If you can take precautions to avoid causing
problems, that's far better than letting the problems happen and then
fixing them.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2483. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116034853.14501.00000585@ng-fl1.aol.com>
Source record: 176319

>Is it justifiable to wait until the family and/or the neighbours
>complain, before fixing the interference by methods that *could* have
>prevented it?
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek
>

That is an interesting question.
My suggestion is to let your neighbors, especially any new ones, know you are a ham--but that's that. If they have a problem then they will tell you. Otherwise, if you make yourself an RFI 'fixer', without any existing problem, you become the receiving end of needless complaints. This will undoubtedly get exponentially worse as the wireless internet kicks in.

Be sure to ask them what, how, and WHEN the 'problem' occurs. WHEN is critical; about half the time I am 'blamed' for RFI when I am not even home, and the rig is off and cold. I'm sure my experience is not unique in this.

73
Chip N1IR

2484. Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Colin Marks <cbm@zip.com.au>
Message-ID: <3a13a119.13273@nancy.pacific.net.au>
Source record: 176320

I use a half-wave dipole antenna tuned for 20 m. band and fed with about 50 feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre of the antenna. There is a RAK balun at the antenna centre. I have had excellent results with swr never more than 1.3 to 1 until recently the swr suddenly shot up to about 5 to 1 - a level to high for me to operate. This happened in the middle of a QSO. I operate ssb and the power would be about 400 watts pep.(legal limit here) but sometimes possibly tested briefly at 700.
The antenna is very difficult to access and I do not wish to take it down for testing unless unavoidable.
The fault must be either in the balun (which is fairly new) or in a co-ax connector.
My question : can I check the balun from the shack in some simple way to avoid taking down the antenna?
From the shack the two sides of the co-ax feedline test open-circuit. This seems to indicate a fault because I think both sides of the balun should be short circuit to DC (open circuit to RF). This could mean a break in either a connector or internally in the balun.
Any comments would be appreciated - preferably by email.
Thanks.
73 Colin VK2LV Sydney Australia

2485. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-1611000057020001@a3a05603.sympatico.bconnected.net>
Source record: 176321

In article <3A135295.2A5BBF31@dvol.com>, Brian Kelly <kelly@dvol.com> wrote:

> I tossed all my income from six months worth of delivering the Philadelphia
> Evening Bulletin at Sears and got a new $109.95 S-40B, took it into the new
> 80m Novice Band in '53 with an 80m ARC-5 and tally-ho!

You were richer than I was. The S20R was all I could afford. After I got my ticket I saved up some more and I got a BC458A surplus transmitter, 5.3 MHz - 7 MHz if I remember correctly, and turned the padder capacitors all the way out so that it covered the bottom 100 KHz or so of 40. Cost $5, somewhat cheaper than the BC459A that covered 40 already, and I figured I could make it work and I was right. Soon thereafter I bought the black Navy version of the BC457A, 4 MHz - 5.3 MHz, for another $5 and turned its padder capacitors all the way in, rather than buying the more expensive one that already covered 80. After retuning, it barely made it down to 3.5 MHz, so I didn't have to worry about going past the band edge. Nice bandspread, done that way! 80 took up almost the whole dial. Worked VKs and ZLs from Ohio with the thing in the dead of night on 80 metres when I should have been studying mathematics. Someone stole the S20R from my college dorm room a year or so later in 1952, and I couldn't afford to replace it, so I sold the two Command set transmitters for I think $10 apiece, and threw in the power supply I had crafted out of pieces of old radios as part of the deal. I must have had thousands of QSOs with that lashup before it and I parted ways. I think my total cost for all my gear including a cheap bug key was about 60 dollars. By the time I got my Extra in 1955 I had no equipment and less money. I could copy 55 wpm in my head, and send 35 wpm, whenever I got to use someone else's rig.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

2486. Re: 160/80 Dipole Parallel or Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A13A369.192C34E9@oio.net>
Source record: 176322

Birken Vogt wrote:
>
> I have been considering an antenna for 160. I have been modeling
> different ones with EZNEC/Demo. I had been considering an inverted L
> but the nulls bug me and the gain doesn't seem that good, even though I
> can only get the dipole up about 50 feet. Then the idea struck me to do
> some kind of combination. I have a trap modeling program (called
> TRAPDIP) but EZNEC gives me very odd impedances and patterns on 80 off
> of center frequency which I have as 3.795. The parallel dipole solution
> seems better but I don't know how to construct it, what to use for
> spacers.
>
> Any hints?
>
> Birken
> KE6DLT

Birken,
You can use almost anything that's an insulator. PVC tubibg, other
kinds of plastic, etc. You can also 'tie-off' to different trees,
poles,
what ever. The more seperation between 'elements' the better, but
seperation isn't too critical...
'Doc

2487. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116040726.28208.00001937@ng-fl1.aol.com>
Source record: 176323

>I use a half-wave dipole antenna tuned for 20 m. band and fed with about 50
>feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre of
>the antenna. There is a RAK balun at the antenna centre. I have had
>excellent results with swr never more than 1.3 to 1 until recently the swr
>suddenly shot up to about 5 to 1 - a level to high for me to operate. This
>happened in the middle of a QSO. I operate ssb and the power would be about
>400 watts pep.(legal limit here) but sometimes possibly tested briefly at
>700.
>The antenna is very difficult to access and I do not wish to take it down
>for testing unless unavoidable.
>The fault must be either in the balun (which is fairly new) or in a co-ax
>connector.
>My question : can I check the balun from the shack in some simple way to
>avoid taking down the antenna?
>From the shack the two sides of the co-ax feedline test open-circuit. This
>seems to indicate a fault because I think both sides of the balun should be
>short circuit to DC (open circuit to RF). This could mean a break in either
>a connector or internally in the balun.
>Any comments would be appreciated - preferably by email.
>Thanks.
>73 Colin VK2LV Sydney Australia

It sounds like the problem is with a disconnected braid, probably at the feedpoint. Reflectometry can confirm the place of the break. I think the MFJ 259B does this, but have not used it in this mode.

Some baluns, such as bead baluns, will given an open circuit when you check continuity.

I fear you have fried something in your balun. What power is it rated at?

73
Chip N1IR

2488. Re: Question on ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8v0i57ogt1@slb7.atl.mindspring.net>
Source record: 176324

Near field noise pickup folks:

In either case, well designed coaxial transmission system or well designed parallel line feeder transmission line, the near field noise pick up will be minimal, since neither will respond to common mode noise. At HF ladder line is no better nor any worse than coaxial cable for near field noise pick up.

In fact often a typical ladder line installation will be superior to a coaxial transmission line for near field noise pickup simply because the installation and maintennance is done more carefully. Many are "lulled" into thinking that coaxial cable "automatically" will reject common mode noise, and fail to pay attention to cable routing and dressing and to good balance and common mode rejection techniques. With ladder line, you are almost forced to "do the right thing", while with coax it is easy to get sloppy.

I have often seen amateur installations where the ham switched from a poorly installed coaxial cable transmission line to a ladder line installation [with the "proper" baluns in line] where the local near field noise pickup was 10 - 20 dB less than with the prior coaxial cable.

So don't be afraid of ladder line wrt local noise pickup, the rumors just simply "ain't true"!

-Peter K1PO

"Roger Leone" <arleone@inreach.com> wrote in message
news:IYeP5.396$9U1.17833@news.inreach.com...
> Cam:
>
> I like the Gates effect answer...
>
>
> But whatever device feeds the ladder line in differential mode (tuner or
> balun) should have pretty good rejection of common mode signals, except of
> course for the unavoidable capacitive coupling.
>
> Roger
>
>

2489. Re: PrimeCase, et al

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A13CD65.351E80F7@hiwaay.net>
Source record: 176325

Sorry, Fracky- in this thread I agree with you, except that you ARE a public figure. You have made it so. You have given public lectures (not just at school), you have been the subject of articles in the Univ paper, you have been included in several technical journals, and in Scientific American.

You are a public figure. But under the current situation, you should not be the subject line of a thread.

Bill

Fractenna wrote:
>
> No one said you couldn't discuss this. Just don't treat me, publicly, as a news
> item, in addition to abusing me. I am not a public figure.
>
> NC

2490. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001116071500.22169.00000003@ng-da1.aol.com>
Source record: 176326

>From: primecase@my-deja.com

>Someone once said to me, "Never argue with an idiot, they drag you down
>to their level and then beat you with experience" Phd or not, the guy
>is still an idiot and more to the point he thinks we care about his so
>called intellectual property. You never see Mr Yagi yelling on these
>newsgroups. Grow up and get a life!

In the past week, the only post I have seen related to Mr Cohen or Fractenna
that appears to be an attempt to stir up trouble is this shot out of the
blue...

73,
Ed Hare, W1RFI

2491. Re: Antenna Tuner question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A13D11E.B3315B2E@dvol.com>
Source record: 176327

WE0H wrote:

> Is the MFJ 969 tuner a good tuner? How about the Yaesu FC 901?
> Thanks, Mike.

>
I've been able to quickly get dead flat 1:1 matches 160-10m with my 969 every time with a number of completely random endfed wires and some of those have had very "hot" ends which is a scenario many tuners can't handle. I've never tried it with any type of balanced line or coax fed dipoles. My only complaint with the 969 is that the turns counter is unreliable, "slips it's cog" and loses it's place which is annoying. It's a mechanical problem, one of these days I'll dig into it and fix it or ship it back to MFJ for repairs or butcher it and install a good turns counter.

>
>
> --
> Mike Reid
> WE0H
> mikereid1@qwest.net

>
w3rv

2492. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A13D180.3B49299A@dvol.com>
Source record: 176328

Rick Littlefield wrote:

> >Something good has gotten lost<.
>
> You're right, but Les Cushman didn't grow that business on good will. What got
> lost was the contents of your wallet--probably at the local computer store.
> Good things only get lost when more interesting things get found.

>
You completely lost me.
>

> Rick K1BQT

>
w3rv

2493. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A13D2D9.CEA1F497@dvol.com>
Source record: 176329

Dick Carroll wrote:

>
> Economic reality is whatever it is. But a part of is that consumers
> will factor those points into their buying decisions. I'd be a little
> reluctant to buy an expensive antenna when I knew in advance that I
> would have problems getting replacement parts for it.
>
>

>
There is an obvious solution to the whole "issue", to hell with 'em all, build your own antennas. Except for weenies like 2m magmounts I put up my last store-bought antenna years ago.
>
w3rv

2494. Re: PrimeCase, et al

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116073004.24633.00000003@ng-cd1.aol.com>
Source record: 176330

>
>Sorry, Fracky- in this thread I agree with you, except that you ARE a
>public figure. You have made it so. You have given public lectures (not
>just at school), you have been the subject of articles in the Univ
>paper, you have been included in several technical journals, and in
>Scientific American.
>
>You are a public figure. But under the current situation, you should not
>be the subject line of a thread.
>
>Bill
>
>Fractenna wrote:
>>
>> No one said you couldn't discuss this. Just don't treat me, publicly, as a
>news
>> item, in addition to abusing me. I am not a public figure.
>>
>> NC
>

My attorney has made it clear to me that the facts are otherwise. Whether you agree or not, if you have some decency you should abide by my reasonable request.

Cordially,

NC

2495. Re: Ed Hare

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116073930.24633.00000004@ng-cd1.aol.com>
Source record: 176331

>>From: primecase@my-deja.com
>
>>Someone once said to me, "Never argue with an idiot, they drag you down
>>to their level and then beat you with experience" Phd or not, the guy
>>is still an idiot and more to the point he thinks we care about his so
>>called intellectual property. You never see Mr Yagi yelling on these
>>newsgroups. Grow up and get a life!
>
>In the past week, the only post I have seen related to Mr Cohen or Fractenna
>that appears to be an attempt to stir up trouble is this shot out of the
>blue...
>
>73,
>Ed Hare, W1RFI
>

Actually, in the last 10 days or so, Chris Trask tried. And I ignored him. In fact, he likes it so much he tried a second time. That stuck. Why? Because he'll just keep on saying incorrect misinformation, at my expense, until I respond.

So I responded. Now we know what motivates Mr. Trask.

Ask him about his beliefs regarding the CFA (cross field antenna).

This is ham radio's own home-grown pseudoscience.(Almost all the articles written about the CFA have appeared in ham publications).

Just what we need, at a time when hams have to make a case for our continued privileges of spectrum--so much for technical conttribution.

See if extant scientific fact is now acceptable to Chris Trask. See how he conducts himself when someone with authority, reasonably tries to present a scientific view.

Maybe this time he will be less willing to get others who do so banned, especially if there are many of those who do not have a 'belief' about the CFA--but speak from an understanding of electromagnetics.

NC

2496. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116074529.24633.00000005@ng-cd1.aol.com>
Source record: 176332

>Rick Littlefield wrote:
>
>> >Something good has gotten lost<.
>>
>> You're right, but Les Cushman didn't grow that business on good will. What
>got
>> lost was the contents of your wallet--probably at the local computer store.
>> Good things only get lost when more interesting things get found.
>
>>
>You completely lost me.
>>
>
>> Rick K1BQT
>
>>
>w3rv
>

You know, Steve Best is an active participant in this forum and the Cushcraft web page readily states he is the President.

Why don't you ask him about this, via e-mail, rather than continuing a thread that clearly is meant to malign Cushcraft?

Frankly, all of this is just in bad taste at this point. And whether I or you or anyone else likes Cushcraft or not, magnifying intangible gripes doesn't belong here IMHO.

Cordially,

NC

2497. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001116074523.29363.00000012@ng-fm1.aol.com>
Source record: 176333

>From: jeffreys@cyburban.com (Jeffrey Steinberg):

>I would hate for this newsgroup to translate its fustration with Dr.
>Cohen into the belief that there is no merit in fractal technology.
>There may be, but sometimes the most interesting advances come
>from such disruptive/different viewpoints.

Scientific and social advances may indeed come from the expression of viewpoints that create a disruptive response in some people. But those advances invariably do not come from the disruption, but from the sometimes few who choose to respond to the original expression in a scientific and social manner.

73, Ed Hare, W1RFI

2498. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001116074813.29363.00000013@ng-fm1.aol.com>
Source record: 176334

>From: fractenna@aol.com (Fractenna):

>I request that you cease and desist invoking me in said public discussion.

The only invocation I saw was discussing the posts you have made in a public discussion, and the ensuing public discussion. Things you post on public newsgroups are fair game for as much further discussion as the participants involved choose to go.

You have every right to privacy, but to invoke that right, you would have to become, well... private.

73,
Ed Hare, W1RFI

2499. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001116075104.29363.00000014@ng-fm1.aol.com>
Source record: 176335

>From: fractenna@aol.com (Fractenna):

>I am not a public figure.

The number of public posts that you have made, Chip, suggest otherwise. The personal life that I am sure you lead that extends significantly past the content of your posts is not a news item, but the posts you have made here certainly are.

73,
Ed Hare, W1RFI

2500. Re: Chip Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001116080418.29363.00000015@ng-fm1.aol.com>
Source record: 176336

From: fractenna@aol.com (Fractenna)
Date: 11/16/00 7:39 AM Eastern Standard Time
Message-id: 20001116073930.24633.00000004@ng-cd1.aol.com>

>>From: primecase@my-deja.com
>
>>Someone once said to me, "Never rgue with an idiot, they drag you down
>>to their level and then beat you with experience" Phd or not, the guy
>>is still an idiot and more to the point he thinks we care about his so
>>called intellectual property. You never see Mr Yagi yelling on these
>>newsgroups. Grow up and get a life!
>
>In the past week, the only post I have seen related to Mr Cohen or Fractenna
>that appears to be an attempt to stir up trouble is this shot out of the
>blue...
>
>73,
>Ed Hare, W1RFI
>

Actually, in the last 10 days or so, Chris Trask tried. And I ignored him.
In
fact, he likes it so much he tried a second time. That stuck. Why? Because
he'll just keep on saying incorrect misinformation, at my expense, until I
respond.

So I responded. Now we know what
motivates Mr. Trask.

Ask him about his beliefs regarding the CFA (cross field antenna).

This is ham radio's own home-grown pseudoscience.(Almost all the articles
written about the CFA have appeared in ham publications).

Just what we need, at a time when hams have to make a case for our continued
privileges of spectrum--so much for technical conttribution.

See if extant scientific fact is now acceptable to Chris Trask. See how he
conducts himself when someone with authority, reasonably tries to present a
scientific view.

Maybe this time he will be less willing to get others who do so banned,
especially if there are many of those who do not have a 'belief' about the
CFA--but speak from an understanding of electromagnetics.

NC

2501. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116084456.06838.00000006@ng-mj1.aol.com>
Source record: 176337

>>From: fractenna@aol.com (Fractenna):
>
>>I am not a public figure.
>
>The number of public posts that you have made, Chip, suggest otherwise. The
>personal life that I am sure you lead that extends significantly past the
>content of your posts is not a news item, but the posts you have made here
>certainly are.
>
>73,
>Ed Hare, W1RFI

That is not correct.

Ask an attorney's counsel on this.

NC

2502. Re: Ed Hare

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116084543.06838.00000007@ng-mj1.aol.com>
Source record: 176338

>>From: fractenna@aol.com (Fractenna):
>
>>I request that you cease and desist invoking me in said public discussion.
>
>The only invocation I saw was discussing the posts you have made in a public
>discussion, and the ensuing public discussion. Things you post on public
>newsgroups are fair game for as much further discussion as the participants
>involved choose to go.
>
>You have every right to privacy, but to invoke that right, you would have to
>become, well... private.
>
>73,
>Ed Hare, W1RFI
>

The said public discussion referred to was the thread title.

NC

2503. Re: Ed Hare

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116084614.06838.00000008@ng-mj1.aol.com>
Source record: 176339

>>From: jeffreys@cyburban.com (Jeffrey Steinberg):
>
>>I would hate for this newsgroup to translate its fustration with Dr.
>>Cohen into the belief that there is no merit in fractal technology.
>>There may be, but sometimes the most interesting advances come
>>from such disruptive/different viewpoints.
>
>Scientific and social advances may indeed come from the expression of
>viewpoints that create a disruptive response in some people. But those
>advances invariably do not come from the disruption, but from the sometimes
>few
>who choose to respond to the original expression in a scientific and social
>manner.
>
>73, Ed Hare, W1RFI
>
>
>
>
>
>
>

2504. Re: Ed Hare

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116084705.06838.00000009@ng-mj1.aol.com>
Source record: 176340

>
>From: fractenna@aol.com (Fractenna)
>Date: 11/16/00 7:39 AM Eastern Standard Time
>Message-id: 20001116073930.24633.00000004@ng-cd1.aol.com>
>
>>>From: primecase@my-deja.com
>>
>>>Someone once said to me, "Never rgue with an idiot, they drag you down
>>>to their level and then beat you with experience" Phd or not, the guy
>>>is still an idiot and more to the point he thinks we care about his so
>>>called intellectual property. You never see Mr Yagi yelling on these
>>>newsgroups. Grow up and get a life!
>>
>>In the past week, the only post I have seen related to Mr Cohen or Fractenna
>>that appears to be an attempt to stir up trouble is this shot out of the
>>blue...
>>
>>73,
>>Ed Hare, W1RFI
>>
>
>Actually, in the last 10 days or so, Chris Trask tried. And I ignored him.
>In
>fact, he likes it so much he tried a second time. That stuck. Why? Because
>he'll just keep on saying incorrect misinformation, at my expense, until I
>respond.
>
>So I responded. Now we know what
>motivates Mr. Trask.
>
>Ask him about his beliefs regarding the CFA (cross field antenna).
>
>This is ham radio's own home-grown pseudoscience.(Almost all the articles
>written about the CFA have appeared in ham publications).
>
>Just what we need, at a time when hams have to make a case for our continued
>privileges of spectrum--so much for technical conttribution.
>
> See if extant scientific fact is now acceptable to Chris Trask. See how he
>conducts himself when someone with authority, reasonably tries to present a
>scientific view.
>
>Maybe this time he will be less willing to get others who do so banned,
>especially if there are many of those who do not have a 'belief' about the

>CFA--but speak from an understanding of electromagnetics.
>
>NC
>
>
>
>
>
>
>

2505. Re: Pseudoscience and CFA Supporter Chris Trask

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a13e393.118641971@nntp.mindspring.com>
Source record: 176341

Dear Dr. Cohen,

I must defer to your opinion on this subject since you are the
resident expert in pseudoscience.

You really shouldn't object to being treated as a public figure since
it was you actions that have made you a public figure.

I hope this helps.

Jerry

On 16 Nov 2000 01:50:59 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>Fractenna <fractenna@aol.com> wrote:
>>
>>
>>: Look: I do NOT appreciate being publicly 'filed' as a post. I am not a
>>: public figure. I am not a target for every potential person with a
>>: keyboard to take pot shots at.
>>
>>: Believe me--I would like nothing BETTER than to NEVER be talked about
>>: here! So let's stop this travesty that I want 'attention'. I most
>>: certainly do not.
>>
>>: Please keep any abusive and judgemental comments to yourselves. Or
>>: imagine what your life would be like to wake up to abuse and malcontent
>>: EVERY day, on public forums and a slew of e-mails.
>>
>>: Just --please-- be quiet. Keep negative personal opinions about
>>: individuals off public forums. There was a start on this-- and now we
>>: see a growing public chatter only opening it up wider.
>>
>>
>> Consider it as being nothing more that reaping the benefits of
>>what you yourself have sewn on this newsgroup and elsewhere for the last
>>couple of years.
>>
>> If you want to cease being the centre of controversy, then don't
>>create them and don't encourage them. The only times that you have ever
>>come under fire is when you yourself have burst forth here and elsewhere
>>threatening lawsuits, claiming that you have received death threats, and
>>a wide range of other abuses that you and you alone have perpetrated
>>time and again IN PUBLIC.
>>

>> Which is why you, and you alone, have been removed from various
>>mail lists and discussion groups. Go find a mirror and discover the
>>real source of your troubles.
>>
>>
>
>
>Again, more prevarications posed at my expense.
>
>Here is a fact in point.
>
>Mr. Trask, a Penn State educated graduate MS holder, got onto the Antennex
>board, and made concerted efforts to prevent anyone from making valid
>scientific comments regarding the so-called CFA antenna.
>
>In other words, Mr. Trask was using this soapbox to advocate PSEUDOSCIENCE. He
>is a big supporter of the CFA.
>
>The CFA is a very electrically small antenna which claims high efficiency and
>NEW PHYSICS to explain said claim. This is bogus, despite the near-worship,
>which some, such as Mr. Trask have, for this faulty premise.
>
>The CFA has been debunked by many objective and sober colleagues, including Dr.
>Jack Belrose, VE2CV, whose writings are well known to many here.
>
>Trask latched onto my cordial and objective comments and tried to turn them
>around so as to make me appear, and to make them appear, something they, and I,
> are not.
>
>The fact is that I called a pseudoscience a pseudoscience. I will continue to
>do so.
>
>The pity here is Trask is someone with some degree of scientific training, who
>thus is expected to know better. Certainly he should know better than to hound
>someone with a knowledgable basis, as is the case here. Certainly he should
>know bettr than to hound the folks who run such a bulletin board until they
>decide to effectively support the pseudosceince by quenching the scientific
>voice pointing this out.
>
>In other words, ham radio, through manipulation of certain public channels, now
> has its own pseudoscience, thanks to the efforts of Chris Trask and a few
>others.
>
>As it stands, Trask is a supporter of a known pseudoscience, who takes more
>than objection to a scientist calling a pseudoscience a pseudoscience.
>
>Objection is more than welcome: I have dealt with this extensively with UFO
>folks--who, by the way, are ALWAYS friendly. ESPECIALLY when you disagree with
>them from a factual basis.
>

>Misinformation; censure; and prevarication, which Trask promulgates here, are
>NOT acceptable.
>
> Nathan Cohen, Ph.D.

2506. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A13EC08.EEE7918F@dvol.com>
Source record: 176342

David or Jo Anne Ryeburn wrote:

> In article <3A135295.2A5BBF31@dvol.com>, Brian Kelly <kelly@dvol.com> wrote:
>
> > I tossed all my income from six months worth of delivering the Philadelphia
> > Evening Bulletin at Sears and got a new $109.95 S-40B, took it into the new
> > 80m Novice Band in '53 with an 80m ARC-5 and tally-ho!
>
> You were richer than I was. The S20R was all I could afford.

>
I decided very early in life that being broke was not an option for me. That
S-40B cost me six months of pounding the bricks with a 50Lb bag of newspapers
seven days a week no matter what in the NE weather. I earned that sucker! As if
the kids today would have a clue.
>

> After I got

> my ticket I saved up some more and I got a BC458A surplus transmitter, 5.3
> MHz - 7 MHz if I remember correctly, and turned the padder capacitors all
> the way out so that it covered the bottom 100 KHz or so of 40. Cost $5,
> somewhat cheaper than the BC459A that covered 40 already, and I figured I
> could make it work and I was right. Soon thereafter I bought the black
> Navy version of the BC457A, 4 MHz - 5.3 MHz, for another $5 and turned its
> padder capacitors all the way in, rather than buying the more expensive
> one that already covered 80. After retuning, it barely made it down to 3.5
> MHz, so I didn't have to worry about going past the band edge. Nice
> bandspread, done that way! 80 took up almost the whole dial. Worked VKs
> and ZLs from Ohio with the thing in the dead of night on 80 metres when I
> should have been studying mathematics.

>
How well I remember those days! My General ticket arrived one very cold Saturday,
late that I night I swished the ARC-5 down to 3.505 and tossed out a CQ, couple
stations called, the loudest was G5ZK. I'd still 'druther be on 3.505 than
anywhere else in the spectrum. And yup, had to keep the noise down else Mom would
storm my bedroom and take out all the light bulbs at 3am so I'd be awake in class
the next day.
>
Ham radio as we know it today would probably not exist if surplus gear hadn't
been available for kids in the 40s & 50s.
>

> Someone stole the S20R from my
> college dorm room a year

>
Boy, that stinks.
>

> or so later in 1952, and I couldn't afford to
> replace it, so I sold the two Command set transmitters for I think $10
> apiece, and threw in the power supply I had crafted out of pieces of old
> radios

>
I trash-picked an RCA TV set, yanked all but the rectifier tube and bingo, nice
hefty 400+vdc power supply for the ARC-5.
>
>as part of the deal. I must have had thousands of QSOs with that

> lashup before it and I parted ways. I think my total cost for all my gear
> including a cheap bug key was about 60 dollars. By the time I got my Extra
> in 1955 I had no equipment and less money. I could copy 55 wpm in my head,
> and send 35 wpm, whenever I got to use someone else's rig.

>
I gave it up when I trucked off to school, got back into it in a big way after I
got married with Drake and Collins gear with an HQ-129X "listener" a bit earlier.
Got self 300 or so confirmed and a 5BDXCC with a big tower, beams and power, ran
the contests for abt 10 years, etc. Life got really complicated around 1975 and I
hung it all up again. The last kid popped out of college three or so years ago
and I went out and bought some Kenwood goodies and I'm slowly worming my way back
onto the airwaves. A hunderd watts and some wire works for me these days.
>

>
> David, ex-W8EZE
>

>
w3rv

2507. Re: PrimeCase, et al

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A13EBAF.4C132A20@IEEE.org>
Source record: 176343

Gilbert Mouget wrote:
> :>> NC

> :NC

> Responding to yourself again ?

Nope he's not. Take a look at the quote levels. You will see that
there is another level between Chip's two postings.
--
http://www.mindspring.com/~w6rca

2508. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v0tek$t0n$1@iac5.navix.net>
Source record: 176344

Were you to go back and see what happed to those that were about to announce
their results of experimentation's, you will get a feel for the fractal
animosity.
"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:3a130432$0$83487$45beb828@newscene.com...
> I agree. But, let me say, I have been a firm beliver in the application
> of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
> while a scientist for IBM in (I think) 1984/85.
>
> While I disagree with the tone an type of posts by Dr. Cohen I hope this
> newsgroup does not write off this interesting application of fractals.
>
> Are they better or worse than other antennas? I have no idea. But what
ham
> radio is all about is testing, experimenting, improving and let others
know
> about the results.
>
> I for one say lets keep on hearing about these interesting developments,
but
> lets keeps it at a scientific level, without insults, threats, etc. from
all
> party's concerned.
>
> I would hate for this newsgroup to translate its fustration with Dr. Cohen
into
> the belief that there is no merit in fractal technology. There may be,
but
> sometimes the most interesting advances come from such
disruptive/different
> viewpoints.
>
> --jeffrey steinberg, KC2GUC, Scarsdale, NY
>
>
>
> In article <8ut381boc1@nnrp1.deja.com>, primecase@my-deja.com says...
> >
> >
> >
> >Ok, a little harsh maybe, but just as you have all expressed opinions
> >about trolling,abuse,baiting etc, I'm still entitled to an opinion and
> >I'll stick to it, right or wrong(just for the curious,this isn't more
> >bait). Yes I'm aware Mr Yagi isn't with us anymore(shame as he has

> >probably forgotten more than we'll ever learn) and it was meant as a
> >metaphor. In the cold light of day my previous post looks worse than
> >any of Mr Cohen's so I'm guilty too I guess, which just goes to prove
> >that maybe posting your immediate thoughts aren't wise when you are
> >p***ed off!.
> >
> >No more will be said on the matter
> >
> >g'night
> >
> >Kevin J Wren
> >
> >
> >In article <8us4ve$i7m$1@nnrp1.deja.com>,
> > primecase@my-deja.com wrote:
> >> Someone once said to me, "Never argue with an idiot, they drag you
> >down
> >> to their level and then beat you with experience" Phd or not, the guy
> >> is still an idiot and more to the point he thinks we care about his so
> >> called intellectual property. You never see Mr Yagi yelling on these
> >> newsgroups. Grow up and get a life!
> >>
> >> Kevin J Wren
> >>
> >> Sent via Deja.com http://www.deja.com/
> >> Before you buy.
> >>
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.
>

2509. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v1097$q8g$1@neptunium.btinternet.com>
Source record: 176345

Ian, it doesn't make sense to fit a choke if the very next thing to do is to take it out again to see if it is needed. ;o)

When an authorised station, complying with regulations, is surrounded by nearby TV receivers a choke is just as likely to make TVI worse as to improve it. Particularly on the 160m to 30m bands.

Since most of the trouble is due to TV installations being too sensitive to frequencies for which they are not intended (or authorised) to receive it is often more effective to cure the problem at the receiving end.

It is time TV receiver manufacturers and installers complied with the rules regarding susceptibility to interference from non-TV frequencies. Also the rules regarding pollution of the air-waves.

All 3 of my few personal experiences arose because of defective receiving installations.

(1) The TV receiver had recently been returned from the local TV repair workshop. The so-called repair engineer had forgotten to replace a screening box after changing a valve. The GPO RFI Dept closed down my station for 5 weeks until the problem was sorted out. I had obtained the RFI complaint form and had assisted the neighbour to fill it in. We remained on the best of terms.

(2) A VHF stereo receiver had very long cables to its pair of speakers. I could be heard on SSB in the speakers even when the receiver was switched off. The speaker cables were acting as a dipole. The emitter-base junctions in the power-output transistors were demodulating my transmissions. The cure - a pair of RF chokes in the speaker cables.

(3) Neighbour with zero technical knowledge had 3 TV receivers on a coaxial 'ring main' fed from one antenna on the chimney. Problem mainly on 7 MHz. The cure - one coaxial choke adjacent to one TV receiver to break up the ring resonance.

Perhaps the most valuable purpose of a feedline choke is with a multi-element beam antenna. A choke MAY prevent feeder radiation interfering with the desired radiation pattern. But much depends on how the RF gets onto the feeder

in the first place. A choke may just distort the pattern
in another beam direction merely because it shifts the
common-mode standing waves on the feeder up or down relative
to the antenna itself.

We've been here before. If it works - don't fix it.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
news:c5V47AA51wE6EwQU@ifwtech.demon.co.uk...
> Reg Edwards wrote:
> >What about the number of occasions when there's TVI with
a choke which
> >disappears when the choke is removed ?
> >
> How often does this happen, compared with the much larger
numbers of RFI
> problems that chokes can cure?
>
> >If you don't suffer from TVI do nothing. If you do
suffer then just
> >move something. First try moving the TV.
>
> Is it justifiable to wait until the family and/or the
neighbours
> complain, before fixing the interference by methods that
could have
> prevented it?
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for
RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2510. Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Scott M. McClements" <yetbbwa@grove.iup.edu>
Message-ID: <3A1433B7.803B84DD@grove.iup.edu>
Source record: 176346

I have a few questions about reflected and antenna tuners. First off, where does reflected power (SWR) actually go? Is it eventually radiated from the antenna, dissipated by PA transistors or is it more complex than that?

Next, if you use an antenna tuner, this will improve how well your antenna "couples" with the feedline, correct? It can actually improve how much power is put into the feedline? However, the mismatch still occurs at the antenna feedpoint and the percentage of reflected power is still constant? With the antenna tuner in place, does this effect how or where a reflected wave acts?

I know this sounds troll'ish..but I am serious about what I am asking.

Thanks,

Scott McClements.

2511. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1409AF.56F8E6D8@oio.net>
Source record: 176347

Colin,
Getready to take the antenna down, sounds like you
have an open balun, or connector, maybe.
'Doc
PS - Try it without the balun.

2512. Using 2 paralell 50ohm coax's instead of 1 for 25

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Ash <ash@gravitywell.org>
Message-ID: <3A140DA4.E912A1EF@gravitywell.org>
Source record: 176348
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

This isn't really an amateur radio question but almost :) ,
at work we have a standard industrial rf generator for 13.56MHz,
operates at powers from 5W to ~800W.
This macine produces a gas plasma inside a vacuum chamber.
This plasma is closer to 25ohms and the manual recommends using 25ohm
cabling instead of 50.
At this point we have a little mismach resulting in some reflected
power.
Someone suggested using two paralell 50ohm cables but I am somewhat
sceptical.
Still, it's pretty low frequency (not exactly microwave :) and the cable
isn't taller than
say 50cm so cutting two identical lengths should pose no problem.
But will it help? Connectors must still be 50ohms since that's all we
can find,
at least for RG-217 cable with hv-N connectors, and the plasma chamber
is still matched
for 50...
The question is would we gain anything from doing this if it's even
possible?
Would appreciate a reply,

Regards //Anders

2513. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8v137k$j62$1@slb7.atl.mindspring.net>
Source record: 176349

I guess he is at a loss for words.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001116084614.06838.00000008@ng-mj1.aol.com...
> >
> >
> >
> >
> >
> >
> >
>
>

2514. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A1410A1.AB234EE3@earthlink.net>
Source record: 176350
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

hi adam
a G5RV dipole is a very picky antenna it has to be installed just so or it will
not tune properly and since your telephone line is so close to your antenna
thats why you have RFI the phone line is not a sheiled line and a auto tuner
will handle a 2.1 swr but not much higher
what i would suggest is since it sounds like you live on a very small lot is to
buy an HF vertical like the GAP or the butternut or the cushcraft R7 or R8 these
are all multiband HF verts and are ground mounted so you wouldnt need much for
ground radials
good luck

Adam wrote:

> Hello everyone. I'm fairly new to HF and have a few questions about my
> antenna setup.
>
> 1. I have a G5RV Dipole up about 40' set up as an inverted "v", and use it
> on 10-80 meters with an external tuner. I just got a new rig with a built-in
> autotuner. My question is: will the autotuner handle the SWR of the G5RV as
> well as my manual tuner does, or will I be better off to continue using the
> manual tuner? II have heard that autotuners have a low tolerance to high
> SWR, and in some spots, the SWR on the G5RV is very high (3.1+).
>
> 2. How far should the ladderline and coax be from the leg of my tower? Do
> the "arms" of the antenna have to be in a V shape, or can I string them to
> fit my lot (If I do a V config., one arm hangs about 10' above my telephone
> line, and I don't want to do that).
>
> 3. I notice that on 40 and especially 80 meters, I get RFI on our TV's and
> phones as well as radios, but only on occasion. Would installing a good
> low-pass filter help to resolve this situation, or should I look into
> installing line and high-pass filters on the effected equipment?
>
> Any information would be greatly appreciated!
>
> Thanks
> Adam

2515. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <2hUQ5.178$EI3.13322@newshog.newsread.com>
Source record: 176351
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"K0HB" <k0hb@my-deja.com> wrote in message
news:8uuc2oaub1@nnrp1.deja.com...
> In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
> "Cliff Holloway" <cholloway14@home.com> wrote:
>
> > Check out this "Important notice" on Benchers (Butternut) page;
> > http://www.bencher.com/notice.html
>
> Misleading and underhanded slam at their competitor. Bencher gets no
> more business from me.

Maybe in poor taste, but when taken in light of the complaints here I doubt
that they are misleading.

I had planned on getting one of the "big" 40 through 10 multiband antennas.
The thing starts with three elements on 40 and covers all WARC bands, but I
think I'll try to find a different source for a "proven" antenna.

For VHF and UHF I've been using the C3i antennas and they have excellent
customer service.

Roger (K8RI)

>
> 73, Hans, K0HB
>
> --
> ~~~
> Hans' Second Law of Thermodenial:
>
> "In any closed mind the quantity of ignorance
> remains constant or increases."
>
>
>
>
>
>
>
>
>
>
> Sent via Deja.com http://www.deja.com/

> Before you buy.

2516. Re: Using 2 paralell 50ohm coax's instead of 1 for 25

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <sFUQ5.3589$DG3.85692@news2.giganews.com>
Source record: 176352
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Yes it's possible and practical to use a parallel pair of cables. If the frequency is low and the cable length is short, there isn't much to be gained. If the length is less than about 1/10 wavelength it's short.

On the other hand, if the length is over 1/4 wavelength, consider increasing it to 1/2 wavelength and you will have a good match with any impedance cable.

Use of 50 Ohm connectors for 50 Ohm cable is proper. If you are using two cables, use two sets of connectors. But again, if the frequency is low, the connectors aren't important.

73, Bob K6DDX

2517. NC changing thread titles (was Re: Ed Hare)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <YKUQ5.138$g5.646029@news.ntplx.net>
Source record: 176353

I am curious, Nathan; from what you said in your earlier posts on this thread, you consider naming threads after individuals to be a very serious personal attack and inappropriate on the NG. Yet, when I posted a message in general support of you, you immediately did to me what you deem to be inappropriate when done to you.

Did something in my post offend you, or do you feel that is is appropriate to lash out at anyone, even innocent bystanders, as long as it helps you get your way in this discussion?

73,
Ed Hare, W1RFI

Many of your posts urge people
Fractenna <fractenna@aol.com> wrote in message
news:20001116084543.06838.00000007@ng-mj1.aol.com...
> >>From: fractenna@aol.com (Fractenna):
> >
> >>I request that you cease and desist invoking me in said public
discussion.
> >
> >The only invocation I saw was discussing the posts you have made in a
public
> >discussion, and the ensuing public discussion. Things you post on public
> >newsgroups are fair game for as much further discussion as the
participants
> >involved choose to go.
> >
> >You have every right to privacy, but to invoke that right, you would have
to
> >become, well... private.
> >
> >73,
> >Ed Hare, W1RFI
> >
>
> The said public discussion referred to was the thread title.
>
> NC
>

2518. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <_LUQ5.139$g5.646157@news.ntplx.net>
Source record: 176354

No, this is just another version of "This thread is closed..."

KB9WFK <KB9WFK@mindspring.com> wrote in message
news:8v137k$j62$1@slb7.atl.mindspring.net...
> I guess he is at a loss for words.
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20001116084614.06838.00000008@ng-mj1.aol.com...
> > >
> > >
> > >
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> > >
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> > >
> > >
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> >
>
>

2519. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <AMUQ5.140$g5.646121@news.ntplx.net>
Source record: 176355

Fractenna <fractenna@aol.com> wrote in message
news:20001116084705.06838.00000009@ng-mj1.aol.com...
> >
> >From: fractenna@aol.com (Fractenna)
> >Date: 11/16/00 7:39 AM Eastern Standard Time
> >Message-id: 20001116073930.24633.00000004@ng-cd1.aol.com>
> >
> >>>From: primecase@my-deja.com
> >>
> >>>Someone once said to me, "Never rgue with an idiot, they drag you down
> >>>to their level and then beat you with experience" Phd or not, the guy
> >>>is still an idiot and more to the point he thinks we care about his so
> >>>called intellectual property. You never see Mr Yagi yelling on these
> >>>newsgroups. Grow up and get a life!
> >>
> >>In the past week, the only post I have seen related to Mr Cohen or
Fractenna
> >>that appears to be an attempt to stir up trouble is this shot out of the
> >>blue...
> >>
> >>73,
> >>Ed Hare, W1RFI
> >>
> >
> >Actually, in the last 10 days or so, Chris Trask tried. And I ignored
him.
> >In
> >fact, he likes it so much he tried a second time. That stuck. Why?
Because
> >he'll just keep on saying incorrect misinformation, at my expense, until
I
> >respond.
> >
> >So I responded. Now we know what
> >motivates Mr. Trask.
> >
> >Ask him about his beliefs regarding the CFA (cross field antenna).
> >
> >This is ham radio's own home-grown pseudoscience.(Almost all the articles
> >written about the CFA have appeared in ham publications).
> >
> >Just what we need, at a time when hams have to make a case for our
continued
> >privileges of spectrum--so much for technical conttribution.

> >
> > See if extant scientific fact is now acceptable to Chris Trask. See how
he
> >conducts himself when someone with authority, reasonably tries to
present a
> >scientific view.
> >
> >Maybe this time he will be less willing to get others who do so banned,
> >especially if there are many of those who do not have a 'belief' about
the
> >CFA--but speak from an understanding of electromagnetics.
> >
> >NC
> >
> >
> >
> >
> >
> >
> >
>
>

2520. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8v183g$150n$1@news.kabelfoon.nl>
Source record: 176356

Scott,

You are having some interesting questions there. Maybe I can help you to answer them. First of all the reflected power will be changed into heat by the PA transistor or tube. As long as the PA can dissipate the heat there is not too much danger (within limits).

The antenna tuner can be seen as a sort of impedance-transformer that transforms the 50 Ohm of your rig into the impedance of your whole antenna (including the feedline etc.). When the rig can see 50 Ohms it can give it's full power and no power is coming back into the rig. So the PA of your transceiver will be very happy. However there could be still a 'standing wave' at your antenna which would mean that the antenna is not dipped for the required frequency. It will mean that it doesn't have the efficiency of a antenna that is dipped for the right frequency.

So you see, the antenna tuner doesn't do anything about standing waves. It just corrects the impedance mismatch between the transceiver and the antenna system. If your antenna is dipped for the right frequency, for instance 1/2 wave end fed, then the antenna is okay but has not the 50 Ohm impedance that your feedline and rig like to see. Normally one would use a balun transformer (1:4 for instance) at the feedingpoint of the antenna to transform the antenna impedance to 50 Ohms unballenced. If you don't have the right connection between feedline and antenna the feedline will become part of the antenna and starts to radiate energy. Your neighbors might not like it very much because TVI can be the result.

Where does the reflected power go? Well, I guess that the answer is blowing in the wind. If you could feel the heat of the coil in the tuner when you tune a bad SWR you will know where the power goes (don't do it if you don't want blisters on your hands or worse).

Well, there are many nice books about antenna's and feedlines. There is much more to it than I can write here. And I'm sure that there are many radio amateurs who have lots of experience with homemade antenna's and can tell you more.

'73 From the Netherlands
Adam

Scott M. McClements <yetbbwa@grove.iup.edu> schreef in berichtnieuws 3A1433B7.803B84DD@grove.iup.edu...
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?

>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.
>
>
>

2521. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8v18v5$1759$1@news.kabelfoon.nl>
Source record: 176357

Colin,

It sounds like you have a loose contact somewhere. I would recommend that you first check your feedline and connectors. Also check the connectors for corrosion ande bad contacts. As your problem happened all of a sudden it can also point at a defect inside the balun. Maybe it got too hot and a wire got loose inside the balun.
There is an other possibility which seems unlikely here but it could be that there is water in your feedline. Did you tape the connectors that are outside the house?

'73 from the Netherlands,
Adam

Colin Marks <cbm@zip.com.au> schreef in berichtnieuws 3a13a119.13273@nancy.pacific.net.au...
> I use a half-wave dipole antenna tuned for 20 m. band and fed with about 50
> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre of
> the antenna. There is a RAK balun at the antenna centre. I have had
> excellent results with swr never more than 1.3 to 1 until recently the swr
> suddenly shot up to about 5 to 1 - a level to high for me to operate. This
> happened in the middle of a QSO. I operate ssb and the power would be about
> 400 watts pep.(legal limit here) but sometimes possibly tested briefly at
> 700.
> The antenna is very difficult to access and I do not wish to take it down
> for testing unless unavoidable.
> The fault must be either in the balun (which is fairly new) or in a co-ax
> connector.
> My question : can I check the balun from the shack in some simple way to
> avoid taking down the antenna?
> From the shack the two sides of the co-ax feedline test open-circuit. This
> seems to indicate a fault because I think both sides of the balun should be
> short circuit to DC (open circuit to RF). This could mean a break in either
> a connector or internally in the balun.
> Any comments would be appreciated - preferably by email.
> Thanks.
> 73 Colin VK2LV Sydney Australia
>
>

2522. Re: NC changing thread titles (was Re: Ed Hare)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <xEVQ5.3965$St1.251315@nntp3.onemain.com>
Source record: 176358

Jesus Christ dude, give it a rest will you!! The guy appears to be 'trying'
to avoid a confrontation, and yet you continue to bait him..

Geeze!!!!!!

--
RttyMan

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:YKUQ5.138$g5.646029@news.ntplx.net...
> I am curious, Nathan; from what you said in your earlier posts on this
> thread, you consider naming threads after individuals to be a very serious
> personal attack and inappropriate on the NG. Yet, when I posted a message
> in general support of you, you immediately did to me what you deem to be
> inappropriate when done to you.
>
> Did something in my post offend you, or do you feel that is is appropriate
> to lash out at anyone, even innocent bystanders, as long as it helps you
get
> your way in this discussion?
>
> 73,
> Ed Hare, W1RFI
>

2523. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8v19fl$18gd$1@news.kabelfoon.nl>
Source record: 176359

Check this out:

http://hem.passagen.se/sm0vpo/antennas/anten.htm

'73, Adam

Scott M. McClements <yetbbwa@grove.iup.edu> schreef in berichtnieuws
3A1433B7.803B84DD@grove.iup.edu...
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.
>
>
>

2524. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <19645-3A142545-75@storefull-111.iap.bryant.webtv.net>
Source record: 176360

Scott McClements wrote:
"where does reflected SWR actually go?"

Ideally, to a ratio of one.

SWR is an interference pattern created by forward and reflected traveling waves on a transmission line. Voltage and current create their own similar patterns, but it is easy to measure and plot the VSWR using a slotted (trough) line.

In a lossless system, all reflected power is finally radiated. None is absorbed back in the transmitter or spent in transmission line or matching networks. SWR indicates temporary storage of circulating energy in the transmission line. Some energy is wasted in all the actual equipment used.

Typically, losses are small and often less than many people think when they see the SWR number.

Next, an antenna tuner should let you transform whatever load impedance appears to your desired load impedance. This is often the impedance of the coax you are using. The impedance desired is frequently 50 ohms which is the impedance many transmitters are specified for as a load at which the transmitter will perform as expected. Other impedances are sometimes specified.

The tuner eliminates a point of reflection between itself and the coax by providing a match. The coax then has an SWR of one.

Best regards, Richard Harrison, KB5WZI

2525. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A142D78.A32949EE@IEEE.org>
Source record: 176361

"Scott M. McClements" wrote:
> With the antenna tuner in place, does this effect how or
> where a reflected wave acts?

An antenna tuner cannot change the SWR at the antenna but a tuner
can achieve a Z0-match so no reflected power reaches the transmitter.
From a magnitude standpoint: Generated Power plus Reflected Power
equals Forward Power. Because of transmission line losses, Reflected
Power will be maximum and Forward Power will be minimum at the
antenna. Thus the SWR is highest at the antenna and lowest at the
antenna tuner (assuming the tuner is located at the transmitter).
--
http://www.mindspring.com/~w6rca

2526. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A14311B.E2DD5CC1@uci.edu>
Source record: 176362

Richard Clark wrote:
>
> On Wed, 15 Nov 2000 12:26:23 -0800, Jim Kelley <jwkelley@uci.edu>
> wrote:
> >My comment referred only to your experiment. Any amount of light lost
> >in reflection would certainly not be detectable by eye.

> The eye is quite capable of coping with reducing that power several
> orders of magnitude and observing that reflection still being visible.
> The threshold of perception easily eclipses much of science's best
> equipment.

Having only designed a couple of photometers, I probably woudn't know anything about that. But the point is not that the eye is detecting an absolute light level, but a relative one, in which the two light levels are very nearly identical. Can your ear discern the difference between 130 dB spl and 130.2 dB spl for example?

Sorry to all for belaboring a small point.

73, Jim AC6XG

2527. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <19645-3A142DC4-83@storefull-111.iap.bryant.webtv.net>
Source record: 176363

Tom, W8JI wrote:
"Any antenna can be cured of the "DC ground" defect by adding a leak resistance or choke across the feedpoint."

Sounds right to me, if one of these points is returned someway to ground.

Ed Laport in "Radio Antenna Engineering' says the way to eliminate the noise of small charged particles contacting the antenna and lead-in wires to discharge is to use wires with sufficient insulation to inhibit the sudden discharge.

Best regards, Richard Harrison, KB5WZi

2528. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <cxWQ5.46133$Ds3.367068@e420r-sjo3.usenetserver.com>
Source record: 176364

Adam wrote in message <8v183g$150n$1@news.kabelfoon.nl>...
. First of all the reflected power will be changed into heat by
>the PA transistor or tube. As long as the PA can dissipate the heat there
is
>not too much danger (within limits).

Not necessarily. If the source generator does not habe the same impedance as the transmision line, part of the reflected power will be re-reflected, adding to the power from the generator. This is always true in 60 cycle power systems, where the source impedance is a small fraction of the load impedance. It is also true in most RF amplifiers, those where the efficiency is greater than 50%.

A typical situation for an amplifier is:
power to line= power from amplifier + re-reflected power: say 130 watts=100 watts + 30 watts
Power to load = power to line - reflected power: 130 watts-30 watts=100 watts for this case: the transmitter output is delivered to the oad(neglecting line loss, which causes the SWR at the ampllifier to be less than that at the load)
w4mb.

2529. dB adding question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: hkj@wer.com
Message-ID: <3A1439D2.9158074F@wer.com>
Source record: 176365

Can I add dBm to dBm?

Can I add dBm to dB?

2530. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <o_WQ5.1607$BL.113359@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176366

"R.P.Haviland" <bobh@iag.net> wrote in message
news:cxWQ5.46133$Ds3.367068@e420r-sjo3.usenetserver.com...
>
> <snip>
>
>
> A typical situation for an amplifier is:
> power to line= power from amplifier + re-reflected power: say 130
watts=100
> watts + 30 watts
> Power to load = power to line - reflected power: 130 watts-30 watts=100
> watts for this case: the transmitter output is delivered to the
> oad(neglecting line loss, which causes the SWR at the ampllifier to be
less
> than that at the load)
> w4mb.
>

Hi Bob:

> Power to load = power to line - reflected power: 130 watts-30 watts=100

This statement is correct in all TL systems, I do however, respectfully
disagree with the following statement:

> power to line= power from amplifier + re-reflected power: say 130
watts=100
> watts + 30 watts

power to line= power from amplifier + re-reflected power is true but these
powers add as vectors since the V and I associated with the powers are
complex quantities. 130 watts = 100 watts + 30 watts is only true when the
100 watts and 30 watts are 90 degrees out of phase.

Steve, VE9SRB

2531. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v1e7f$7ff$1@iac5.navix.net>
Source record: 176367

First I would listen, are signals down from where they normally are? If not, I would be looking for a broken shield connection at either end of the coax. The ohm meter has confirmed the circuit is open, that is if it is a 1:1 balun and not a choke balun. Even though it may be hard to access, the connection between the RG8 and 58 could be a problem.

I would first check the connector on the radio end. Next I would look at the connection at the junction, and then bite the bullet and check the connector at the balun. In most cases, the power you run on 20 meters will not burn out a balun. What model of balun are you using?

"Colin Marks" <cbm@zip.com.au> wrote in message
news:3a13a119.13273@nancy.pacific.net.au...
> I use a half-wave dipole antenna tuned for 20 m. band and fed with about
50
> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre
of
>

2532. Re: dB adding question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <8v1hp5rr1@nnrp1.deja.com>
Source record: 176368

In article <3A1439D2.9158074F@wer.com>,
hkj@wer.com wrote:
> Can I add dBm to dBm?
No this would be combining powers. Not as simple as adding.

>

> Can I add dBm to dB?
Yes.For example if you had a 10 dBm signal and added 3 dB of gain, you
would have 13 dBm
>
>

--
BillN6VLR

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2533. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116032313.28196.00002118@ng-fl1.aol.com>
Source record: 176416

```
>
> 16 Nov 2000 00:05:48 GMT dans l'article
> <20001115190548.26026.00000533@ng-fm1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:Shalom.
>
>Salamalec.
>--
>Gilbert.
>
>
>
>
>
>
>
```

2534. Re: Jim Pennino

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116032400.28196.00002119@ng-fl1.aol.com>
Source record: 176417

>
>Fractenna <fractenna@aol.com> wrote:
>
>
>
>> From now on I will create a thread with each person's name, who declines
>> earlier request NOT to use Nathan Cohen' as a thread name.
>
>> Thank you.
>
>> NC
>
>That would be interesting to say the least. However, you haven't a clue
>what a thread is; you have not started a new one.
>
>And I agree the guy that started this thread should be whipped with a
>fractal antenna for rousing the sleeping dog.
>
>Jim Pennino
>

2535. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001116033407.14501.00000580@ng-fl1.aol.com>
Source record: 176418

```
>
> 16 Nov 2000 00:08:26 GMT dans l'article
> <20001115190826.26026.00000534@ng-fm1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:
>:I request that you cease and desist invoking me in said public discussion.
>:
>:Thank you for your assistance in this matter.
>:
>:Nathan Cohen, Ph.D.
>
>You started it, not this thread, but a lot of others.
>Stop interfering with constructive discussions.
>
>--
>Gilbert.
>

No one said you couldn't discuss this. Just don't treat me, publicly, as a news
item, in addition to abusing me. I am not a public figure.

NC
```

2536. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:05:48 UTC
From: fractenna@aol.com
Message-ID: <20001115190548.26026.00000533@ng-fm1.aol.com>
Source record: 176396

>I agree. But, let me say, I have been a firm beliver in the application
>of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
>while a scientist for IBM in (I think) 1984/85.
>
>While I disagree with the tone an type of posts by Dr. Cohen I hope this
>newsgroup does not write off this interesting application of fractals.
>
>Are they better or worse than other antennas? I have no idea. But what ham
>radio is all about is testing, experimenting, improving and let others know
>about the results.
>
>I for one say lets keep on hearing about these interesting developments, but
>lets keeps it at a scientific level, without insults, threats, etc. from all
>party's concerned.
>
>I would hate for this newsgroup to translate its fustration with Dr. Cohen
>into
>the belief that there is no merit in fractal technology. There may be, but
>sometimes the most interesting advances come from such disruptive/different
>viewpoints.
>
>--jeffrey steinberg, KC2GUC, Scarsdale, NY
>
>
>
>In article <8ut381boc1@nnrp1.deja.com>, primecase@my-deja.com says...
>>
>>
>>
>>Ok, a little harsh maybe, but just as you have all expressed opinions
>>about trolling,abuse,baiting etc, I'm still entitled to an opinion and
>>I'll stick to it, right or wrong(just for the curious,this isn't more
>>bait). Yes I'm aware Mr Yagi isn't with us anymore(shame as he has
>>probably forgotten more than we'll ever learn) and it was meant as a
>>metaphor. In the cold light of day my previous post looks worse than
>>any of Mr Cohen's so I'm guilty too I guess, which just goes to prove
>>that maybe posting your immediate thoughts aren't wise when you are
>>p***ed off!.
>>
>>No more will be said on the matter
>>
>>g'night
>>
>>Kevin J Wren

>>
>>
>>In article <8us4ve$i7m$1@nnrp1.deja.com>,
>> primecase@my-deja.com wrote:
>>> Someone once said to me, "Never argue with an idiot, they drag you
>>down
>>> to their level and then beat you with experience" Phd or not, the guy
>>> is still an idiot and more to the point he thinks we care about his so
>>> called intellectual property. You never see Mr Yagi yelling on these
>>> newsgroups. Grow up and get a life!
>>>
>>> Kevin J Wren
>>>
>>> Sent via Deja.com http://www.deja.com/
>>> Before you buy.
>>>
>>
>>
>>Sent via Deja.com http://www.deja.com/
>>Before you buy.
>

Look: I do NOT appreciate being publicly 'filed' as a post. I am not a public figure. I am not a target for every potential person with a keyboard to take pot shots at.

Believe me--I would like nothing BETTER than to NEVER be talked about here! So let's stop this travesty that I want 'attention'. I most certainly do not.

Please keep any abusive and judgemental comments to yourselves. Or imagine what your life would be like to wake up to abuse and malcontent EVERY day, on public forums and a slew of e-mails.

Just --please-- be quiet. Keep negative personal opinions about individuals off public forums. There was a start on this-- and now we see a growing public chatter only opening it up wider.

Thank you.

Shalom.

Nathan Cohen, Ph.D.

2537. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:08:26 UTC
From: fractenna@aol.com
Message-ID: <20001115190826.26026.00000534@ng-fm1.aol.com>
Source record: 176397

>Jeffrey Steinberg wrote:
>>
>> I agree. But, let me say, I have been a firm beliver in the application
>> of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
>> while a scientist for IBM in (I think) 1984/85.
>>
>> While I disagree with the tone an type of posts by Dr. Cohen I hope this
>> newsgroup does not write off this interesting application of fractals.
>>
>> Are they better or worse than other antennas? I have no idea. But what
>ham
>> radio is all about is testing, experimenting, improving and let others know
>> about the results.
>>
>> I for one say lets keep on hearing about these interesting developments,
>but
>> lets keeps it at a scientific level, without insults, threats, etc. from
>all
>> party's concerned.
>>
>> I would hate for this newsgroup to translate its fustration with Dr. Cohen
>into
>> the belief that there is no merit in fractal technology. There may be, but
>> sometimes the most interesting advances come from such disruptive/different
>> viewpoints.
>>
>> --jeffrey steinberg, KC2GUC, Scarsdale, NY
>>
>
>It's a bit difficult to carry on a discussion about anything when
>one of the disputants threatens the others with lawsuits, and
>links their posts with Nazi propaganda. If both sides don't agree
>to disagree in good faith, then any discussion will eventually
>deteriorate into childish chaos.
>
>Attempts have been made, believe it or not, to investigate the
>nature of fractal antennas by some contributors to this newsgroup.
>You may want to look in dejanews to see how they were rewarded for
>their efforts. Some of us would like to see more serious discussion
>of all types of new antennas, but the future looks bleak in this regard
>due to the infestation of trolls.
>
>Tom Donaly KA6RUH
>

I request that you cease and desist invoking me in said public discussion.

Thank you for your assistance in this matter.

Nathan Cohen, Ph.D.

2538. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:15:14 UTC
From: wwilliams2458@my-deja.com
Message-ID: <8uv8ue$58j$1@nnrp1.deja.com>
Source record: 176398
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Fred-are u interested in getting rid of the R7000?
Does it have the 80 meter Kit.

In article <3a127208$0$93849$1dc6e903@news.corecomm.net>,
"Fred" <Fredmp@megsinet.net> wrote:
> Bought an R-7000 a couple of years ago at Hamvention in Dayton.
Never could
> get it to tune. No help from Cushy on that one either. It still
don't
> work. Been laying up in the attic in the original box for a year now.
> Never again will I buy one of their products, after buying many of
them over
> the years. Terrible customer service and equally terrible attitude
when you
> try to get an answer from them.
> Nuff said
> Fred KE8TQ
> plmills@attglobal.net wrote in message
<3A11C2D3.A8A62890@attglobal.net>...
> >Hello to all,
> >
> >First let me say that up until now I've been a happy camper
> >using Cushcraft products. However, I've just learned something
> >that may be of interest to anyone considering purchasing a
> >new Cushcraft antenna.
> >
> >I recently bought an R-8 vertical. It was just damaged by
> >lightning and I e-mailed Cushcraft tech support regarding
> >parts availability....the answer was 2 sentences that suggested
> >I buy a new antenna and try to collect on insurance. Needless
> >to say, I was not happy with that so I wrote a letter to the
> >Cushcraft manager of amateur products. This gentleman was kind
> >enough to telephone me today. Essentially, the conversation
> >focused on the fact that the parts I needed would be so expensive
> >as to make buying a new antenna more practical. However, one
> >interesting fact did come to light. Parts for the R-8 vertical
> >had not been "priced" yet and were thus unavailable. Further,
> >Cushcraft does not "price" replacement parts until the product
> >has been out for 9 to 12 months. I'd suggest you keep this
> >in mind....if you drop your new R-8 or new whatever, you may
> >not be able to get parts for it for up to a year!!
> >
> >thanks & 73,

> >Phil
> >W5BVB
>
>

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2539. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:30:15 UTC
From: on4caf@qsl.net
Message-ID: <9a961tgf5odse559kvltkcu0d12m4ibih8@4ax.com>
Source record: 176399

Happily there are other sources:
http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html
It's a pity that that the technical discussion of Steve, Roy and Nathan
ended is this mess.
One of Nathan's creations, the FRACVERT HALFWAVE, is a clever
vertical described by Nathan about 3 years ago, with good directional
properties which can be made with a single pole support, good usable
on the lower HF bands, (I don't agree with Nathan's claim on some points)
which certainly deserves a place in ham antenna publications.
Reading rec.radio.amateur.antenna posting of 3 years ago makes me sad.
Hopefully this newsgroup will return to the same spirit it had.
Jan, on4caf

On 15 Nov 2000 15:49:05 -0600, jeffreys@cyburban.com (Jeffrey Steinberg) wrote:

>I agree. But, let me say, I have been a firm beliver in the application
>of fractal geometry since Benoit Mandlebrot wrote the orginal book on it
>while a scientist for IBM in (I think) 1984/85.
>
>While I disagree with the tone an type of posts by Dr. Cohen I hope this
>newsgroup does not write off this interesting application of fractals.
>
>Are they better or worse than other antennas? I have no idea. But what ham
>radio is all about is testing, experimenting, improving and let others know
>about the results.
>
>I for one say lets keep on hearing about these interesting developments, but
>lets keeps it at a scientific level, without insults, threats, etc. from all
>party's concerned.
>
>I would hate for this newsgroup to translate its fustration with Dr. Cohen into
>the belief that there is no merit in fractal technology. There may be, but
>sometimes the most interesting advances come from such disruptive/different
>viewpoints.
>
>--jeffrey steinberg, KC2GUC, Scarsdale, NY

2540. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:33:39 UTC
From: primecase@my-deja.com
Message-ID: <8uva14$67o$1@nnrp1.deja.com>
Source record: 176401

Ok...point taken, unnaceptable post.... and I'd like to extend appologies to all on this group. As I said pointed out in my second post in the cold light of day it didn't look good...in fact downright out of order. Now I have been fully chastised I'll crawl back in my hole. As I said I was a little dismayed at what I read over several previous days and (like always) I picked the wrong time to add comments of my own. So take it whichever way you like I wasn't out to pick a fight.

Kevin

In article <8uur0nosb1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:
> In article <8us4ve$i7m$1@nnrp1.deja.com>,
> primecase@my-deja.com wrote:
>
> > Phd or not, the guy is still an idiot and more to the point
> > he thinks we care about his so called intellectual property.
>
> The Armenian judges gave this a 9.8 on the Olympic Troll-O-Meter, but
> they were over-ruled by the umpires in instant replay, who award it a
> 2.6.
>
> The Armenian judges lodged a formal protest!
>
> It was sufficiently trollish, of course, but way too obvious.
> It was poorly written, poorly executed, and was so incredibly
> lame as to lack the true drawing power of a really masterful
> troll. Maybe as high as a 3.3 for the sheer stupidity of the
> premise, but a 9.8? Never! The Armenian judges tear their
> hair out, throw their balalaikas down in dismay, and perform
> the traditional Armenian Dismay Chant! They demand a recount!
>
> 73, de Hans, K0HB
> --
> ~~~
> Hans' Second Law of Thermodenial:
>
> "In any closed mind the quantity of ignorance
> remains constant or increases."
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2541. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:44:09 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uvakp$48q$1@208.206.142.77>
Source record: 176402
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

K0HB wrote:
>
> In article <8uujdp$96p$2@208.206.142.114>,
> Dick Carroll <dixie@townsqr.com> wrote:
> > K0HB wrote:
> > >
> > > In article <OVpQ5.198409$g6.90773734@news2.rdc2.tx.home.com>,
> > > "Cliff Holloway" <choIloway14@home.com> wrote:
> > >
> > > > Check out this "Important notice" on Benchers (Butternut) page;
> > > > http://www.bencher.com/notice.html
> > >
> > > Misleading and underhanded slam at their competitor. Bencher gets
> no
> > > more business from me.
> >
> > That's not the way I see it. Informing prospective customers of your
> > own product support policy as opposed to the competition is just good
> > business.
>
> So far, so good.
>
> But they completely distorted the Cushcraft statement.
>
> Cushcraft states they have discontinued the SALE of certain old
> antennas.
>
> Cushcraft did not state that they would no longer SUPPORT existing
> owners of those antennas.

And if they aren't supporting their LATE models, we should expect that
they'll support the older ones?

> The Bencher notice is outright fraud.
>
> 73, Hans, K0HB
>
> --
> ~~~
> Hans' Second Law of Thermodenial:
>
> "In any closed mind the quantity of ignorance
> remains constant or increases."
>

> Sent via Deja.com http://www.deja.com/
> Before you buy.

2542. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:51:18 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <8uvb26$5pq$1@nnrp2.phx.gblx.net>
Source record: 176400

Fractenna <fractenna@aol.com> wrote:

: Look: I do NOT appreciate being publicly 'filed' as a post. I am not a
: public figure. I am not a target for every potential person with a
: keyboard to take pot shots at.

: Believe me--I would like nothing BETTER than to NEVER be talked about
: here! So let's stop this travesty that I want 'attention'. I most
: certainly do not.

: Please keep any abusive and judgemental comments to yourselves. Or
: imagine what your life would be like to wake up to abuse and malcontent
: EVERY day, on public forums and a slew of e-mails.

: Just --please-- be quiet. Keep negative personal opinions about
: individuals off public forums. There was a start on this-- and now we
: see a growing public chatter only opening it up wider.

Consider it as being nothing more that reaping the benefits of
what you yourself have sewn on this newsgroup and elsewhere for the last
couple of years.

If you want to cease being the centre of controversy, then don't
create them and don't encourage them. The only times that you have ever
come under fire is when you yourself have burst forth here and elsewhere
threatening lawsuits, claiming that you have received death threats, and
a wide range of other abuses that you and you alone have perpetrated
time and again IN PUBLIC.

Which is why you, and you alone, have been removed from various
mail lists and discussion groups. Go find a mirror and discover the
real source of your troubles.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

2543. Re: ? on Stealth Ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 00:59:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8uvbgq$48q$2@208.206.142.77>
Source record: 176403

You can glean a wealth of that sort of information from the archives of this NG in Dejanews by using various search words...attic antenna, stealth, antenna restricted, etc.

Dick

K4JDP@webtv.net wrote:
>
> If any one has used or is using any stealth antenna for HF work please
> e-mail me privately with your experience and details of them.
>
> Sincerely,
> John

2544. Pseudoscience and CFA Supporter Chris Trask

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 01:50:59 UTC
From: fractenna@aol.com
Message-ID: <20001115205059.06843.00002129@ng-fy1.aol.com>
Source record: 176404

>
>Fractenna <fractenna@aol.com> wrote:
>
>
>: Look: I do NOT appreciate being publicly 'filed' as a post. I am not a
>: public figure. I am not a target for every potential person with a
>: keyboard to take pot shots at.
>
>: Believe me--I would like nothing BETTER than to NEVER be talked about
>: here! So let's stop this travesty that I want 'attention'. I most
>: certainly do not.
>
>: Please keep any abusive and judgemental comments to yourselves. Or
>: imagine what your life would be like to wake up to abuse and malcontent
>: EVERY day, on public forums and a slew of e-mails.
>
>: Just --please-- be quiet. Keep negative personal opinions about
>: individuals off public forums. There was a start on this-- and now we
>: see a growing public chatter only opening it up wider.
>
>
> Consider it as being nothing more that reaping the benefits of
>what you yourself have sewn on this newsgroup and elsewhere for the last
>couple of years.
>
> If you want to cease being the centre of controversy, then don't
>create them and don't encourage them. The only times that you have ever
>come under fire is when you yourself have burst forth here and elsewhere
>threatening lawsuits, claiming that you have received death threats, and
>a wide range of other abuses that you and you alone have perpetrated
>time and again IN PUBLIC.
>
> Which is why you, and you alone, have been removed from various
>mail lists and discussion groups. Go find a mirror and discover the
>real source of your troubles.
>
>

Again, more prevarications posed at my expense.

Here is a fact in point.

Mr. Trask, a Penn State educated graduate MS holder, got onto the Antennex board, and made concerted efforts to prevent anyone from making valid scientific comments regarding the so-called CFA antenna.

In other words, Mr. Trask was using this soapbox to advocate PSEUDOSCIENCE. He is a big supporter of the CFA.

The CFA is a very electrically small antenna which claims high efficiency and NEW PHYSICS to explain said claim. This is bogus, despite the near-worship, which some, such as Mr. Trask have, for this faulty premise.

The CFA has been debunked by many objective and sober colleagues, including Dr. Jack Belrose, VE2CV, whose writings are well known to many here.

Trask latched onto my cordial and objective comments and tried to turn them around so as to make me appear, and to make them appear, something they, and I, are not.

The fact is that I called a pseudoscience a pseudoscience. I will continue to do so.

The pity here is Trask is someone with some degree of scientific training, who thus is expected to know better. Certainly he should know better than to hound someone with a knowledgable basis, as is the case here. Certainly he should know bettr than to hound the folks who run such a bulletin board until they decide to effectively support the pseudosceince by quenching the scientific voice pointing this out.

In other words, ham radio, through manipulation of certain public channels, now has its own pseudoscience, thanks to the efforts of Chris Trask and a few others.

As it stands, Trask is a supporter of a known pseudoscience, who takes more than objection to a scientist calling a pseudoscience a pseudoscience.

Objection is more than welcome: I have dealt with this extensively with UFO folks--who, by the way, are ALWAYS friendly. ESPECIALLY when you disagree with them from a factual basis.

Misinformation; censure; and prevarication, which Trask promulgates here, are NOT acceptable.

Nathan Cohen, Ph.D.

2545. Re: Jan Anker

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 02:01:28 UTC
From: fractenna@aol.com
Message-ID: <20001115210128.06843.00002130@ng-fy1.aol.com>
Source record: 176405

>Happily there are other sources:
>http://www-tsc.upc.es/eef/research_lines/antennas/fractals/history.html

Much of which is wrong, aspects of which were discussed here last week. Please review. Puente's site is a very poor one for accuracy.

>It's a pity that that the technical discussion of Steve, Roy and Nathan
>ended is this mess.
>One of Nathan's creations, the FRACVERT HALFWAVE, is a clever
>vertical described by Nathan about 3 years ago,

4 years ago.

with good directional
>properties which can be made with a single pole support, good usable
>on the lower HF bands, (I don't agree with Nathan's claim on some points)

What 'claim' do you find invalid? Feel free to drop me e-mail on this:

chipn1ir@aol.com

>which certainly deserves a place in ham antenna publications.

Excuse me; do you mean ADDITIONAL ones?:-) It has already appeared in two: 73 Amateur radio, and DX Magazine. That's enough.

>Reading rec.radio.amateur.antenna posting of 3 years ago makes me sad.
>Hopefully this newsgroup will return to the same spirit it had.

Pending litigation is likely to assist in that direction. I will do my best with the two which are proceeding.

Jan, please do not use me as a 'thread'. I think you'll understand how irritating this can be, as well as embarrassing.

From now on I will create a thread with each person's name, who declines earlier request NOT to use Nathan Cohen' as a thread name.

Thank you.

NC

>Jan, on4caf
>
>

2546. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 02:13:57 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <bpHQ5.5068$a5.2386540@newsfeed1.thebiz.net>
Source record: 176406

How high off the ground is that bottom wire of the loop Cecil?

Tnx/73, Barry N1EU

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A11F887.25C25B3D@IEEE.org...
> W2WX wrote:
> >
> > Am looking for lengths and construction/hanging suggestions for a delta
loop
> > for 75/80 meters. Have no experience with one. Please email a reply.
Thanks,
> > Steve, W2WX w2wx@aol.com
>
> How about a 75m loop that fits in the space of a G5RV and has a 50 ohm
> feedpoint impedance? http://people.delphi.com/cecilmoore/rect80m.htm
> --
> http://www.mindspring.com/~w6rca

2547. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 02:21:54 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A135295.2A5BBF31@dvol.com>
Source record: 176407

David or Jo Anne Ryeburn wrote:

> >
> > Me too, Brian. I learned to copy CW on an old Philco like that. It didn't have
> > a BFO but I learned to copy the Shussssssssh and Shush.

>
Yupper, I remember it well! More like "thump thump" when the guy was loud. I was never able to actually able to copy cw with the thing though, but I lusted for being able to do that. A buddy of mine now n3rs not only was able to copy it, but actually went into the 80m Novice Band without a BFO and worked scads of qsos in that mode. I decided to go for the Boy Scout Radio Merit badge which required building a one-tube regen with which I could copy cw and things moved really fast from there.
>

> My aunt had an RCA console receiver that went up to about 18 Mc/s (as they
> said in those days). Shortly after the end of WW2 I started listening to
> the ham bands on it. I soon got tired of what I heard on the phone bands
> -- some things never change --

>
Boy, that's absolute fact. I tuned 75m a few times and couldn't figure out why they bothered. 50 years later I still don't understand.
>
'Cept when some expedition pops up on 3.750 . .
>
>and I wanted to try to learn to copy code.

> I solved the BFO problem by putting an all-American 5-tuber on top of the
> RCA and tuning the little radio so that a harmonic of its local oscillator
> would beat against the CW signal I wanted to copy.

>
Ancient stunt. My buddy who could run cw without a BFO eventually scrounged a Heath grid dip meter and ran it's oscillator against the incoming sigs. One hand on the J-38 and the other all over the two tuning dials.
>
>The only trouble was

> that if I wanted to QSY I had to tune both receivers. Eventually I saved
> up enough money to buy a beat-up used Hallicrafters S20R and I said
> goodbye to the big old RCA (which was built about the same time as I was).
> Soon thereafter in 1949 I got my class B (what they used to call General
> class) ticket, and my Extra in 1955.

>
I tossed all my income from six months worth of delivering the Philadelphia Evening

Bulletin at Sears and got a new $109.95 S-40B, took it into the new 80m Novice Band in '53 with an 80m ARC-5 and tally-ho!

>
>
> David, ex-W8EZE
>

wn3yik/w3rv

2548. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 03:05:34 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <T9IQ5.5075$a5.2389072@newsfeed1.thebiz.net>
Source record: 176408

Just modelled it at 50ft height with bottom wire 13ft off the ground. Very promising. Might give it a try.

73, Barry N1EU

2549. Re: 75 meter delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 03:35:57 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <xCIQ5.15169$wW2.507019@news1.giganews.com>
Source record: 176409

My 75M delta loop was designed using the handbook formula for a full-wave quad loop. The apex is about 70 ft (hanging off the tower from a 10 ft mast section acting as a parallel boom) and the bottom wire is about 10 ft off the ground. Am using a standard 1/4 wave length of RG-11 72 Ohm cable for the corner fed impedance match to 50 Ohms.

How does it work?

It's OK for close to medium commo and appears to have nearly an omni directional pattern.

73 de Jack

BarryG wrote in message ...
>How high off the ground is that bottom wire of the loop Cecil?
>
>Tnx/73, Barry N1EU
>
>Cecil <Cecil.A.Moore@IEEE.org> wrote in message
>news:3A11F887.25C25B3D@IEEE.org...
>> W2WX wrote:
>> >
>> > Am looking for lengths and construction/hanging suggestions for a delta
>loop
>> > for 75/80 meters. Have no experience with one. Please email a reply.
>Thanks,
>> > Steve, W2WX w2wx@aol.com
>>
>> How about a 75m loop that fits in the space of a G5RV and has a 50 ohm
>> feedpoint impedance? http://people.delphi.com/cecilmoore/rect80m.htm
>> --
>> http://www.mindspring.com/~w6rca
>
>

2550. Re: Re:PrimeCase (was Nathan Cohen)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 03:46:00 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t16m3okc0681a8@corp.supernews.com>
Source record: 176410

Bill Aycock <baycock@hiwaay.net> wrote:
: Chip is right- lets change the subject to PrimeCase, the real lowlife in
: this thread. His TROLL was pretty stupid, ill-timed, and worthless,
: while being very irritating.

: Bill-W4BSG

I can only half agree with this. The post in question was certainly
a mean-spirited mistake. I can whole-heartedly join you in putting
it down as an example of the worst sort of online behavior. Where
we do not agree is the point about calling its author a lowlife.
All that does is add to the nastiness.

I don't blame anyone for feeling inspired to speak up when they
disagree with what someone has posted here, or have a problem with
how someone is conducting themselves.

The personal attacks, however, are...well...an example of the kind
of thing I don't blame anyone for objecting to, and not a proper way
to make a point.

--Jim WB5UDE

2551. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 04:03:12 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t16n409sen4d7@corp.supernews.com>
Source record: 176411

Fractenna <fractenna@aol.com> wrote:

: Keep negative personal opinions about individuals off
: public forums.

I agree. If (ahem) *everyone* would refrain from posting their negative personal opinions about individuals here, the improvement would be enormous.

A lot of times, it helps to remember to treat others as you'd prefer to be treated yourself. I know I've offered that advice (mostly in private email) a number of times.

I'm sure everyone who opens the newsgroup only to find themselves the object of personal attack (as opposed to respectful disagreement, which is altogether different) would prefer that others make the effort to improve their efforts to disagree, and when necessary, even object to the way someone behaves here, without attacks, lamely founded accusations, negative personal opinions, and all that other ...uhm... questionable... behavior.

Well said, Chip!

--Jim WB5UDE

2552. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 04:59:55 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a1369c0.50280168@news1.pei.sympatico.ca>
Source record: 176412
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"David Ackrill" <Nospam@thanks.com> wrote:

--cut--
>
>So, companies like Cushcraft and Bencher could well look at the postings
>here and think, perhaps privately, 'so what?'
>
>Let's not over inflate our opinion of ourselves and our influence, eh?
>
>de Dave (G0DJA)
>
>
You're likely more right than wrong Dave...just irks me when this happens
though...but, as you say, we don't really count for much, especially in latter
years. <sigh>

--
Gord Beaman
PEI Canada.

2553. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 05:18:41 UTC
From: "Dennis D. Alsup" <dalsup3@home.com>
Message-ID: <R6KQ5.201676$g6.92276785@news2.rdc2.tx.home.com>
Source record: 176413
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I am not posting this to discredit your experiences, I am mearly going to give you my recent very good experiences with Cushcraft. I bought a AR27013S 6m, 2m, 70cm Beam in September. I had a problem with high SWR. I called Cushcraft left a mesaage. they called back within 10 Minutes and after several calls back and forth found the problem to be my ignorance.

The problem has since reoccured and I thought ok, I will buy a new reddi match assymbly. I placed my order and explained the problem on their website form. Low and behold, they call me back and stated that they were sending me the new reddi match assymbly at no charge. Maybe it is just me, but I did not expect that from them.

I also bought an MA5B. I opened the package on a Monday, to find that one of the rubber boots that cover the end of the traps had a small pucture in it. I called them again Monday afternoon. I told them I wnated to put the antenna up the next weekend. Fed Ex arrived on Friday with the replacement

Maybe my expectations are low, but from my experiences I am pleased with my recent experiences with Cushcraft!

73's All!

Dennis Alsup
W5DDA

<plmills@attglobal.net> wrote in message
news:3A11C2D3.A8A62890@attglobal.net...
> Hello to all,
>
> First let me say that up until now I've been a happy camper
> using Cushcraft products. However, I've just learned something
> that may be of interest to anyone considering purchasing a
> new Cushcraft antenna.
>
> I recently bought an R-8 vertical. It was just damaged by
> lightning and I e-mailed Cushcraft tech support regarding
> parts availability....the answer was 2 sentences that suggested
> I buy a new antenna and try to collect on insurance. Needless
> to say, I was not happy with that so I wrote a letter to the
> Cushcraft manager of amateur products. This gentleman was kind
> enough to telephone me today. Essentially, the conversation
> focused on the fact that the parts I needed would be so expensive
> as to make buying a new antenna more practical. However, one
> interesting fact did come to light. Parts for the R-8 vertical
> had not been "priced" yet and were thus unavailable. Further,

> Cushcraft does not "price" replacement parts until the product
> has been out for 9 to 12 months. I'd suggest you keep this
> in mind....if you drop your new R-8 or new whatever, you may
> not be able to get parts for it for up to a year!!
>
> thanks & 73,
> Phil
> W5BVB

2554. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 07:05:51 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8v010f$p86$3@bashir.peak.org>
Source record: 176415

Ian White, G3SEK <G3SEK@ifwtech.com> wrote:

: 2. I have no idea why Doc says that baluns do not stop RFI/TVI.
: Thousands of people have proved that they do.

Doc was probably thinking about RFI/TVI that originates from antenna
radiation. A balun will not affect that.

But, as you state, RFI/TVI due to radiation from the coax can be
reduced or eliminated by the proper use of baluns or chokes.

--
Bill Nelson (billn@peak.org)

2555. Re: PrimeCase

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-16 07:12:40 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1388E8.E38F1AA2@hiwaay.net>
Source record: 176414

You are correct- I take back the "lowlife" part. I still wish he had not
done it.
Bill-W4BSG

Jim Glover wrote:

> I can only half agree with this.
S N I P
Where
> we do not agree is the point about calling its author a lowlife.
> All that does is add to the nastiness.
>
> --Jim WB5UDE

2556. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <lBiR5.5204$a5.2470777@newsfeed1.thebiz.net>
Source record: 176119

Wow! Nice job Reg. Downloaded it and am playing with it now. As you promised, it's very entertaining.

Tnx/73,
Barry N1EU

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:8v2dmi$n58$1@plutonium.btinternet.com...
> Computer program VARNEY.exe is now available:

2557. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A15B61A.75E7D4FD@hiwaay.net>
Source record: 176120

Andrew- a part of the answer is easy- since the ladder line direct to the xcver gives pretty good reception, the problem has to be in the tuner or the coax link. On the tuner, check the switch positions- I have seen them off sync- then check the balun. Do this as you did the ladder line- hook it to a coax input station on the tuner and see. If it is good there, that also indicates that the coax link is OK-
As an aside- I bought a used MFJ tuner, and found a problem similar to yours- After much checking- I found the posts on the ladder line input were coated with something. I could get a reading with TIGHT clips that were twisted enough to cut through the lacquer or hairspray that was on there. After I wire brushed the posts and nuts, everything was fine. (I wondered if the low price I paid was because the guy couldn't get it to work)

In other words, try everything in and out of the setup.

Good luck - Bill W4BSG

"Andrew J. O'Brien" wrote:
>
> Let me see if people with a better brain than I can figure this out....
>
> I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm
> ladderline to an MFJ941C tuner. I bought the tuner used six months ago but
> had never got around to using it. The ladder line is brand new.
>
> I have made many dipoles before over the years with no major problems. So I
> was quite surprised , when I got the thing up in the air (only 20 feet at
> this point) , that the receive was VERY bad. I have not even tried to xmit
> on the antenna yet. I checked the ladder line connection to the antenna and
> all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV
> gets an S9 usually, this new dipole gets an S1 to S2 regardless of settings
> on the 941C. I double checked the short coax cable between the rig and 941C
> and it too appears okay. Just for the fun of it, I took the ladderline our
> of the 941C , stuck one end of the ladder line into my coax connector on
> my rig, when I do that the receive on WWV increases to S7. Also when I
> connected my existing G5RV via the 941C it works fine.
>
> So, I am baffled as to why when I connect both side of the ladder line with
> an antenna connected to it via the 941C that I get S1 to S2.
>
> Any thoughts?????
>
> Andy KB2EOQ

2558. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <3a67a791.1990636634@news.seanet.com>
Source record: 176121

On Fri, 17 Nov 2000 12:11:04 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>> Exactly? There is no correlation between the function of the eye and
>> the function of the ear - especially with a brain in the middle. ;-)
>
>The analog is nevertheless valid. Is this the right room for an
>argument?
>
>ac6xg

Hi Jim,

Lookin' for a fight? ;-) Gives us more from Mr. Feynman. I can think
of at least one way to argue more. (Note my provisos in earlier
postings).

73's
Richard Clark, KB7QHC

2559. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <5ncb1tomtk7lm517pda7pb2arlqgunln4v@4ax.com>
Source record: 176122

Thanks for all the comments guys.
FWIW, when I contacted Rohn, they told me I needed a 4x4x4' base.
A bit bigger than I had expected, but I'm over half there now.

I would still like to hear about pitfalls to avoid, etc.
This is my first go around with a tower, so I'm
trying to "learn from others mistakes."

I'll be making my base slightly deeper than 4' so I can line the
bottom with gravel - for drainage. I've heard some people also
put a first layer of sand down. However, an army engineer
that I talked with reccommended skipping the sand. We have
a mostly clay & rock soil here and he thought it would just
hold the moisture.

The base of the tower will be wider at the bottom than the top.
The sides are "scalloped." The corners are square.

I will have at least 4" of concrete above ground so that water
won't run over and into the base where the bottom section
protrudes.

I will be making a "basket" of 1/2" re-bar around and through
the bottom section. (Neither the re-bar nor the section will
be in contact with soil. Avoid rust.)

My ground rod will go into the earth beneath the base,
attaching to re-bar/tower section and protrude through top
of concrete.

The Army engineer also suggested I coat the bottom section with
oil to help with rust prevention.

I guess one of the fun parts will be trying to get the bottom section
aligned correctly. (I'll be using a standard 10' section.)
I'm thinking 4' level and/or maybe a plum-bob.

I'll be using 4500psi concrete as it's only $4 more a yard then
3000psi. (Oh yeah, make sure ground is damp before pouring so
that the ground doesn't suck the moisture out of the concrete.)

I'll let the concrete cure for 30+ days before going to the tower
erection phase.

Am I missing anything?

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

2560. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A15B6F3.68E6AC7B@hiwaay.net>
Source record: 176123

About the "Aluminum came from there in the first place"- true, but NOT
in the form of metal. The aluminum extraction process takes LOTS of
power to reverse the way nature intended the stuff to go, to get metal
from ore. the metal-to-ore process (oxidation) is the easy way that
nature will take.

Steve Ellington wrote:
>
> The dope is a substance used for copper to aluminum connections. It's
> available under many different names from any place that sells electrical
> supplies including Home Depot. I would't worry about your wire
> underground. Aluminum came from there in the first place and it should
> outlast either one of us. 73
>
> On Thu, 16 Nov 2000, George, W5YR wrote:
>
> > When I put up my vertical I installed 60 radials. I used the Home Depot
> > 17 ga aluminum wire.
> >
> > That was 3 years ago, and now I am beginning to worry about the
> > condition of the radials from the viewpoint of corrosion due to soil
> > conditions, etc. The radials are below the sod about an inch. I could
> > dig up one and look but various health problems over the last 3 years
> > have prevented that.
> >
> > So, my question: has anyone else used the aluminum wire for radials, and
> > if so, how well do they stand up under shallow burial?
> >
> > Steve, what is the "dope" you smeared on the connections?
> >
> > Thanks.
> >
> > 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> > Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
> >
> >
> > Steve Ellington wrote:
> > >
> > > Home Depot sells aluminum electric fence wire in 17ga. I've used it for a
> > > 160m horiz loop and it lasted 5 years in high winds due to it's light
> > > weight. At the feed point, smear it with dope and use wire nuts for the
> > > connection.

> >
>
> Steve Ellington N4LQ
> N4LQ@IGLOU.COM

2561. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v4fcm$b3s$0@208.207.71.159>
Source record: 176124

George, W5YR wrote:
>
> When I put up my vertical I installed 60 radials. I used the Home Depot
> 17 ga aluminum wire.
>
> That was 3 years ago, and now I am beginning to worry about the
> condition of the radials from the viewpoint of corrosion due to soil
> conditions, etc. The radials are below the sod about an inch. I could
> dig up one and look but various health problems over the last 3 years
> have prevented that.
>
> So, my question: has anyone else used the aluminum wire for radials, and
> if so, how well do they stand up under shallow burial?
>

George, I believe the longevity of aluminum in soil is a function of
the acid level in the soil, or more accurately its alkalinity, which is
what actually 'eats' the aluminum. Where I live it will last underground
forever.

73, Dick W0EX

2562. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A15C2FB.D18F6A45@mwci.net>
Source record: 176125

VE9SRB wrote:

> The only impedance
> that the amplifier ever "sees" is the transmission line characteristic
> impedance ZO. It never really ever "sees" any other physical impedance.

This is not true. The transmission line equations definitely predict very accurately the input admittance (conductance and susceptance) of a transmission line that is connected to some arbitrary load impedance. The real power that is delivered to that admittance from the amplifier is the voltage squared times the input conductance. [This power, minus line loss, is the load power. Extremely easy to calculate.] This complex admittance is what the amplifier sees. The value of this admittance is determined by the composite voltage (forward and reflected) and by the composite current (forward and reflected).

The output admittance of the amplifier, which is essentially a lossless dynamic resistance, should be considered to be part of the amplifier, and not of the coax input admittance. Also, re-reflections do not have any influence on the input admittance of the coax.

The output connector of the amplifier is a "reference plane", just like in a network analyzer. To the left of this plane is the generator, a current source in parallel with a dynamic resistance (this is slightly idealized, of course). To the right of the plane is a coax input admittance that is due entirely to the vector sum of forward and reflected voltages and forward and reflected currents. This plane is a point of precise equilibrium between the voltage and current arriving from the left and the voltage and current leaving to the right. At this point of equilibrium, all so-called re-reflections are reconciled, and as a result they do not play any further role. For example, re-reflections do not influence coax input admittance.

Re-reflections influence the voltage and current levels into the coax (but not the admittance), but only if there is a reflection. No reflection, no re-reflection. From a circuit standpoint, the bottom line on re-reflection is that the output admittance of the amplifier is in parallel with the actual load admittance. If the load is not Z0 then the dynamic output admittance produces an effect that we have been describing by the so-called "re-reflection". This is an example of how a very simple circuit idea gets screwed up with a lot of wave mechanical claptrap.

I guess I must be pretty dense, but this wave-chasing drives me nuts. The "circuit" approach in the amplifier and the transmission line equations on the coax (derived directly from Maxwell's equations) are so elegant and straightforward and correct, that I really do get bored with the confusions of chasing waves back and forth. Once we have mastered the basic ideas of how wave mechanics works, its time to move on.

Back in the old days when complex computations by hand were difficult, we needed these mental intuition-aids. Nowadays, with personal computers, the Smith chart and the highly perfected mathematical equations and simulations, I keep wondering why we don't move into the new millenium.

Bill W0IYH

2563. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v4g0n$2it$1@neptunium.btinternet.com>
Source record: 176126

Cecil, there's one result which should be highlighted.

At 18.14 MHz, your EZNEC-derived G5RV dipole feedpoint
impedance was -

Z = 44.3 - j290 ohms.

At 18.10 MHz, a difference in frequency of 0.22 percent, my
VARNEY.exe-derived G5RV dipole feedpoint impedance was -

Z = 44.2 - j296 ohms.

When one considers the unbelievably different computational
methods of producing these two results, it is most
reassuring, indeed gratifying, they should be so close to
each other.

Cec, you won't have to re-write your website !

Can you persuade your 450-ohm ladder-line supplier to
re-advertise the stuff as 385-ohms? Which is what it really
is. Otherwise, sooner or later, somebody is sure to blame my
programs for the difference between predicted and computed
results. I am liable to be sued for 'money back'.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:8v4and$s3i$1@plutonium.btinternet.com...
> Cecil, further to my last message -
>
> I've just compared your analysis of the 'standard' G5RV in
> your latest web site with results using VARNEY.exe
>
> Comparison between two large masses of figures are more
> confusing than helpful. So I will summarise the input
> impedance data, R+jX, for the 102 feet dipole (no feeder)
> in the following manner.
>
> Using VARNEY, slightly deviate frequency until either my R
> or jX agrees exactly with your R or jX, then the following
> table results -
>

> F MHz Dev %
> ------- --------
> 3.8 0.9
> 7.2 -0.8
> 10.125 1.1
> 14.2 -1.3
> 18.14 -0.2
> 21.3 0.0
> 24.95 -1.0
> 28.4 0.0
>
> The small frequency deviations needed are most likely due
to
> me having to guess at the type of ground and antenna
> conductor diameter.
>
> The following table compares your values of SWR on the 50
> ohm line, obtained using EZNEC and the ARRL transmission
> line calculator, with my values of SWR using VARNEY. I
had
> to guess at the feeder attenuation. The ARRL and EZNEC
> probably ignore it.
>
>
> FMHz Your SWR My SWR
> -------- ------------ -----------
> 3.8 3.4 2.2
> 7.2 4.3 5.5
> 10.125 50 56
> 14.2 2.6 2.7
> 18.14 40 39
> 21.3 7.8 7.3
> 24.95 2.2 2.2
> 28.4 64 71
>
> I would judge that the differences between the computer
> programs are no worse than the accuracy of the data which
is
> likely to be fed into them.
>
> The following is a table of resonant frequencies and the
> 50-ohm SWR for the standard G5RV with a 450-ohm ladder
line
> which is 1/2-wave long at 14.15 MHz.
>
> Res Freq. SWR-50
> ---------- ----------
> 3.566 2.1
> 7.945 1.5
> 14.145 2.2

> 20.370 1.2
> 24.736 2.0
> 32.053 1.5
>
> Although only 2 resonant frequencies lie in amateur bands,
> the low average value of SWR at resonance shows the
> superiority of 450-ohm line in that respect. This sort of
> table can be generated in a few minutes using Varney.exe
>
> And I've just noticed my G5RV is about 12 inches longer
than
> yours ! Which should be added to the list of differences
in
> computer input data.
>
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********
> Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
> news:8v3reimrc1@neptunium.btinternet.com...
> > Cecil wrote..
> > > Reg Edwards wrote:
> > > > For the G5RV admirer, enter Louis' full set of
antenna
> > data
> > > > ready for analysis by hitting a single key.
> > >
> > > Reg, have you compared it to the EZNEC reults on my
web
> > page?
> > ==========
> > Yes Cecil, I checked umpteen months back as a matter of
> > routine. I forget the details but I couldn't find
> anything
> > the matter with Eznec. It does a sufficiently accurate
> job.
> >
> > You can check yourself. Only takes a few seconds from
> > switching on the computer with Varney.exe. It takes
weeks
> > to find a complete set of resonant frequencies just
using
> > Eznec. But of course it is excellent at plotting
> radiation
> > patterns which none of my programs do.
> > --
> > **********

> > Regards from Reg, G4FGQ
> > For free radio modelling software go to:
> > http://www.btinternet.com/~g4fgq.regp
> >
> > **********
> >
> >
> >
> >
>
>

2564. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A15C3F5.72C5A838@uci.edu>
Source record: 176127

Richard Clark wrote:
> I can think of at least one way to argue more. (Note my provisos in earlier
> postings).

I'm quite sure of that. But would you mind picking something arguable
next time?

Jim

2565. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A15CE60.26BF@wt.net>
Source record: 176128

Yuri Blanarovich wrote:
>
> >There probably are many stories of success and failure in the attempt to
> >eliminate precipation static.
> >
> >Best regards, Richard Harrison, KB5WZI
> >
>
> Possible.
> There are basically two problems with "precipitation static." One is a grounded
> or unchoked antenna acquiring static electricity charge and then arcing over to
> something. (That is easily solved with draining choke or resistors.) The second
> one is wideband noise caused by charged particles (snow, rain) hitting metallic
> things, having to discharge themselves and creating the hash, regardless of
> antenna, it shows up as about 20 over S9.
> We had this happen during WRTC in Slovenia for about 8 hours, virtually
> paralyzing our reception. We were not allowed to have another antenna, even
> piece of wire lying on the ground.
> It appears that this hash is caused by discharge of the droplets on metallic
> and grounded things, antenna then picks them up (it is right there in the
> middle of it). We had discussions on of the reflectors about the phenomena and
> mechanics of it (I forgot what was the conclusion, would have to look it up.)
> The only 100% working solution seem to be, when you have stacked antennas, or
> two layers (high and low) of antennas, only the bottom ones are DEAD quiet, top
> or side positioned antennas are overwhelmed by hash.
> Based on that experience I would guess that even having HV insulated wires way
> up there would pickup "signals" from the droplets being discharged on
> (metallic) things "up there." Maybe Laporte was playing with insulated rhombics
> on wooden poles? That would probably work, but metallic things in today's
> antennas are almost unavoidable, so I doubt that HV insulation would help, the
> hash is generated right inside of antenna. It didn't help with Razors, which I
> was trying to achieve and failed miserably :-)
>
> Yuri, K3BU

Hummmm, that seems weird to have the bottom antennas quiet if the cause
is wideband noise caused by charged particles. Seems this would effect
the bottom antennas also if this was the case. I've had this noise many
times, and have tried things like quickly grounding the antenna and then
switching back to it real fast to see if the noise changed. It never
seemed to make any difference. So it didn't seem to be from any built up
charge on the antenna wires that could be discharged to lower the noise.
I would just have to wait it out. I would notice many times the noise
did seem to build up though. It would "tick" faster and faster as if

something in the area was indeed building a charge up and arcing to something. I'm wondering...maybe you were streaming as in lightning. This would explain why the lower antennas were quiet. The top antenna acts as the lightning rod, and streams, where the lower one doesn't.??? If this is the case, it would seem to me that adding a lightning rod above the top beam should make it quieter also, unless you are receiving rf from arcing. I'm not sure if insulated wire helps any at all. Maybe a bit, but I think I still get the noise with the insulated wire. All my present wire antennas are from #12 insulated copper wire. I'm guessing the insulation good for 600 volts +-??? .So anyway, maybe trying a lightning rod above the top beam would help it. Worth a try maybe..Also I would think if something in the area is streaming it would generate noise that could be heard in the receiver. After all, it's an arc of sorts. Should be noise from dc-light nearly I would think. MK
--
http://web.wt.net/~nm5k

2566. Re: 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Jim <jspaz@i-55.com>
Message-ID: <3A15D51A.7F347EC@i-55.com>
Source record: 176129
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Go for the South West direction. That way when the band opens up, you can get some of the US. If using SSB go for horizontal, if FM the go for vertical.

Jim

Peter wrote:

> I'm wondering what would be the best direction to point a 6m beam? I do not
> have a rotor available at this time. My location is on the east coast of
> Canada (grid FN65) and am very new to 6m. In fact, this will be my first
> antenna for this band!
>
> Peter

2567. Re: HF mobile (small car)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <8v4kfa$1u3i$1@news.gate.net>
Source record: 176130

If anyone is still following this thread.....an update.

I got my new Icom 706mk2g and High Sierra 1500 screwdriver about four days ago. A couple of hours working on the installation each day and I'm finally done. It works great!!! Got on tonight and the HS-1500 tunes easily from the driver's seat with an SWR of <1.2 on all bands. My first contact was with VK6APZ in Australia - he was beaming long path to the states! Good grief, I couldn't have asked for more!

I've got a pretty good ground in the mobile. I had an extra 20 feet of 1-1/2" copper strap from PolyPhaser and used it between the antenna and my steel frame about 6" away. I also used the copper strap to ground the radio, the hood, and trunk and applied anti-corrosive compound to all connections. The 706 faceplate is mounted neatly on the console and a cable runs to the radio mounted in the trunk. All wires and cables are hidden from view under carpet and inside plastic tubing for protection. I ordered a Clearspeech speaker but it's backordered for a couple weeks.

I'm getting a small amount of hash in my Honda Accord from the pair of engine fans that come on every few minutes while sitting in idle. Maybe I can filter them some way?

This is going to be fun!

73,
David, K4ZZR

2568. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8v4m8ljbn1@bob.news.rcn.net>
Source record: 176131

"B Nehl" <k0emt@dbbear.com> wrote in message
news:5ncb1tomtk7lm517pda7pb2arlqgunln4v@4ax.com...
> Thanks for all the comments guys.
> > The Army engineer also suggested I coat the bottom section with
> oil to help with rust prevention.
>
> Am I missing anything?
>
> 73,
>
> Bryan
>
Check with Rohn on this, but I believe they recommend coating the tower with
tar
{roofing cement?) where it will be in contact with the cement. It should
also be
mentioned in the spec sheets.

Pete

2569. Re: 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "Alan D. Bulley" <jackal@videotron.ca>
Message-ID: <zelR5.6489$nT1.151389@wagner.videotron.net>
Source record: 176132
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

If you can't get a rotor, mount the beam so you can turn it by hand. You'll want to be able to swing the antenna north for auroral propagation, and point in the appropriate directions for whatever sporadic-E or F2 propagation you might be able to take advantage of.

For my first year on 6m I used a hand-turned quad mounted about 15' off the ground. I worked 70 grids, 30 states and several provinces. Have fun, and don't forget to swing the beam my way once in a while. :-)

All the best,

Alan D. Bulley VA2ADB in FN25
Aylmer, QC

jackal@videotron.ca
va2adb@rac.ca

<primecase@my-deja.com> wrote in message news:8v3cq4eqb1@nnrp1.deja.com...
> Peter
> It really depends on what you want to work, try having the main
> lobe pointing down the east coast of Canada & the US where you should
> be able to work a lot of stations when the band is open, and also if
> you have poor front to back ratio you could work Auroral scatter from
> the back of the beam (unlikely)
> It really depends on how much you wish to monitor for those weaker
> signals.
>
> Kevin
>
>
> In article <6z1R5.3953$rm4.82874@sodalite.nbnet.nb.ca>,
> "Peter" <ve9ptr@hotmail.com> wrote:
> > I'm wondering what would be the best direction to point a 6m beam? I
> do not
> > have a rotor available at this time. My location is on the east coast
> of
> > Canada (grid FN65) and am very new to 6m. In fact, this will be my
> first
> > antenna for this band!
> >
> > Peter
> >
> >
>
>

> Sent via Deja.com http://www.deja.com/
> Before you buy.

2570. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A15F81D.6956@wt.net>
Source record: 176133

John Burrell wrote:
>
> > Ask an attorney's counsel on this.
>
> counsel = advice

Yep, I'm aware of the meaning of counsel, but since frac likes to play
Perry Mason I like to mess with his head.
>
> He's right, you are wrong. Now why not back off and give the guy a chance.
> On the evidence of the last week's postings he is obviously trying a new
> approach and surely deserves to be given another chance. How about a fresh
> start all round?

But I'm not wrong. The whole issue was his reply to W1RFI, in which he
stated that w1rfi's statement was incorrect, and that he that he should
consult counsel.

quote from W1RFI:
The number of public posts that you have made, Chip, suggest otherwise.
The
personal life that I am sure you lead that extends significantly past
the
content of your posts is not a news item, but the posts you have made
here
certainly are.

Frac says thats not true. W1RFI's statements were very correct. This is
a public forum, and if Frac is not the #1 poster I'll eat my hat. I'd
almost bet $$$ he's the "ALL TIME" #1 poster as far back as deja news
goes. If you post here , you are a public figure. I'm not trying to stir
up controversy, but the facts are facts. As far as the NG goes he is
very public. And I don't see any change in his approach at all. He's
right, the other person is wrong, and as usual needs counsel. It will
never change. I'm sorry now I even brought it up, but he provoked me
with his "your wrong, I'm always right, get counsel", attitude. I'm so
sick of his legal advice , I'm about to puke. If he had left counsel out
of it, I probably wouldn't have bothered with him. MK

--
http://web.wt.net/~nm5k

2571. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: WE0H <mikereid1@uswest.net>
Message-ID: <FRmR5.3209$dJ5.364211@news.uswest.net>
Source record: 176134

Would it be a wiser choice to have the ground stake away from the concrete base? I would think that if the ground stake was under the base and attached to the rebar in the concrete, that if lightning hit the tower the current would be flowing through the rebar, heating the concrete till it exploded.

2572. Raibeam.. Two Element Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A15FAE7.2A6BC560@ix.netcom.com>
Source record: 176135

How is the feed line coupled to the two driven elements? What is the theory behind how this antenna is fed? I'm not interested in gain numbers, just interested in how the feed system works for two or more elements. 73, EG

2573. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A16116A.51C9@wt.net>
Source record: 176136

Tom W8JI wrote:

>
> If you listen closely to rain staic (or snow static) during a storm,
> you'll hear it build up into a high pitched high level peak, then when
> lightning hits anywhere in the area it totally and immediately stops.
> You also find that rain or snow MISSING the top antenna and stricking
> the bottom antenna will NOT cause any noise at all in cases wher the
> antenna is mounted lower on the tower. If the charges were in the
> droplets, and transferred to the antenna by the contact...this would
> clearly not be the case.
>
> 73 Tom

I hadn't seen your post before I posted the other one, but your experience seems to agree with my theory of this noise being streamer related. Or corona disharge, which in that case would be almost the same. I've also heard the noise that goes away with a lightning strike."usually a ticking type sound that varies with speed" That's what led me to believe I was hearing "streamers" off in distance. Maybe not too far away either. So maybe the best thing to kill noise, might not be a lighting rod, but maybe the opposite, a large blunt ball like a flag pole. Anyway, these theories make more sense to me than charged particles hitting the antenna. If that were true, I'd expect all levels to have about the same noise. MK
--
http://web.wt.net/~nm5k

2574. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A15071E.7B58A7F1@mwci.net>
Source record: 176220

Cecil wrote:

> He
> has said that solid-state amplifiers can indeed eat enough reflected energy
> to overheat or blow themselves up. "Reflections II" will probably correct
> that misunderstanding.

This is not a good way to look at it. What happens is that the standing wave on the line causes the load impedance for the transistor to be the wrong value. This means that the collector/drain load impedance is not what is needed for proper efficiency. Suppose we want 100 W *net* power output. If this impedance is too low the transistor gets too hot. If the impedance is too high the transistor may not get too hot but the RF voltage on the collector/drain becomes too large and may destroy the transistor.

From a circuit standpoint this is what happens. The *circuit* behavior is affected by the *wave* behavior on the line.

A good technique, when thinking about RF systems, is to use the left side of the head to think "waves" and the right side of the head to think "circuit" and the middle of the head to see how the two sides are related and work together.

Basic principles.

Bill W0IYH

2575. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A14E9C5.A4@wt.net>
Source record: 176221

Lounging in pink crotchless fishnet stockings, that other guy at
Fractenna picked up a crayon and wrote:

>Hey there Mark
>
>I don't know what Chip thinks but I just wanted to pass along a hearty '$uck "first letter changed by me to protect innocent eyes.MK" you'.
>
>
>And you can stick that graphic of yours up yer own ass.
>
>Phil

Well, Frankly I would have expected more from academics. I assume you are also an academic and not just Chips little flunky. "Or do I have it backwards" Sorry , but I'm not available for any sexual romps with you if that is your intent. I don't engage in such homosexual endeavers. You aren't likely built right, and you likely have hairy legs. Maybe Chip will let you hump his leg. Also I'm glad my "graphic" made such a favorable impression on you. You will be happy to note that all my frectal endeaveurs are inspired by you two. I learned from the best. But anyway, glad to have this little chat. I'm glad to see that my posting of the "facts" of the matter made such an impression on you. Heck, I was frankly amazed to see that the Chipster and Co. made 1700 posts in the month of october. Thats appx 54.8387096774193548387 per day assumming a 31 day month for oct. Or appx 2.28494623655913978 per hour. Thats a heck of a record for such a private person. I'm impressed. Hope this helps,
MK
--
http://web.wt.net/~nm5k

2576. Cushcraft isn't the only one ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <WT8R5.1024$en6.2186@newsfeed.slurp.net>
Source record: 176222

.. consider the future of other things we know and love.

Had the privilege of looking inside a yazoo ft1k recently. Those things will not ever become boat anchors -- imo, the broken ones will reverse-sublime into spare-parts-departments for moneyed break-fixers. There is simply too much ASIC-ry going on in that and a ton of other boxes for them to age gracefully, like some of the hollow-state technology of yore, after current production runs are over.

I routinely employ a hot-air rework station for break-fix a/o changing things which shudda been socketed .. ever lifted a pad on the surface of a board 8 layers deep? Broken one of those pyrex air nozzles? And .. even if you find that prize PLD, where you gonna get the programming fixture and code? Or, have you tried to find a TR7 display?

Another disagreeable thought: the high-priced nitwittery on ebay may actually serve to preserve some of the older gear, which pricing appeals to the cupidity of those who dig omnivorously, and pitch stuff about which they know little. I can't afford the glow-bugs which graced the stations of my spent youth <g>.

A curmudgeonly 73,

K3BHJ

K3BHJ

2577. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001117070355.29046.00000219@ng-fm1.aol.com>
Source record: 176223

>Lounging in pink crotchless fishnet stockings, that other guy at
>Fractenna picked up a crayon and wrote:
>
>
>>Hey there Mark
>>
>>I don't know what Chip thinks but I just wanted to pass along a hearty '$uck
>"first letter changed by me to protect innocent eyes.MK" you'.
>>
>>
>>And you can stick that graphic of yours up yer own ass.
>>
>>Phil
>
>Well, Frankly I would have expected more from academics. I assume you
>are also an academic and not just Chips little flunky. "Or do I have it
>backwards" Sorry , but I'm not available for any sexual romps with you
>if that is your intent. I don't engage in such homosexual endeavers. You
>aren't likely built right, and you likely have hairy legs. Maybe Chip
>will let you hump his leg. Also I'm glad my "graphic" made such a
>favorable impression on you. You will be happy to note that all my
>frectal endeaveurs are inspired by you two. I learned from the best. But
>anyway, glad to have this little chat. I'm glad to see that my posting
>of the "facts" of the matter made such an impression on you. Heck, I was
>frankly amazed to see that the Chipster and Co. made 1700 posts in the
>month of october. Thats appx 54.8387096774193548387 per day assumming a
>31 day month for oct. Or appx 2.28494623655913978 per hour. Thats a heck
>of a record for such a private person. I'm impressed. Hope this helps,
>MK
>--
>http://web.wt.net/~nm5k
>

Hello Mark,

I would say that if Phil felt this way, that he probably represents a spectrum of disgust for your filth and inaccuracy. Your allegation that I have personally authored that many posts in October is a case in point.

Mr. Keith, you appeare incapable of espousing human decency. Placing this private e-mail on this public NG is a case in point.

But I admire Phil's honesty with you. Some of us are a bit more restrained.

Now: how many 'posts' does this one count for on your arithmetic? 120? 369.7?

Maybe you should be a canvasser.

End of discussion.

NC

2578. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001117071624.29090.00000241@ng-fm1.aol.com>
Source record: 176224

>Heck, I was
>frankly amazed to see that the Chipster and Co. made 1700 posts in the
>month of october.

I think you should be astounded: the actual number is 170. A vast majority of these are real-time dialogue of one or two sentences, usually on weekends.

Mr. Keith: these deliberate distortions and prevarication on your part MUST stop.

I am requesting that you cease and desist in this.

Thank you for your cooperation.

Nathan Cohen

2579. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001117074314.21348.00000243@ng-fd1.aol.com>
Source record: 176225

>There probably are many stories of success and failure in the attempt to
>eliminate precipation static.
>
>Best regards, Richard Harrison, KB5WZI
>

Possible.
There are basically two problems with "precipitation static." One is a grounded or unchoked antenna acquiring static electricity charge and then arcing over to something. (That is easily solved with draining choke or resistors.) The second one is wideband noise caused by charged particles (snow, rain) hitting metallic things, having to discharge themselves and creating the hash, regardless of antenna, it shows up as about 20 over S9.
We had this happen during WRTC in Slovenia for about 8 hours, virtually paralyzing our reception. We were not allowed to have another antenna, even piece of wire lying on the ground.
It appears that this hash is caused by discharge of the droplets on metallic and grounded things, antenna then picks them up (it is right there in the middle of it). We had discussions on of the reflectors about the phenomena and mechanics of it (I forgot what was the conclusion, would have to look it up.)
The only 100% working solution seem to be, when you have stacked antennas, or two layers (high and low) of antennas, only the bottom ones are DEAD quiet, top or side positioned antennas are overwhelmed by hash.
Based on that experience I would guess that even having HV insulated wires way up there would pickup "signals" from the droplets being discharged on (metallic) things "up there." Maybe Laporte was playing with insulated rhombics on wooden poles? That would probably work, but metallic things in today's antennas are almost unavoidable, so I doubt that HV insulation would help, the hash is generated right inside of antenna. It didn't help with Razors, which I was trying to achieve and failed miserably :-)

Yuri, K3BU

2580. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <3a152e56.1394380@nntp.mindspring.com>
Source record: 176226

On Thu, 16 Nov 2000 20:47:24 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:
> Assume a 100 joules/second transmitter with
>a one second long lossless transmission line and a load which causes
>reflected power to equal half of the forward power. Key the transmitter.
>
>After one second, no power has reached the load and there is 100 joules
>in the transmission line.
>
>After two seconds, 50 joules has reached the load, 50 joules has been
>reflected, and 100 joules is in the forward wave. NOTE THAT 150 JOULES
>EXISTS IN THE TRANSMISSION LINE, MORE THAN THE GENERATED ENERGY.
>
>Assuming a Z0-match which blocks reflected power from reaching the
>transmitter, after three seconds forward energy equals 150 joules and
>reflected energy equals 50 joules.
>

Given the 1-second long transmission line, how does the Z0-match block
reflected power at the 2nd second?

- Jeff

2581. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v3a5r$h1k$1@plutonium.btinternet.com>
Source record: 176227

Cecil, havn't you forgotten the time it takes for the 100 joules to be transported from the hydro-electric generators at Boulder to your shack ? ;o)

The question is "Where" does the reflected power go, not "When".

So we are not concerned with transients but with steady state.

So I repeat - all the RF power outputted by the transmitter is absorbed (for the want of a better word) by the antenna. THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.

Why unnecessarily complicate matters by dragging red herrings all over the place ? ;o)
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Cecil <Cecil.A.Moore@IEEE.org> wrote in message news:3A149C3C.B7C538BD@IEEE.org...
> Reg Edwards wrote:
> > In a sensibly lossless transmission system, which most
> > systems are, all the RF power outputted by the transmitter
> > is absorbed by the intended load, ie., the antenna. There's
> > simply no-where else for it to go.
>
> Here we go again. :-) Assume a 100 joules/second transmitter with
> a one second long lossless transmission line and a load which causes
> reflected power to equal half of the forward power. Key the transmitter.
>
> After one second, no power has reached the load and there is 100 joules
> in the transmission line.
>
> After two seconds, 50 joules has reached the load, 50 joules has been

> reflected, and 100 joules is in the forward wave. NOTE
THAT 150 JOULES
> EXISTS IN THE TRANSMISSION LINE, MORE THAN THE GENERATED
ENERGY.
>
> Assuming a Z0-match which blocks reflected power from
reaching the
> transmitter, after three seconds forward energy equals 150
joules and
> reflected energy equals 50 joules.
>
> After four seconds, 75 joules has reached the load, 75
joules has been
> reflected, etc. etc. etc.
>
> I think you get the idea. After steady-state has been
reached there is
> 200 joules of forward energy and 100 joules of reflected
energy. The
> transmitter has generated 300 more joules than has been
absorbed by
> the load. There exists 200 watts of forward power and 100
watts of
> reflected power. It really and truly exists because it
hasn't made
> it to the load yet.
>
> There **IS** somewhere else for it to go, Reg. It is
stored in the
> transmission line until the transmitter is turned off.
Without the
> reflected energy stored in the transmission line, all the
generated
> power would not make it to the load.
> --
> http://www.mindspring.com/~w6rca

2582. Re: 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: primecase@my-deja.com
Message-ID: <8v3cq4eqb1@nnrp1.deja.com>
Source record: 176228
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Peter
It really depends on what you want to work, try having the main
lobe pointing down the east coast of Canada & the US where you should
be able to work a lot of stations when the band is open, and also if
you have poor front to back ratio you could work Auroral scatter from
the back of the beam (unlikely)
It really depends on how much you wish to monitor for those weaker
signals.

Kevin

In article <6z1R5.3953$rm4.82874@sodalite.nbnet.nb.ca>,
"Peter" <ve9ptr@hotmail.com> wrote:
> I'm wondering what would be the best direction to point a 6m beam? I
do not
> have a rotor available at this time. My location is on the east coast
of
> Canada (grid FN65) and am very new to 6m. In fact, this will be my
first
> antenna for this band!
>
> Peter
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2583. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <BwaR5.2500$S43.183244@bgtnsc06-news.ops.worldnet.att.net>
Source record: 176229

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:3A1486DF.D7AED8D2@mwci.net...
>
>
> VE9SRB wrote:
>
> > I should have said: 130 watts = 100
> > watts + 30 watts is only true when the voltages and currents associated
with
> > the 100 watts and 30 watts are 90 degrees out of phase.
> >
> > In a 50 ohm transmission line, 100 watts of power has an associated
voltage
> > magnitude of 70.71 V and a current magnitude of 1.414 A. 30 watts of
power
> > has an associated voltage magnitude of 38.73 V and a current magnitude
of
> > 0.775 A. 130 watts of power has an associated voltage magnitude of
80.623 V
> > and a current magnitude of 1.62 A. This all based on the relationship
that
> > P = |V| |I| cos(theta), where theta is the phase angle difference
between V
> > and I. V and I both being in a 50 ohm system.
> >
>
> This is incorrect for the following reasons:
>
> 1) The current corresponding to 130 W is 1.613 A, not 0.62 A. But we
cannot look
> at this problem in this manner.

Hi Bill:

If you check my post again you will see that I made the following statement
:

"130 watts of power has an associated voltage magnitude of 80.623 V and a
current magnitude of 1.62 A."

So, I am not sure where the 0.62 A figure you quote comes from.

>
> 2) The forward power is 130 W. In terms of the forward wave this is
> (V+)^2 / 50, so (V+) = 80.62 V RMS
>

This is exactly as I have stated above.

> 3) The reflected power is 30 W. In terms of the reflected wave this is
> (V-)^2 / 50, so (V-) = 38.73 V RMS.

This is exactly as I have stated above.

>
> 4) The difference between the forward and reflected power waves is
> (V+)^2 / 50 - (V-)^2 /50 = 130 - 30 = 100 W.

This is true in all transmission line systems and is not a point of disagreement from my perspective. Regardless of the level of re-reflection at the transmitter, the net power delivered to the transmission line is always equal to the steady state forward power minus the steady state reflected power. It is important to understand that the 100 W of delivered power is a net value and not the forward source power of the transmitter. The point of issue is what power "components" combine to become the total steady state forward power of 130 watts. It is not a source power of 100 W "adding" to a re-reflected power of 30 W to become 130 W. The 100 watts is the effective net power delivered to the transmission line. The actual forward source power delivered to the transmission line is not 100 watts.

>
> These two values are what a thermoelectric directional wattmeter measures.
The
> phase between (V+) and (V-) is *not* specified. The phase difference
between
> (V+) and (V-) is controlled by the reflection coefficient at the load,
which can
> be anywhere on a certain circle on the Smith chart.
>
> For example, at a resistive load, (V+) and (V-) can be completely in-phase
(or
> completely out-of-phase). But as we move along the line the phase between
(V+)
> and (V-) rotates. But the forward (130), reflected (30) and net (100)
power
> values are constant everywhere on the line.
>

I agree with these statements. With the directional wattmeter, we are measuring steady state forward and reflected power in the transmission line. We are not measuring the true forward source power nor are we measuring the re-reflected power. All we can "see" with the wattmeter is the net forward power of 130 watts which is the result of the re-reflected power combining with the true forward source power. If these two powers are "in-phase", the 130 watts of total forward power will not be the result of 100 watts of true forward source power adding to 30 watts of re-reflected power.

Steve

> Bill W0IYH
>

2584. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v3dfq$j2l$0@208.207.71.148>
Source record: 176230

Reg Edwards wrote:
> all the RF power outputted by the transmitter
> is absorbed (for the want of a better word) by the antenna.
> THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.

Hving caused noticible temperature rise in a few coaxial feedlines over
the years I can't entirely agree, Reg.

Dick

2585. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <C3bR5.2513$S43.182696@bgtnsc06-news.ops.worldnet.att.net>
Source record: 176231

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:8v3a5r$h1k$1@plutonium.btinternet.com...
>
> So I repeat - all the RF power outputted by the transmitter
> is absorbed (for the want of a better word) by the antenna.
> THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.
>

IMHO, here's where the total power outputted by the transmitter goes (no
tuner between TX and antenna):

1) A portion of it is delivered to the antenna.
2) A portion of it is lost in the feedline
3) A portion of it is returned to the transmitter as a function of the
transmitter output impedance.

Steve

2586. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1540EB.8FC93310@IEEE.org>
Source record: 176232

Fred Hambrecht wrote:
> They eat themselves up, do to the mismatch of impedance. Lets put a tuner in
> line so the impedance is matched. I think you would agree that the SWR on
> the line has not changed one iota, (disregarding lengths of wire in the
> tuner) now we are back to Maxwell's original premise.

I agree. The misunderstanding arises because Walter Maxwell assumed a
tuner function with its accompanying Z0-match but he did not state his
assumption in words. Because he didn't state his assumption, some people
have inferred that he was talking about systems without a tuner. He wasn't.
--
http://www.mindspring.com/~w6rca

2587. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1541AA.61735F8D@IEEE.org>
Source record: 176233

"William E. Sabin" wrote:
>
> Cecil wrote:
> > He
> > has said that solid-state amplifiers can indeed eat enough reflected energy
> > to overheat or blow themselves up. "Reflections II" will probably correct
> > that misunderstanding.
>
> If this impedance is too
> low the transistor gets too hot. If the impedance is too high the transistor may
> not get too hot but the RF voltage on the collector/drain becomes too large and
> may destroy the transistor.

That's what I said. The impedance seen depends on the phase of the reflections
that make it back to the transmitter.
--
http://www.mindspring.com/~w6rca

2588. Re: Cushcraft isn't the only one ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v3gku$1j7$0@208.207.71.148>
Source record: 176234

David J. Windisch wrote:
>
> .. consider the future of other things we know and love.
>
> Had the privilege of looking inside a yazoo ft1k recently. Those things
> will not ever become boat anchors -- imo, the broken ones will
> reverse-sublime into spare-parts-departments for moneyed break-fixers.
> There is simply too much ASIC-ry going on in that and a ton of other boxes
> for them to age gracefully, like some of the hollow-state technology of
> yore, after current production runs are over.

Yep, that's what has happened to the venerable Kenwood TS940S/AT. I
have a pair of them in the closet, one that is pristine but has had a
lil' "static discharge" into its antenna port,(but the PLL's are alive)
and another thats pretty much a beater, but which does work, albeit with
a couple minor tribulations. Maybe this winter I'll get around to
combining the two into a really nice oldtimer.

Hey, a TS940 is old?????

Dick

2589. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1543C1.3FB5C98F@IEEE.org>
Source record: 176235

Reg Edwards wrote:
> So we are not concerned with transients but with steady
> state.

Whadda mean we, white man? :-)

> So I repeat - all the RF power outputted by the transmitter
> is absorbed (for the want of a better word) by the antenna.
> THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.

But there is somewhere else for it to go, Reg. It is stored
in the transmission line until the transmitter is turned off.
This is easy to prove by observing TV signals with reflections
and the resultant ghosts. It is easy to prove that there is more
energy in the transmission line with reflections than without.

In my example where 300 joules is stored in the one second long
lossless transmission line, the transmission line continues to
deliver power to the load for many seconds after the transmitter
has been disconnected. 2/3 of that 300 joules is real live reflected
energy. It is really there. It is not imaginary.
--
http://www.mindspring.com/~w6rca

2590. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a154200.208364109@nntp.mindspring.com>
Source record: 176236

On 17 Nov 2000 12:03:55 GMT, fractenna@aol.com (Fractenna) wrote:

>>Lounging in pink crotchless fishnet stockings, that other guy at
>>Fractenna picked up a crayon and wrote:
>>
>>
>>>Hey there Mark
>>>
>>>I don't know what Chip thinks but I just wanted to pass along a hearty '$uck
>>"first letter changed by me to protect innocent eyes.MK" you'.
>>>
>>>
>>>And you can stick that graphic of yours up yer own ass.
>>>
>>>Phil
>>
>>Well, Frankly I would have expected more from academics. I assume you
>>are also an academic and not just Chips little flunky. "Or do I have it
>>backwards" Sorry , but I'm not available for any sexual romps with you
>>if that is your intent. I don't engage in such homosexual endeavers. You
>>aren't likely built right, and you likely have hairy legs. Maybe Chip
>>will let you hump his leg. Also I'm glad my "graphic" made such a
>>favorable impression on you. You will be happy to note that all my
>>frectal endeaveurs are inspired by you two. I learned from the best. But
>>anyway, glad to have this little chat. I'm glad to see that my posting
>>of the "facts" of the matter made such an impression on you. Heck, I was
>>frankly amazed to see that the Chipster and Co. made 1700 posts in the
>>month of october. Thats appx 54.8387096774193548387 per day assumming a
>>31 day month for oct. Or appx 2.28494623655913978 per hour. Thats a heck
>>of a record for such a private person. I'm impressed. Hope this helps,
>>MK
>>--
>>http://web.wt.net/~nm5k
>>
>
>Hello Mark,
>
>I would say that if Phil felt this way, that he probably represents a spectrum
>of disgust for your filth and inaccuracy. Your allegation that I have
>personally authored that many posts in October is a case in point.
>
>Mr. Keith, you appeare incapable of espousing human decency. Placing this
>private e-mail on this public NG is a case in point.

You lowlife hypocrite you constantly post private email.
Chip you are lower than squid manure at the bottom of the
Mariana Trench.

>But I admire Phil's honesty with you. Some of us are a bit more restrained.

Some of "you" have idiot sock puppets who do the dirty work. I don't
even believe "Phil" even post this stuff. I think you do it to vent
while maintaining what you think is your "good" image.

You continue to be an embarrassment to PhDs everywhere and surveys
still show your peers find your behavior disgusting.
>
>Now: how many 'posts' does this one count for on your arithmetic? 120? 369.7?
>
>Maybe you should be a canvasser.
>
>End of discussion.

No we still feel free to talk about you when you're gone. I only
wish you would give us more opportunities. Despite your
continued eforts you do not control this newsgroup or its
participants. Perhaps you would like to write my Congressional
deligation again.

BTW you never answered my questions. What was it that "hatred"
did?
>
>NC
>

2591. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A154485.3A327A3F@IEEE.org>
Source record: 176237

VE9SRB wrote:
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:8v3a5r$h1k$1@plutonium.btinternet.com...
> >
> > So I repeat - all the RF power outputted by the transmitter
> > is absorbed (for the want of a better word) by the antenna.
> > THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.
>
> IMHO, here's where the total power outputted by the transmitter goes (no
> tuner between TX and antenna):
>
> 1) A portion of it is delivered to the antenna.
> 2) A portion of it is lost in the feedline
> 3) A portion of it is returned to the transmitter as a function of the
> transmitter output impedance.

4) A portion of it is stored in the transmission line until the
transmitter is disconnected.

We're talking about lossless systems, so number 2 doesn't apply.

We're talking about Z0-matched systems, so number 3 doesn't apply.
--
http://www.mindspring.com/~w6rca

2592. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <FJbR5.1319$Ur5.132989@monger.newsread.com>
Source record: 176238

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Louis Bybee" <louisb@datacomm.com> wrote in message
news:3A0F4764.234563C8@datacomm.com...
> How about a number of stout Rebar pieces drilled into the Bed Rock? I
> wish I had such material available where I lived. If oversized holes
> were drilled into the rock at an angle, and Epoxy used to retain the
> Rebar, which was bent vertical after leaving the rock, the result could
> be unequaled support, unavailable without great expense!

Cost of "one" 5/8" X 12" long drill bit for hammer drill is over $50
You'd probably want to go at least 18" if not 24. Depends on the rock. If
it's granite you'd need a diamond drill and they make the hammerdrill bits
look cheap.

Good hammer drill is $200 give or take.

I had one of the good industrial ones (5/8ths inch, not 1/2 inch, with 8 amp
motor) and it caught fire on the second day. (totaled it, but they replaced
it no questions asked)

You might be able to find one at a rental agency, but the drill bits could
get realy expensive.

It takes a really good set of shoulder and arm muscles to keep from getting
hurt when the thing hangs up. <:-))

I had an electrician friend get one hung up and the power cord pulled his
thumb out by the roots. Completely tore it off.

Roger (K8RI)

>
> Louis
>
> kl7ifp wrote:
> >
> > I got a 4X4 X3 under my tower that is self supported and it has survive
many
> > of 90 plus winds .... 120 knots so far been the greatest gust that it
has
> > with stood. only reason I didn't do the 3x3x5 that was manufacture
recommend
> > was hit bed rock 3 feet down.
> > "B Nehl" <k0emt@dbbear.com> wrote in message

> > news:1a2e0t0fambivicl62qd4ufn6m8mgrp39i@4ax.com...
> > > >This life and death subject has no room for antidotal experiences.
> > > >Please obtain the necessary specifications and requirements directly
> > > >from Rohn, POBox 2000, Peoria, Il 61656 (309)697-4400. For example,
> > > >the allowable antenna area for a 30ft self-supporting 25G tower
> > > >exposed to ice and 90mph winds is ZERO.
> > >
> > > I agree that the Rohn specs & requirements should be followed.
> > > I have been to the Rohn website (www.rohn.net) and have sent an email
> > > to them detailing my plans and seeking their recommended base size.
> > >
> > > However, I am still interested in knowing what others have done.
> > > Problems, etc that others have run into. The group I run with tends
> > > to "over-engineer." Can a base ever be "too-big?"
> > >
> > > 73,
> > >
> > > Bryan - k0emt

2593. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A154675.5D482A09@IEEE.org>
Source record: 176239

Jeff Anderson wrote:
>
> On Thu, 16 Nov 2000 20:47:24 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
> > Assume a 100 joules/second transmitter with
> >a one second long lossless transmission line and a load which causes
> >reflected power to equal half of the forward power. Key the transmitter.
> >
> >After one second, no power has reached the load and there is 100 joules
> >in the transmission line.
> >
> >After two seconds, 50 joules has reached the load, 50 joules has been
> >reflected, and 100 joules is in the forward wave. NOTE THAT 150 JOULES
> >EXISTS IN THE TRANSMISSION LINE, MORE THAN THE GENERATED ENERGY.
> >
> >Assuming a Z0-match which blocks reflected power from reaching the
> >transmitter, after three seconds forward energy equals 150 joules and
> >reflected energy equals 50 joules.
>
> Given the 1-second long transmission line, how does the Z0-match block
> reflected power at the 2nd second?

A lossless antenna tuner provides a Z0-match which doesn't allow any
reflected energy to reach the transmitter. The "SWR" between the transmitter
and the antenna tuner is 1:1. There is simply nowhere else for the reflected
energy to go except back towards the antenna. We know "what" happens from
a scalar standpoint. "How" is really not important except to academics.
--
http://www.mindspring.com/~w6rca

2594. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A154722.7E5DEB72@IEEE.org>
Source record: 176240

Reg Edwards wrote:
> For the G5RV admirer, enter Louis' full set of antenna data
> ready for analysis by hitting a single key.

Reg, have you compared it to the EZNEC reults on my web page?
--
http://www.mindspring.com/~w6rca

2595. Re: how close can I stack my 70cm beam above my 2m and my 2m above my 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <1RbR5.1322$Ur5.133076@monger.newsread.com>
Source record: 176241

I take it that these are the C3i antennas of the K1FO design.

A quick call to C3i will get you the figures you wish.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"N1RZ" <n1rz@timhavens.com> wrote in message
news:xYdQ5.11460$Ds3.127118@e420r-sjo3.usenetserver.com...
> I'm trying to locate some data on how close my yagi's can be placed next
to
> eachother without greatly effecting the others on the mast?
>
> I have a:
>
> 5 ele 6m beam with about a 12' boom.
> a Long Boom K1FO 2m yagi (12 ele I think)
> a Long Boom K1FO 70cm yagi (22 ele?)
>
> Anyway...I'm just trying to find a guideline for how close they can be on
> the vertical mast....they will all be mounted Horizontally....on a
Vertical
> mast.
>
> I was considering adding a second 70cm and phasing them together....and
> wondering how I should configure them all to get this done...I'm not sure
I
> have enough mast currently to do this.
>
> What are some thoughts on distances from each yagi to the next....(without
> the phased extra 70cm beam)?
>
> The 6m will be on the bottom then the 2m and then the 70cm. I was
thinking
> about having it go like 6m, 70cm (lower phased), 2m, 70cm (upper phased)
>
> What do you folks think....maybe you can point me to some good sources on
> this as well....I've been out of the hobby about 6 years, and most of this
> has left my brain....(ooppps).
>
> Tim (N1RZ)
>
>

>
>

2596. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12462-3A154891-49@storefull-117.iap.bryant.webtv.net>
Source record: 176242

Steve best wrote:
"The 100 watts is the effective net power delivered to the transmission line. The actual forward source power delivered to the transmission line is not 100 watts."

These sentences seem contradictory to me.

Cecil gave the formula for the inline wattmeter determined power early in this thread. It is:
forward power minus reflected power is the actual power at the measurement point. On a lossless line, power is the same at any point along the line, regardless of SWR. If the line is lossy, power measured at the load is less than that measured at the transmitter.

Re-reflected power and fresh from the transmitter power are indistinguishable to the wattmeter. So, the forward power indication can contain old power and fresh power.

If there is no significant loss, between the transmitter and its load, the power output of the transmitter and the power delivered to the load are the same quantity. Forward and reflected indicated powers should be the same at both ends of the transmission line. With loss in the line, the difference in net power indications at opposite ends of the transmission line is the power lost in the line.

Best regards, Richard Harrison, KB5WZI

2597. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <N%bR5.13329$mq1.893626@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176243

```
"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A154485.3A327A3F@IEEE.org...
> VE9SRB wrote:
> >
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:8v3a5r$h1k$1@plutonium.btinternet.com...
> > >
> > > So I repeat - all the RF power outputted by the transmitter
> > > is absorbed (for the want of a better word) by the antenna.
> > > THERE IS SIMPLY NOWHERE ELSE FOR IT TO GO.
> >
> > IMHO, here's where the total power outputted by the transmitter goes (no
> > tuner between TX and antenna):
> >
> > 1) A portion of it is delivered to the antenna.
> > 2) A portion of it is lost in the feedline
> > 3) A portion of it is returned to the transmitter as a function of the
> > transmitter output impedance.
>
> 4) A portion of it is stored in the transmission line until the
> transmitter is disconnected.
>
> We're talking about lossless systems, so number 2 doesn't apply.
>
> We're talking about Z0-matched systems, so number 3 doesn't apply.
> --
> http://www.mindspring.com/~w6rca

Sorry.
```

2598. Re: how close can I stack my 70cm beam above my 2m and my 2m above my 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a155098.0@oracle.zianet.com>
Source record: 176244

A good rule of thumb is 1/2 the length of the longest boom.

Ed, W5EJ

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:1RbR5.1322$Ur5.133076@monger.newsread.com...
> I take it that these are the C3i antennas of the K1FO design.
>
> A quick call to C3i will get you the figures you wish.
>
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "N1RZ" <n1rz@timhavens.com> wrote in message
> news:xYdQ5.11460$Ds3.127118@e420r-sjo3.usenetserver.com...
> > I'm trying to locate some data on how close my yagi's can be placed next
> to
> > eachother without greatly effecting the others on the mast?
> >
> > I have a:
> >
> > 5 ele 6m beam with about a 12' boom.
> > a Long Boom K1FO 2m yagi (12 ele I think)
> > a Long Boom K1FO 70cm yagi (22 ele?)
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> > Anyway...I'm just trying to find a guideline for how close they can be
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> > the vertical mast....they will all be mounted Horizontally....on a
> Vertical
> > mast.
> >
> > I was considering adding a second 70cm and phasing them together....and
> > wondering how I should configure them all to get this done...I'm not
> sure
> I
> > have enough mast currently to do this.
> >
> > What are some thoughts on distances from each yagi to the
> next....(without
> > the phased extra 70cm beam)?
> >
> > The 6m will be on the bottom then the 2m and then the 70cm. I was

> thinking
> > about having it go like 6m, 70cm (lower phased), 2m, 70cm (upper phased)
> >
> > What do you folks think....maybe you can point me to some good sources
on
> > this as well....I've been out of the hobby about 6 years, and most of
this
> > has left my brain....(ooppps).
> >
> > Tim (N1RZ)
> >
> >
> >
> >
>
>

2599. Re: 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A1555BD.FDE05E3E@earthlink.net>
Source record: 176245
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

hi peter
i would suggest pointing south south west
but for $50 por so you can get an old TV antenna rotor and put under it and
turn it easlily and it would clamp on even a push up pole with no problem
good luck hope to hear you on 6 when the band opens
73 de k4oxg EL88

Peter wrote:

> I'm wondering what would be the best direction to point a 6m beam? I do not
> have a rotor available at this time. My location is on the east coast of
> Canada (grid FN65) and am very new to 6m. In fact, this will be my first
> antenna for this band!
>
> Peter

2600. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1556C6.C0BA47B2@bellatlantic.net>
Source record: 176246

Typically, with a good tuner, most of the power ends up radiated.
The amount of power that is lost (dissipated as heat, rather than
radiated) depends upon the loss figure of the transmission line
at the frequency of operation and the degree of mismatch between
the antenna and the transmission line. That is the simple answer.

An overview of the theory is below.
The power travels from the rig through the tuner trough the transmission
line to the antenna. Some of the power is dissipated (lost) as heat along
the way. When the power reaches the antenna, which has an impeadance
that does not match the transmission line impedance, some of it is radiated
by the antenna, and some of it is reflected back toward the tuner. On its
way back to the tuner, some of the reflected power is dissipated in the
transmission line. When it arrives at the tuner, it is re-reflected back
toward
the antenna. Again, part of that power is dissipated in the transmission
line
as it travels toward the antenna.

The amount (percentage) of arriving power that is reflected depends upon
the amount of mismatch; the amount of loss in the transmission line depends
on the type of line and the frequency.

"Scott M. McClements" wrote:

> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.

2601. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A155BA4.C0E1B53A@bellatlantic.net>
Source record: 176247

Dick Carroll wrote:

> Scott M. McClements wrote:
> >
> > I have a few questions about reflected and antenna tuners. First off,
> > where does reflected power (SWR) actually go? Is it eventually radiated
> > from the antenna, dissipated by PA transistors or is it more complex
> > than that?
> >
> > Next, if you use an antenna tuner, this will improve how well your
> > antenna "couples" with the feedline, correct? It can actually improve
> > how much power is put into the feedline? However, the mismatch still
> > occurs at the antenna feedpoint and the percentage of reflected power is
> > still constant? With the antenna tuner in place, does this effect how or
> > where a reflected wave acts?
> >
> > I know this sounds troll'ish..but I am serious about what I am asking.
> >
> > Thanks,
> >
> > Scott McClements.
>
> I'll be dipped. Not a word from the experts about low loss feedline
> preserving more of the power for radiation rather than dissipation,
> whether or not we're talking of the forward incident wave or a reflected
> wave.

Actually, Mr. Harrison alluded to it. His post was very good, in
my opinion. I added what I hope is a simple overview explanation of
what goes on. I hope it did not muddy the waters - and I would have
preferred that one of the experts had done it. I'm sure they can do a far
better job than I.

I really felt that for this particular question the overall basic description

was in question, not the more in depth stuff in the ensuing discussion. And
like you, I would have like to have seen a stronger mention of feedline loss.
Not that the discussion was out of place - it's always interesting what
these guys have to say! Just that the basics needed to be outlined first.

2602. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v3m6c$9so$1@iac5.navix.net>
Source record: 176248

My personal opinion is reflected power dos not exist! It is a figment that allows us to understand why the darn SWR bridge works.

"Richard Clark" <rwclark@seanet.com> wrote in message news:3a5e77db.1912886675@news.seanet.com...
> On Thu, 16 Nov 2000 19:41:19 -0500, "Fred Hambrecht" <Fred@w4jle.com>
> wrote:

> Thanks Fred,
>
> Walt and I have corresponded to this matter considerably (both online
> and off). I enjoy his style and the points made as his work is very
> accessible and should be required reading.
>
> Differences you may note certainly does not inhibit either of us to
> express those same differences and hold to them, but I would reckon
> that even with such divergence, he and I are much closer together than
> we are far apart.
>
> 73's
> Richard Clark, KB7QHC

2603. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <MgdR5.13439$mq1.898571@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176249

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:12462-3A154891-49@storefull-117.iap.bryant.webtv.net...
> Steve best wrote:
> "The 100 watts is the effective net power delivered to the transmission
> line. The actual forward source power delivered to the transmission line
> is not 100 watts."
>
> These sentences seem contradictory to me.
>

Hi Richard,

I'm not sure why. I think we all agree that there may be some level of re-reflection at the transmitter output and that this re-reflection adds to the transmitter's forward source power to become the total forward traveling power that we measure with a wattmeter. The effective net power delivered to the transmission line is the difference between the total forward and reflected powers. The transmitter's forward source power and the effective net power it delivers to the system are generally two different things.

Let's assume that we connect a transmitter to a TL connected to a matched load and we measure a forward traveling power of 100 watts and a reflected power of 0 watts. In this case, the net power delivered to the TL is 100 watts AND the transmitter's forward source power is also 100 watts.

Now let's change the load to 100 ohms. Numerous things could happen in this case to affect the forward and reflected powers in the TL.

One possibility is the following. We again measure a forward power of 100 watts and a reflected power of 11.11 watts. In this case, the transmitter's output impedance is ZO and again, no re-reflection occurs at the transmitter output. The 11.11 watts of reflected power is returned to the transmitter. The transmitter's forward source power is still 100 watts but the net power delivered to the TL system is only 88.89 watts.

Now, let's complicate the problem by creating the situation where re-reflections do occur at the transmitter output. Let's still assume that the transmitter delivers 100 watts of power to a matched load but that the transmitter's output impedance is no longer matched to ZO. Let's again assume that we change the load to 100 ohms. As one possibility, let's assume that we measure a forward power of 126.56 watts and a reflected power of 14.06 watts. The effective net power delivered to the TL is now 112.5 watts. However, the transmitter's forward source power still remains at 100 watts. Most people would immediately assume that the 126.56 watts of total forward power is the result of 14.06 watts of reflected power being totally re-reflected and then adding in-phase to the 112.5 watts of delivered power

such that 126.56 W = 112.5 W + 14.06 W. However, when we look at voltages and currents we see that in-phase power addition cannot occur in this manner. What really happens? In this case, my numbers were derived by assuming that the transmitter's output impedance was 100 ohms. Therefore, the actual re-reflected power is only 1.56 watts. This 1.56 watts of forward power "adds" to the transmitter's 100 watts of forward source power to become the total forward power of 126.56 watts. At this point, most people would say that 100 W + 1.56 Watts can't possibly equal 126.56 watts. So, let's check the "math" with voltage addition. 1.56 watts has a voltage magnitude of 8.83 V. 100 watts has a voltage magnitude of 70.71 V. These two voltages add to a total voltage magnitude of 79.54 V (they add in-phase) resulting in a total forward power of 126.56 W. In phase powers always add as Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2).

Although it is always correct to determine effective net power delivery as follows: Net Power Delivery = Pforward - Preflected, it is incorrect to take this relationship and assume that Pforward is a result of Preflected being totally re-reflected and adding to Net Power Delivery such that Pforward = Net Power Delivery + Pre-reflected. On the surface it is not immediately obvious but these concepts are totally unrelated.

> Cecil gave the formula for the inline wattmeter determined power early
> in this thread. It is:
> forward power minus reflected power is the actual power at the
> measurement point. On a lossless line, power is the same at any point
> along the line, regardless of SWR. If the line is lossy, power measured
> at the load is less than that measured at the transmitter.
>

Correct, with the following understanding: From the TL's perspective, there are only two steady state powers. The forward traveling power and the reflected traveling power. The difference between the two is the "net power" delivered to the point where the measurements are made.

> Re-reflected power and fresh from the transmitter power are
> indistinguishable to the wattmeter. So, the forward power indication can
> contain old power and fresh power.
>

Correct.

> If there is no significant loss, between the transmitter and its load,
> the power output of the transmitter and the power delivered to the load
> are the same quantity.

This depends again on how we define the power output of the transmitter. Based on your statement, the "power output" of the transmitter would be defined as the "net power" delivered to the TL which is the difference between the forward and reflected power at the transmitter output. I have no problem with this definition except in the case where it is used to describe the relationship between total forward power and the re-reflected power at the transmitter output. The net power delivered to the TL is the

end result of the wave reflection and addition process, it is not the beginning of it. The re-reflected power "adds" to the transmitter's actual forward source power not the net power the transmitter "delivers". This is where the concepts start to mixed and used incorrectly.

> Forward and reflected indicated powers should be
> the same at both ends of the transmission line. With loss in the line,
> the difference in net power indications at opposite ends of the
> transmission line is the power lost in the line.
>
> Best regards, Richard Harrison, KB5WZI
>

Steve, VE9SRB

2604. TA-33 MOSLEY BEAM

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Matt <ke5ol@flash.net>
Message-ID: <9ndR5.3613$6W1.266110@news.flash.net>
Source record: 176250

FS TA-33 MOSLEY THREE ELEMENT BEAM WITH 40 METER ADD
ON...40--20--15--10 METERS ALL TRAPS GOOD, WITH MANULS, PICK UP ONLY. NO
SHIPING. $125.OO
ke5ol@flash.net

2605. Re: Using 2 paralell 50ohm coax's instead of 1 for 25

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8v3p1upsh1@nnrp1.deja.com>
Source record: 176251
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Further thoughts to what I posted yesterday...

If you were to make the RG-217 35.5 electrical degrees long (about 1.45 meters, if I've calculated correctly, assuming velocity factor = 0.66), using a single 50 ohm line, and then put about 157pF of capacitance across the RF generator end of the line, the generator will "see" very close to a 50 ohm load, assuming the load on the other end of the line is 25 ohms resistive. In that case, the loss in the line will be roughly 8 watts per 1000 watts, or about 0.035dB. I'd say that's not enough to worry about, and if you don't have matching problems with your line 1/3 as long as that, the losses surely must be insignificant to you.

In summary: if the generator can deliver the power in your current situation (with a nominally 25 ohm load at the generator), there's probably no reason to hassle with doing it differently. If generator matching is a problem, you might improve things by making the line a bit longer and putting a capacitor (RF current rated!!) across the genertor end.

Cheers,
Tom

In article <3A140DA4.E912A1EF@gravitywell.org>,
Ash <ash@gravitywell.org> wrote:
> This isn't really an amateur radio question but almost :) ,
> at work we have a standard industrial rf generator for 13.56MHz,
> operates at powers from 5W to ~800W.
> This macine produces a gas plasma inside a vacuum chamber.
> This plasma is closer to 25ohms and the manual recommends using 25ohm
> cabling instead of 50.
> At this point we have a little mismach resulting in some reflected
> power.
> Someone suggested using two paralell 50ohm cables but I am somewhat
> sceptical.
> Still, it's pretty low frequency (not exactly microwave :) and the
cable
> isn't taller than
> say 50cm so cutting two identical lengths should pose no problem.
> But will it help? Connectors must still be 50ohms since that's all we
> can find,
> at least for RG-217 cable with hv-N connectors, and the plasma chamber
> is still matched
> for 50...

> The question is would we gain anything from doing this if it's even
> possible?
> Would appreciate a reply,
>
> Regards //Anders
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

2606. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a156375.23831253@news.akorn.net>
Source record: 176252

On 17 Nov 2000 12:43:14 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>It appears that this hash is caused by discharge of the droplets on metallic
>and grounded things, antenna then picks them up (it is right there in the
>middle of it). We had discussions on of the reflectors about the phenomena and
>mechanics of it (I forgot what was the conclusion, would have to look it up.)
>The only 100% working solution seem to be, when you have stacked antenn

In my experience, and I have plenty with towers as tall as 300 feet,
the bulk of the noise comes from corona discharge.

If the antenna has rounded blunt edges that don't stick out into the
air, it is less affected by incliment weather.

I have problems with "rain static" even when the rain isn't here, just
because the voltage gradient between the antenna and sky increases.

I've found the same thing as Yuri, the only real cure is to mount the
antenna lower, so some other higher conductive object shields it, and
provides the discharge path into the air.

I even did an experiment, charging a water hose outlet with a very HV
supply, and spraying an "antenna" with a fog. The drops themselves
made no noise that I could detect, but getting the cloud near the
antenna end caused corona.

If you listen closely to rain staic (or snow static) during a storm,
you'll hear it build up into a high pitched high level peak, then when
lightning hits anywhere in the area it totally and immediately stops.
You also find that rain or snow MISSING the top antenna and stricking
the bottom antenna will NOT cause any noise at all in cases wher the
antenna is mounted lower on the tower. If the charges were in the
droplets, and transferred to the antenna by the contact...this would
clearly not be the case.

73 Tom

2607. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <mFdR5.13461$mq1.898567@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176253

"Scott M. McClements" <yetbbwa@grove.iup.edu> wrote in message
news:3A1433B7.803B84DD@grove.iup.edu...
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.
>

With the antenna tuner in-line between the antenna and the PA, none of the reflected power will arrive back at the PA, so this is not an issue.

Without getting into any physics, the SWR of the antenna does not change and as a result, there will still be reflected power on the line between the antenna and the tuner. With the tuner matched, there will be no reflected power between the tuner and the PA.

The reflected power from the antenna arrives at the tuner output where a portion of it is re-reflected back towards the antenna. As a result, there is more forward power in the line between the tuner and the antenna than in the line between the tuner and the PA. Therefore, more total power is delivered to the antenna for radiation than in the case where no tuner is used. The total power delivered to the antenna can never exceed the power delivered to the tuner. At the same time, since there is more forward and reflected power in the line than in the case where no tuner is used, the power dissipation in the transmission line increases. There will also be a small loss of power in the tuner.

The transmitter does not put more power into the feedline. The power that is reflected from the antenna is just now distributed differently in the system and more power is radiated by the antenna.

Ultimately, the reflected power from the antenna goes to three places:

1) A portion of it is re-delivered to the antenna.
2) A portion of it is lost in the transmission line.
3) A portion of it is returned to the tuner (this aspect of the discussion is complex and is beyond the scope of this response).

Steve

2608. Omega-T Antenna Noise Bridge - QRMFreeTuneUp

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: kd4pwb@my-deja.com
Message-ID: <8v3q5iqsl1@nnrp1.deja.com>
Source record: 176254

Got an Omega-T Antenna Noise Bridge for sale on eBay if anyone's interested. You can look at it here: http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=497835491&r=0&t=0&showTutorial=0&ed=974731360&indexURL=0&rd=1

It's Item #497835491.

Thanks!

Bill
KD4PWB
http://kd4pwb.homepage.com

Sent via Deja.com http://www.deja.com/
Before you buy.

2609. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a625f57.1972146676@news.seanet.com>
Source record: 176255

On Fri, 17 Nov 2000 16:45:32 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>I'm not sure why. I think we all agree that there may be some level of
>re-reflection at the transmitter output and that this re-reflection adds to
>the transmitter's forward source power to become the total forward traveling
>power that we measure with a wattmeter.

Hi Steve, All,

When the condition described above exists it is an acknowledgement
that there is a measurement plane between two planes of reflection.
Under such circumstances the Mismatch Uncertainty prevails and barring
knowledge of the phase of the components of the waves, any claims to
even poor accuracy of power determination are at best a dream.

A 2:1 mismatched source facing a 2:1 mismatched load will present an
uncertainty in power determination of 30% minimum - IN ADDITION TO ALL
OTHER INACCURACIES.

As such, further discussion of voltages and currents listed out to 2
decimal places of resolution are interesting, but hardly real.

73's
Richard Clark, KB7QHC

2610. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <LgeR5.62$2s1.1105@bgtnsc06-news.ops.worldnet.att.net>
Source record: 176256

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a625f57.1972146676@news.seanet.com...
>
> As such, further discussion of voltages and currents listed out to 2
> decimal places of resolution are interesting, but hardly real.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard:

The discussion were only meant to illustrate the concepts, which is where the real issues appear to be. As for the 2 decimal places, I only present them to avoid rounding errors if anyone wanted to verify the calculations. Whether the conditons described are real or not is secondary to the concepts discussed. Sorry for the trouble.

Steve

2611. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v3reimrc1@neptunium.btinternet.com>
Source record: 176257

Cecil wrote..
> Reg Edwards wrote:
> > For the G5RV admirer, enter Louis' full set of antenna
data
> > ready for analysis by hitting a single key.
>
> Reg, have you compared it to the EZNEC reults on my web
page?
==========
Yes Cecil, I checked umpteen months back as a matter of
routine. I forget the details but I couldn't find anything
the matter with Eznec. It does a sufficiently accurate job.

You can check yourself. Only takes a few seconds from
switching on the computer with Varney.exe. It takes weeks
to find a complete set of resonant frequencies just using
Eznec. But of course it is excellent at plotting radiation
patterns which none of my programs do.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

2612. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1574A6.BB88D480@mwci.net>
Source record: 176258

VE9SRB wrote:

> If you check my post again you will see that I made the following statement
> :
>
> "130 watts of power has an associated voltage magnitude of 80.623 V and a
> current magnitude of 1.62 A."

I checked your original post again and it said 0.62 A. I corrected it in my reply to that post. Much ado about nothing, eh?

My recent replies to Cecil Moore and Bob Haviland have further opinions on this subject that I believe are OK.

Let's forget about waves and transmission lines for a moment, and connect a resistor directly to the output of the directional wattmeter. We will look at the *circuit*.

The directional wattmeter is an impedance bridge that is calibrated in watts for a Z0 ohm system. If the load is Z0 ohms the reflected port reads 0.0 W and the forward scale reads 100 watts. The bridge is *balanced*. The delivered power is 100 watts.

Suppose the reflected port reads 130watts and the forward port reads 30 watts. This means that there is an impedance difference between the load and the Z0 ohms that the bridge was designed for. In other words the readings of the meters are a somewhat indirect indication of the degree of the Z0 mismatch.

Consider a solid state broadband amplifier. If we want to, we might be able to deliver 100 watts to this resistor anyway. Crank up the amplifier until the difference between forward reading and reflected reading is 100 watts. Keep in mind that we are not talking about waves, but a *lumped* circuit.

The wattmeter makes two voltage measurements, one proportional to load current and one proportional to load voltage. These voltages are added at the forward port and subtracted at the reflected port. If the bridge is unbalanced then the load is not Z0, but we don't whether the load is less than Z0 or greater than Z0.

Now consider the amplifier. If the load is less than Z0 and we try to force 100 watts into it the amplifier may overheat. If the load is greater than Z0 and we try to force 100 watts, the transistors may be zapped by excessive collector/drain voltage. This has zero to do with waves, it has to do with the load impedance that the amplifier sees.

What I am suggesting is that the concepts of forward power and reflected power are really nothing more than a way of describing the degree of Z0 mismatch. The

actual power delivered is the product of the voltage across, and the current through, the load resistor. But this crazy directional wattmeter is calibrated in terms of a so-called "forward" power and a "reflected" power. The whole thing is just a game with words, *if* the load is a lumped impedance.

If we replace the lumped load with a Z0 coax and a distant load of some kind, the readings do tell us two values that we call forward and reflected power waves, from which we can find SWR. But the bottom line is that the bridge is in reality responding to the actual value of the impedance that the line presents to the wattmeter. This impedance is the result of the vector sum of forward and reflected voltage and current waves. The power numbers are "derived" from the voltage and current measurements.

We should keep in mind that voltage and current waves are the real entities that are being measured and that power is a "derived" unit, and not a basic entity that flows back and forth on the line. We have established this repeatedly in the past. The wattmeter responds to voltage and current, and not "directly" to watts. And that is why the question "where does the reflected power go?" is moot. The power doesn't go anywhere, it is voltage and current that travel, and power is merely a "value" that goes along for the ride.

And the crucial parameter for the broadband solid state amplifier is its complex load impedance, which can cause mayhem.

Bill W0IYH

2613. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Steve Ellington <n4lq@iglou.com>
Message-ID: <Pine.GSO.4.21.0011171310500.3591-100000@shell1>
Source record: 176259

The dope is a substance used for copper to aluminum connections. It's available under many different names from any place that sells electrical supplies including Home Depot. I would't worry about your wire underground. Aluminum came from there in the first place and it should outlast either one of us. 73

On Thu, 16 Nov 2000, George, W5YR wrote:

> When I put up my vertical I installed 60 radials. I used the Home Depot
> 17 ga aluminum wire.
>
> That was 3 years ago, and now I am beginning to worry about the
> condition of the radials from the viewpoint of corrosion due to soil
> conditions, etc. The radials are below the sod about an inch. I could
> dig up one and look but various health problems over the last 3 years
> have prevented that.
>
> So, my question: has anyone else used the aluminum wire for radials, and
> if so, how well do they stand up under shallow burial?
>
> Steve, what is the "dope" you smeared on the connections?
>
> Thanks.
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
>
> Steve Ellington wrote:
> >
> > Home Depot sells aluminum electric fence wire in 17ga. I've used it for a
> > 160m horiz loop and it lasted 5 years in high winds due to it's light
> > weight. At the feed point, smear it with dope and use wire nuts for the
> > connection.
>

Steve Ellington N4LQ
N4LQ@IGLOU.COM

2614. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a6572f7.1977170891@news.seanet.com>
Source record: 176260

On Fri, 17 Nov 2000 17:53:47 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>"Richard Clark" <rwclark@seanet.com> wrote in message
>news:3a625f57.1972146676@news.seanet.com...
>>
>> As such, further discussion of voltages and currents listed out to 2
>> decimal places of resolution are interesting, but hardly real.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Hi Richard:
>
>The discussion were only meant to illustrate the concepts, which is where
>the real issues appear to be. As for the 2 decimal places, I only present
>them to avoid rounding errors if anyone wanted to verify the calculations.
>Whether the conditons described are real or not is secondary to the concepts
>discussed. Sorry for the trouble.
>
>Steve

Hi Steve,

My point was not so much the reported values, but that those values
were meaningless even conceptually.

When the measurement plane falls between two planes of reflection,
even for modest mismatches (2:1) there is so much error injected into
the debate as to render it useless.

Also, this is not a problem of Trouble, per sï¿½, but rather a learning
opportunity as to the nature of Power determination and sources of
error. Conceptually every discussion point attempted here would be
well served if all such reportings of current and voltage were in
phasor form.

There is no mandate that this argument be devoid of the data necessary
to conduct the debate. Relying on simple SWR reporting fails in this
regard, but the scenario may be recovered by simply (and arbitrarily)
introducing the phase back into the discussion.

73's
Richard Clark, KB7QHC

2615. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A15848B.51FD42CF@mwci.net>
Source record: 176261

William E. Sabin wrote:

> VE9SRB wrote:
>
> > If you check my post again you will see that I made the following statement
> > :
> >
> > "130 watts of power has an associated voltage magnitude of 80.623 V and a
> > current magnitude of 1.62 A."
>
> I checked your original post again and it said 0.62 A. I corrected it in my
> reply to that post. Much ado about nothing, eh?
>
> My recent replies to Cecil Moore and Bob Haviland have further opinions on this
> subject that I believe are OK.
>
> Let's forget about waves and transmission lines for a moment, and connect a
> resistor directly to the output of the directional wattmeter. We will look at
> the *circuit*.
>
> The directional wattmeter is an impedance bridge that is calibrated in watts for
> a Z0 ohm system. If the load is Z0 ohms the reflected port reads 0.0 W and the
> forward scale reads 100 watts. The bridge is *balanced*. The delivered power is
> 100 watts.
>
> Suppose the reflected port reads 130watts and the forward port reads 30 watts.

I mean forward 130 and reflected 30.

> This means that there is an impedance difference between the load and the Z0
> ohms that the bridge was designed for. In other words the readings of the
> meters are a somewhat indirect indication of the degree of the Z0 mismatch.
>
> Consider a solid state broadband amplifier. If we want to, we might be able to
> deliver 100 watts to this resistor anyway. Crank up the amplifier until the
> difference between forward reading and reflected reading is 100 watts. Keep in
> mind that we are not talking about waves, but a *lumped* circuit.
>
> The wattmeter makes two voltage measurements, one proportional to load current
> and one proportional to load voltage. These voltages are added at the forward
> port and subtracted at the reflected port. If the bridge is unbalanced then the
> load is not Z0, but we don't whether the load is less than Z0 or greater than
> Z0.
>
> Now consider the amplifier. If the load is less than Z0 and we try to force 100

> watts into it the amplifier may overheat. If the load is greater than Z0 and we
> try to force 100 watts, the transistors may be zapped by excessive
> collector/drain voltage. This has zero to do with waves, it has to do with the
> load impedance that the amplifier sees.
>
> What I am suggesting is that the concepts of forward power and reflected power
> are really nothing more than a way of describing the degree of Z0 mismatch. The
> actual power delivered is the product of the voltage across, and the current
> through, the load resistor. But this crazy directional wattmeter is calibrated
> in terms of a so-called "forward" power and a "reflected" power. The whole
> thing is just a game with words, *if* the load is a lumped impedance.
>
> If we replace the lumped load with a Z0 coax and a distant load of some kind,
> the readings do tell us two values that we call forward and reflected power
> waves, from which we can find SWR. But the bottom line is that the bridge is in
> reality responding to the actual value of the impedance that the line presents
> to the wattmeter. This impedance is the result of the vector sum of forward and
> reflected voltage and current waves. The power numbers are "derived" from the
> voltage and current measurements.
>
> We should keep in mind that voltage and current waves are the real entities that
> are being measured and that power is a "derived" unit, and not a basic entity
> that flows back and forth on the line. We have established this repeatedly in
> the past. The wattmeter responds to voltage and current, and not "directly" to
> watts. And that is why the question "where does the reflected power go?" is
> moot. The power doesn't go anywhere, it is voltage and current that travel, and
> power is merely a "value" that goes along for the ride.
>
> And the crucial parameter for the broadband solid state amplifier is its complex
> load impedance, which can cause mayhem.
>
> Bill W0IYH

2616. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1587CA.24AB@wt.net>
Source record: 176262

Fractenna wrote:

>
> Hello Mark,
>
> I would say that if Phil felt this way, that he probably represents a spectrum
> of disgust for your filth and inaccuracy. Your allegation that I have
> personally authored that many posts in October is a case in point.

Filth? No I don't think so. inaccuracy? Yes, I'm afraid. But it wasn't
really my fault on that. Deja DID say you had 1700 posts for oct. When I
actually pulled them all up page by page, it only came to 176. So I
admit my error there. But I still say you are one heck of a private guy
even with 176 posts.
>
> Mr. Keith, you appeare incapable of espousing human decency. Placing this
> private e-mail on this public NG is a case in point.

Thats right. When that little #$%^ sends me a post with a link to the
NG, that means he first likely sent to both, and then canceled the NG
post. Don't send your little smutty notes to my e mail. I will repost
them here where they belong. His mail pertained to my NG post.
>
> But I admire Phil's honesty with you. Some of us are a bit more restrained.

I admire his honesty, but he better watch out how he talks to strangers.
I've beat the crap out of people for less. Corn on the cob is no fun
with no teeth.

>
> Now: how many 'posts' does this one count for on your arithmetic? 120? 369.7?

43.23
>
> Maybe you should be a canvasser.

Gore tried to hire me as a ballot counter already. I declined.
>
> End of discussion.

I know thats right. MK
--
http://web.wt.net/~nm5k

2617. Re: Rhombic antenna for 10m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A1590D8.3A33D864@uci.edu>
Source record: 176263

Richard Clark wrote:
> Exactly? There is no correlation between the function of the eye and
> the function of the ear - especially with a brain in the middle. ;-)

The analog is nevertheless valid. Is this the right room for an
argument?

ac6xg

2618. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <k%gR5.172$2s1.6074@bgtnsc06-news.ops.worldnet.att.net>
Source record: 176264

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:3A1574A6.BB88D480@mwci.net...
>
>
> VE9SRB wrote:
>
> > If you check my post again you will see that I made the following
statement
> > :
> >
> > "130 watts of power has an associated voltage magnitude of 80.623 V and
a
> > current magnitude of 1.62 A."
>
> I checked your original post again and it said 0.62 A. I corrected it in
my
> reply to that post. Much ado about nothing, eh?
>

As usual!! Bill, you should have known what I meant and just ignored what I
wrote.

> My recent replies to Cecil Moore and Bob Haviland have further opinions on
this
> subject that I believe are OK.
>

I looked at them and they seem fine to me.

> Let's forget about waves and transmission lines for a moment, and connect
a
> resistor directly to the output of the directional wattmeter. We will look
at
> the *circuit*.
>
> The directional wattmeter is an impedance bridge that is calibrated in
watts for
> a Z0 ohm system. If the load is Z0 ohms the reflected port reads 0.0 W
and the
> forward scale reads 100 watts. The bridge is *balanced*. The delivered
power is
> 100 watts.
>

Agreed.

> Suppose the reflected port reads 30watts and the forward port reads 130
watts.
> This means that there is an impedance difference between the load and the
Z0
> ohms that the bridge was designed for. In other words the readings of the
> meters are a somewhat indirect indication of the degree of the Z0
mismatch.
>
> Consider a solid state broadband amplifier. If we want to, we might be
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> deliver 100 watts to this resistor anyway. Crank up the amplifier until
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> difference between forward reading and reflected reading is 100 watts.
Keep in
> mind that we are not talking about waves, but a *lumped* circuit.
>
> The wattmeter makes two voltage measurements, one proportional to load
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> and one proportional to load voltage. These voltages are added at the
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> port and subtracted at the reflected port. If the bridge is unbalanced
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> load is not Z0, but we don't whether the load is less than Z0 or greater
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> Z0.
>
> Now consider the amplifier. If the load is less than Z0 and we try to
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> watts into it the amplifier may overheat. If the load is greater than Z0
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> try to force 100 watts, the transistors may be zapped by excessive
> collector/drain voltage. This has zero to do with waves, it has to do with
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> load impedance that the amplifier sees.
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> What I am suggesting is that the concepts of forward power and reflected
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> are really nothing more than a way of describing the degree of Z0
mismatch. The
> actual power delivered is the product of the voltage across, and the
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> through, the load resistor. But this crazy directional wattmeter is
calibrated
> in terms of a so-called "forward" power and a "reflected" power. The
whole
> thing is just a game with words, *if* the load is a lumped impedance.
>
> If we replace the lumped load with a Z0 coax and a distant load of some
kind,
> the readings do tell us two values that we call forward and reflected
power

> waves, from which we can find SWR. But the bottom line is that the bridge
is in
> reality responding to the actual value of the impedance that the line
presents
> to the wattmeter. This impedance is the result of the vector sum of
forward and
> reflected voltage and current waves. The power numbers are "derived" from
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> voltage and current measurements.
>
> We should keep in mind that voltage and current waves are the real
entities that
> are being measured and that power is a "derived" unit, and not a basic
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> that flows back and forth on the line. We have established this repeatedly
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> the past. The wattmeter responds to voltage and current, and not
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> watts. And that is why the question "where does the reflected power go?"
is
> moot. The power doesn't go anywhere, it is voltage and current that
travel, and
> power is merely a "value" that goes along for the ride.
>
> And the crucial parameter for the broadband solid state amplifier is its
complex
> load impedance, which can cause mayhem.
>
> Bill W0IYH
>

I would agree that the real parameters to consider in this discussion are the traveling voltage and current. They are the quantities that must be considered to understand wave behavior and the relationships between the forward and reflected waves in the TL. In any measurement or analysis, power is always the derived quantity. I would like to continue the discussion as it relates to the complex "load impedance" and your comments above:

"If the load is less than Z0 and we try to force 100 watts into it the amplifier may overheat. If the load is greater than Z0 and we try to force 100 watts, the transistors may be zapped by excessive collector/drain voltage. This has zero to do with waves, it has to do with the load impedance that the amplifier sees."

In the transmission line problem, the load impedance the amplifier "sees" has everything to do with the waves traveling in the TL. The only impedance that the amplifier ever "sees" is the transmission line characteristic impedance Z0. It never really ever "sees" any other physical impedance. From the perspective of your discussion above, just like power, the steady state load or line impedance at the amplifier output is a derived quantity

and it too is a function of the traveling voltages and currents. Consider first that the amplifier drives the TL with a forward source voltage and current that is entirely a function of ZO. At the amplifier output, there will also be a rearward traveling reflected voltage and current and, if the amplifier output impedance is not equal to ZO, there will also be a forward traveling re-reflected voltage and current. The total voltage developed at the amplifier output is equal to Vsource + Vreflected + Vre-reflected. The total current developed at the amplifier output is equal to Isource - Ireflected + Ire-reflected (the + and - sign with current is a function of the math convention selected for the analysis). The effective load or line impedance is simply derived from Vtotal / Itotal. The steady state power delivered to this effective impedance is in fact the steady state power delivered to the TL and is found from Pdel = |Vtotal| |Itotal| cos (theta), where theta is the phase angle between Vtotal and Itotal. We also know that in all cases, Vforward total is equal to Vsource + Vre-reflected.

From the perspective of the internal components in the amplifier, there are two "sources" in the system. One is the internal amplifier forward driving source and the other is the rearward driving source created from the reflections that arrive at the amplifier output. In all cases, except where the amplifier has a purely reactive output impedance, some level of voltage and current travel rearward into the amplifier. The level of voltage delivered rearward into the amplifier is equal to Vreflected + Vre-reflected. The total steady state voltages developed within the amplifier are the combination of the forward voltage developed within the amplifier and the rearward voltage developed within the amplifier. Since the forward and rearward voltages are traveling in opposite directions, the total voltage developed in any one series component is equal to Vforward - Vrearward. The total voltage developed in anyone parallel component is equal to Vforward + Vrearward.

The total power dissipation occurring within the amplifier is a function of both the amplifier's forward source and the wave reflections within the system. If the wave reflections and re-reflections are such that the effective load impedance is less than ZO, Vforward and Vrearward typically combine to increase the total voltages within the amplifier such that more power is dissipated in the amplifier relative to the situation where the amplifier operates into a matched load.

The load impedance "seen" by the amplifier is a direct function of the forward and reflected waves within the transmission line. Given that the internal power dissipation within the amplifier is a function of this load impedance, it must follow that the internal power dissipation is a function of the reflected waves traveling within the system. For this reason, reflected waves are quite real and are significant as to how the voltages and currents develop within any system component. They cannot be ignored as if they don't really exist.

Steve VE9SRB

2619. Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: "Andrew J. O'Brien" <obrienaj@netsync.net>
Message-ID: <t1ba3bo1s4qs7f@corp.supernews.com>
Source record: 176265

Let me see if people with a better brain than I can figure this out....

I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm ladderline to an MFJ941C tuner. I bought the tuner used six months ago but had never got around to using it. The ladder line is brand new.

I have made many dipoles before over the years with no major problems. So I was quite surprised , when I got the thing up in the air (only 20 feet at this point) , that the receive was VERY bad. I have not even tried to xmit on the antenna yet. I checked the ladder line connection to the antenna and all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV gets an S9 usually, this new dipole gets an S1 to S2 regardless of settings on the 941C. I double checked the short coax cable between the rig and 941C and it too appears okay. Just for the fun of it, I took the ladderline our of the 941C , stuck one end of the ladder line into my coax connector on my rig, when I do that the receive on WWV increases to S7. Also when I connected my existing G5RV via the 941C it works fine.

So, I am baffled as to why when I connect both side of the ladder line with an antenna connected to it via the 941C that I get S1 to S2.

Any thoughts?????

Andy KB2EOQ

2620. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v4and$s3i$1@plutonium.btinternet.com>
Source record: 176266

Cecil, further to my last message -

I've just compared your analysis of the 'standard' G5RV in
your latest web site with results using VARNEY.exe

Comparison between two large masses of figures are more
confusing than helpful. So I will summarise the input
impedance data, R+jX, for the 102 feet dipole (no feeder)
in the following manner.

Using VARNEY, slightly deviate frequency until either my R
or jX agrees exactly with your R or jX, then the following
table results -

F MHz	Dev %
3.8	0.9
7.2	-0.8
10.125	1.1
14.2	-1.3
18.14	-0.2
21.3	0.0
24.95	-1.0
28.4	0.0

The small frequency deviations needed are most likely due to
me having to guess at the type of ground and antenna
conductor diameter.

The following table compares your values of SWR on the 50
ohm line, obtained using EZNEC and the ARRL transmission
line calculator, with my values of SWR using VARNEY. I had
to guess at the feeder attenuation. The ARRL and EZNEC
probably ignore it.

FMHz	Your SWR	My SWR
3.8	3.4	2.2
7.2	4.3	5.5
10.125	50	56
14.2	2.6	2.7
18.14	40	39
21.3	7.8	7.3
24.95	2.2	2.2
28.4	64	71

I would judge that the differences between the computer programs are no worse than the accuracy of the data which is likely to be fed into them.

The following is a table of resonant frequencies and the 50-ohm SWR for the standard G5RV with a 450-ohm ladder line which is 1/2-wave long at 14.15 MHz.

Res Freq. SWR-50
---------- ----------
3.566 2.1
7.945 1.5
14.145 2.2
20.370 1.2
24.736 2.0
32.053 1.5

Although only 2 resonant frequencies lie in amateur bands, the low average value of SWR at resonance shows the superiority of 450-ohm line in that respect. This sort of table can be generated in a few minutes using Varney.exe

And I've just noticed my G5RV is about 12 inches longer than yours ! Which should be added to the list of differences in computer input data.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:8v3reimrc1@neptunium.btinternet.com...
> Cecil wrote..
> > Reg Edwards wrote:
> > > For the G5RV admirer, enter Louis' full set of antenna
> data
> > > ready for analysis by hitting a single key.
> >
> > Reg, have you compared it to the EZNEC reults on my web
> page?
> ==========
> Yes Cecil, I checked umpteen months back as a matter of
> routine. I forget the details but I couldn't find
anything
> the matter with Eznec. It does a sufficiently accurate
job.
>
> You can check yourself. Only takes a few seconds from
> switching on the computer with Varney.exe. It takes weeks
> to find a complete set of resonant frequencies just using
> Eznec. But of course it is excellent at plotting

radiation
> patterns which none of my programs do.
> --
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
>
>
>

2621. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A15AE61.2126907D@ix.netcom.com>
Source record: 176267

I used bare aluminum wire for my sixty radials here in N. Texas several years ago. Within about six months most of the radials were gone due to the alkaline nature of our soil here. I replaced all of the aluminum radials (what was left) with insulated wire. 73, Ed - N5NUG

--

Edward A. Goodman
(214-505-6835)
(214-352-4623)
ICQ 31510047

2622. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:00:00 UTC
From: CJ <cjr@visi.com>
Message-ID: <3A15B53D.ED8360D6@visi.com>
Source record: 176268

I think that there is a jumper that must be connected in order to put
the internal balun in the circuit. I don't have a '941 tuner here, but I
have two others and they both require the jumper. Look on the back for
an indication of a "wire" between two posts. Connect the wire and try
again.

Good luck and 73, CJ K0CJ

"Andrew J. O'Brien" wrote:
>
> Let me see if people with a better brain than I can figure this out....
>
> I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm
> ladderline to an MFJ941C tuner. I bought the tuner used six months ago but
> had never got around to using it. The ladder line is brand new.
>
> I have made many dipoles before over the years with no major problems. So I
> was quite surprised , when I got the thing up in the air (only 20 feet at
> this point) , that the receive was VERY bad. I have not even tried to xmit
> on the antenna yet. I checked the ladder line connection to the antenna and
> all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV
> gets an S9 usually, this new dipole gets an S1 to S2 regardless of settings
> on the 941C. I double checked the short coax cable between the rig and 941C
> and it too appears okay. Just for the fun of it, I took the ladderline our
> of the 941C , stuck one end of the ladder line into my coax connector on
> my rig, when I do that the receive on WWV increases to S7. Also when I
> connected my existing G5RV via the 941C it works fine.
>
> So, I am baffled as to why when I connect both side of the ladder line with
> an antenna connected to it via the 941C that I get S1 to S2.
>
> Any thoughts?????
>
> Andy KB2EOQ

2623. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:04:16 UTC
From: k1bqt@aol.com
Message-ID: <20001116190416.06912.00000062@ng-mj1.aol.com>
Source record: 176305

>You know, Steve Best is an active participant in this forum and the Cushcraft web page readily states he is the President.<

Just another ham on here who has a job in the industry.

>Why don't you ask him about this, via e-mail, rather than continuing a thread that clearly is meant to malign Cushcraft?<

Trolling with lead line today, I see.

>Frankly, all of this is just in bad taste at this point. And whether I or you or anyone else likes Cushcraft or not, magnifying intangible gripes doesn't belong here IMHO.<

Trolling for tuna with "good taste" or stinky tuna that "tastes good", Chip?

Rick K1BQT

2624. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:19:15 UTC
From: rwclark@seanet.com
Message-ID: <3a5e77db.1912886675@news.seanet.com>
Source record: 176308

On Thu, 16 Nov 2000 19:41:19 -0500, "Fred Hambrecht" <Fred@w4jle.com>
wrote:

>Might I presume to disagree Sir? Herr Maxwell in "Another look at
>reflections" Sub Chapter "Too low a SWR can kill you" said "judging from
>what we hear on the air, nearly everyone is looking for a VSWR of 1:1
>
>Question why and the answer may be, I'm not getting out on this frequency
>because my SWR 2.5:1... there's too much power coming back and not enough
>getting to the antenna...or I feel a line having that much SWR, the
>reflected power flowing back in to the amplifier will burn it up..." He then
>goes on to Poo Poo any of these ideas. If interested I will be glad to post
>the reasons.
>

Thanks Fred,

Walt and I have corresponded to this matter considerably (both online
and off). I enjoy his style and the points made as his work is very
accessible and should be required reading.

Differences you may note certainly does not inhibit either of us to
express those same differences and hold to them, but I would reckon
that even with such divergence, he and I are much closer together than
we are far apart.

73's
Richard Clark, KB7QHC

2625. Tuner differences [was: Where does reflected power go?]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:22:48 UTC
From: Korinna & Peter <Peter.Hovorka@t-online.de>
Message-ID: <8v1tg7$533$07$1@news.t-online.com>
Source record: 176306

Hi folks,

so - with all the experts here:

What is the big difference between:

A - A built in Tuner like in a FT1000 etc. that 'matches' up to a SWR of
1:3
B - A external autotuner like the Kenwood AT250, the Yaesu FC-1000 etc.
C - The all famous SGC - Antenna coupler.

Many thanks in advance,

73,
Peter

--
Korinna Imle & Peter Hovorka
ICQ #74200239
Peter: DG1GPQ
http://WWW.CYBERCATS.DE
--

2626. Re: dB adding question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 00:54:43 UTC
From: klocko@toad.net
Message-ID: <8v1vkgcvo1@nnrp1.deja.com>
Source record: 176307

In article <FjZQ5.141$g5.663602@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> As an example, 0 dBm is 1 milliwatt. 1 milliwatt + 1 milliwatt = 2
> milliwatts. Restated in dBm, 0 dBm + 0 dBm = 3 dBm. :-)
>

Hey! Let's have none of that new math, Ed.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2627. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 01:27:54 UTC
From: k3bu@aol.com
Message-ID: <20001116202754.12455.00000074@ng-bg1.aol.com>
Source record: 176309

>
>Ed Laport in "Radio Antenna Engineering' says the way to eliminate the
>noise of small charged particles contacting the antenna and lead-in
>wires to discharge is to use wires with sufficient insulation to inhibit
>the sudden discharge.
>
>Best regards, Richard Harrison, KB5WZi
>
>
>
>
>

Don't work!
When I designed Razor Beams, I used insulated wire for quad elements and all yagi elements were "grounded" to the boom and tower, all at the ground potential (DC). When rain or snow static came, there was that 20 over S9 hash on the top antenna. Same as on "crumy" TH6. But when I switched to bottom one, it was dead silence (form static hash). They were both "grounded" on the same tower.
It appears that top antenna acts as an umbrella for static charge. That was the only way I could "ignore" the rain/snow static.
When talking about discharge from static electricity buildup, of course you need things grounded directly or via chokes/resistors/stubs.

Yuri, K3BU
Tesla RC N2EE

2628. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 01:40:29 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v22ad$dc3$0@208.207.71.158>
Source record: 176310

Scott M. McClements wrote:
>
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.

I'll be dipped. Not a word from the experts about low loss feedline
preserving more of the power for radiation rather than dissipation,
whether or not we're talking of the forward incident wave or a reflected
wave.

2629. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 01:49:29 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A148EA4.F6DB91B1@att.net>
Source record: 176311

Unless the cable(s) presents exceptional loss, I would expect an open
circuit situation to present a much higher SWR than 5:1.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

> >I use a half-wave dipole antenna tuned for 20 m. band and fed with about 50
> >feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre of
> >the antenna. There is a RAK balun at the antenna centre. I have had
> >excellent results with swr never more than 1.3 to 1 until recently the swr
> >suddenly shot up to about 5 to 1 - a level to high for me to operate. This
> >happened in the middle of a QSO. I operate ssb and the power would be about
> >400 watts pep.(legal limit here) but sometimes possibly tested briefly at
> >700.
> >The antenna is very difficult to access and I do not wish to take it down
> >for testing unless unavoidable.
> >The fault must be either in the balun (which is fairly new) or in a co-ax
> >connector.
> >My question : can I check the balun from the shack in some simple way to
> >avoid taking down the antenna?
> >From the shack the two sides of the co-ax feedline test open-circuit. This
> >seems to indicate a fault because I think both sides of the balun should be
> >short circuit to DC (open circuit to RF). This could mean a break in either
> >a connector or internally in the balun.
> >Any comments would be appreciated - preferably by email.
> >Thanks.
> >73 Colin VK2LV Sydney Australia

2630. Re: Tuner differences [was: Where does reflected power go?]

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 01:51:39 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A148F27.8EDEE08@att.net>
Source record: 176312

In general, external tuners are more robust and can tolerate higher
voltages and currents, as well as handling higher SWR situations than
interna; tuners.

Internal tuners are noted for being relatively "tender" and easily
damaged by voltage/current extremes.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
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Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Korinna & Peter wrote:
>
> Hi folks,
>
> so - with all the experts here:
>
> What is the big difference between:
>
> A - A built in Tuner like in a FT1000 etc. that 'matches' up to a SWR of
> 1:3
> B - A external autotuner like the Kenwood AT250, the Yaesu FC-1000 etc.
> C - The all famous SGC - Antenna coupler.

2631. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 02:01:58 UTC
From: fractenna@aol.com
Message-ID: <20001116210158.22157.00000114@ng-da1.aol.com>
Source record: 176313

>Unless the cable(s) presents exceptional loss, I would expect an open
>circuit situation to present a much higher SWR than 5:1.
>
>72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
>Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
>Amateur Radio W5YR, in the 55th year and it just keeps getting better!
>Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
>
>> >I use a half-wave dipole antenna tuned for 20 m. band and fed with about
>50
>> >feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre
>of
>> >the antenna. There is a RAK balun at the antenna centre. I have had
>> >excellent results with swr never more than 1.3 to 1 until recently the swr
>> >suddenly shot up to about 5 to 1 - a level to high for me to operate. This
>> >happened in the middle of a QSO. I operate ssb and the power would be
>about
>> >400 watts pep.(legal limit here) but sometimes possibly tested briefly at
>> >700.
>> >The antenna is very difficult to access and I do not wish to take it down
>> >for testing unless unavoidable.
>> >The fault must be either in the balun (which is fairly new) or in a co-ax
>> >connector.
>> >My question : can I check the balun from the shack in some simple way to
>> >avoid taking down the antenna?
>> >From the shack the two sides of the co-ax feedline test open-circuit. This
>> >seems to indicate a fault because I think both sides of the balun should
>be
>> >short circuit to DC (open circuit to RF). This could mean a break in
>either
>> >a connector or internally in the balun.
>> >Any comments would be appreciated - preferably by email.
>> >Thanks.
>> >73 Colin VK2LV Sydney Australia
>

Not necessarily. Last week I repaired the 10M FQY--a braid disconnect at the
feed. The SWR had jumped from 1.4:1 to about 6:1.

73
Chip N1IR
>

2632. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 02:12:12 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <Rx0R5.14986$8F2.1727098@nnrp4.clara.net>
Source record: 176314

> Ask an attorney's counsel on this.

counsel = advice

He's right, you are wrong. Now why not back off and give the guy a chance.
On the evidence of the last week's postings he is obviously trying a new
approach and surely deserves to be given another chance. How about a fresh
start all round?

Not looking for controversy - just fair play

73, John, G8OZH

2633. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 02:21:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v24mfrom0@208.207.71.158>
Source record: 176315

Brian Kelly wrote:
>
> David or Jo Anne Ryeburn wrote:
>
> > >
> > > Me too, Brian. I learned to copy CW on an old Philco like that. It didn't have
> > > a BFO but I learned to copy the Shussssssssh and Shush.
>
> >
> Yupper, I remember it well! More like "thump thump" when the guy was loud. I was
> never able to actually able to copy cw with the thing though, but I lusted for being
> able to do that. A buddy of mine now n3rs not only was able to copy it, but actually
> went into the 80m Novice Band without a BFO and worked scads of qsos in that mode.

Extending the story of my years with the Highway Patrol to this
subject, on occasion we would find a ham working CW on the 40 meter band
interfering with one of the several receivers we continuously monitored
in the 42 mHz range, from the 6th harmonic of his signal. You'd be
surprised how little radiated energy it takes to open the squelch on a
sensitive FM receiver. I soon learned to keep a ham callbook in the
drawer so that I could quickly find who the culprit was and get him on
the phone. To copy his callsign, I'd just openthe squelch on the
receiver he was hitting and capy the noise quieting. Worked quite well,
until we moved to a new building with newly installed equipment which
had NO consolemounted squelch controls. All you could hear would be a
"thumppity, thump thump" sound which was not possible to copy as Morse
code. I soon learned to take a walkie talkie or a signal generator and
provide a beat note.
I don't know what they do nowdays. There's no one left there who can
copy CW. But maybe they don't have such interference these days due to
lessened activity on 40 CW.
At one time early on I lived a couple blocks from the station, and a
couple of times *I* got the call, while beeping at home on 40, and soon
learned to carefully avoid a couple of particular discrete frequencies
there.
Since we used a number of remote talk-in repeaters as well as the
local receivers, there was a lot of opportunity for this sort of
interference over all of the state. At that, it didn't happen often.

2634. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 03:09:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v27hs$854$0@208.207.71.158>
Source record: 176316

Scott M. McClements wrote:
>
> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>

I don't know what happens elsewhere, but here's how it goes at my
station.
When I transmit through my tuner then through the coax feeding my
antenna, if I'm on a frequency where the antenna is perfectly matched to
the feedline, and the tuner is then matched to both the feedline at its
output, and to the transmitter at its input, there is no reflected wave
present. SWR can be said to be 1:1 both between the transmitter and the
tuner, between the tuner and the feedline and the antenna.

When I move off the resonant frequency of my antenna, there then exists
a reflected wave component that returns from the antenna through the
coaxial feedline to the tuner. After a slight readjustment of the tuner,
there then exists no reflected wave between the transmitter and the
tuner, but there still exists a reflected wave component travelling back
and forth between the tuner and the antenna on the coaxial feedline.

Where does reflected "power" go? That part that successfully travels
back and forth between the tuner and the antenna and reaches the antenna
again (the entire reflected component less that amount that is
dissipated as heat due to line loss) is radiated as RF energy into space
- except that amount that is again re-reflected because of the mismatch
existing at the coax/antenna junction. It makes the trip again, and once
again suffers the lossikntroduced by the feedline loss characteristic.

So it goes, back and forth, with most of the original RF that enters
the feedline being radiated by the antenna and some small amount being
reflected, re-reflected and partly radiated, and so on for as long as
the transmitter is keyed, assuming some acceptable level of SWR that
doesn't create too much loss or cause voltages too high for the coax to
tolerate.

The bottom line here is that you can construct a dipole antenna for the center of any HF band, then using a tuner located at the tranmitter, operate with perfectly acceptable reflected wave level and no detectable degernation of service on either end of the RF circuit. I use parallelled dipoles for multiple band operation.

By now it should be obvious where some of the pitfalls of this system lie. Since most coaxial line exhibits loss at high SWR, and high voltages can exist at those high reflected levels, it behoove one to use a good quality coax selected for good high voltage rating and low loss. Since coax loss increases with frequency, and this factor becomes much worse above HF, one has less latitude with such installations at VHF and above than at HF. Many hams prefer to use balanced open wire or ladder line feedlines which have much lower loss than coax, and which then can be used at much higher SWR than coax. There are some advantages to this approach but it is more restrictive from a hardware standpoint than simple coaxial line intallations.

Dick W0EX

2635. 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 03:25:54 UTC
From: Peter <ve9ptr@hotmail.com>
Message-ID: <6z1R5.3953$rm4.82874@sodalite.nbnet.nb.ca>
Source record: 176317
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I'm wondering what would be the best direction to point a 6m beam? I do not have a rotor available at this time. My location is on the east coast of Canada (grid FN65) and am very new to 6m. In fact, this will be my first antenna for this band!

Peter

2636. G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 04:43:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v2dmi$n58$1@plutonium.btinternet.com>
Source record: 176219

Computer program VARNEY.exe is now available:

Entertain yourself!

It models:-

Tuner+
Coax+
Balun+
BalancedLine+
Dipole&
Ground.

If you don't need the coax or the twin line just set the
appropriate length to zero.

Enter details/dimensions of each component in the system.

Obtain input impedance R+jX (as measured on your antenna
analyser) of each component, transmission efficiency, swr,
etc. Then overall efficiency.

Plus L-network tuner L and C component values. Also which
end to connect the capacitor. Or is no capacitor required ?

Vary frequency from 1.5 to 35 MHz. Vary coax length and Zo,
balanced line length and Zo, dipole length and height,
balun ratio.

Find those elusive resonant frequencies in a few seconds.
Even the ones which are not of much use. Special on-screen
facilities to assist the user to find resonances.

Force resonance and low swr at any frequency by varing line
lengths and/or Zo. Find optimum Zo for mult-band working.
If there is one.

Just watch the tuner micro-henrys and picofarads whizzing
round as you vary the feeder length.

Avoid inconvenient component values in the tuner.

Which way round should you connect the tuner ?

Can you make the tuner redundant on your favourite band. ?

How long must the coax be to render the tuner unnecessary ?
;o)

Check the swr bandwidth. But in fact there's no need to know any swr's - the impedance R+jX actually presented to the transmitter without the tuner is continuously available.

For the G5RV admirer, enter Louis' full set of antenna data ready for analysis by hitting a single key. Depart from the specification and immediately see the results.

Educate yourself on dipole behaviour. Do some indoor armchair experimenting while the weather is bad. When the sun comes out go into your back yard and start erecting with confidence and vigour.

Download VARNEY.exe in a few seconds. Not zipped-up. Run immediately. Read operating notes and off you go!

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

2637. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-17 04:50:41 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A14B91B.66546167@att.net>
Source record: 176318

When I put up my vertical I installed 60 radials. I used the Home Depot
17 ga aluminum wire.

That was 3 years ago, and now I am beginning to worry about the
condition of the radials from the viewpoint of corrosion due to soil
conditions, etc. The radials are below the sod about an inch. I could
dig up one and look but various health problems over the last 3 years
have prevented that.

So, my question: has anyone else used the aluminum wire for radials, and
if so, how well do they stand up under shallow burial?

Steve, what is the "dope" you smeared on the connections?

Thanks.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Steve Ellington wrote:
>
> Home Depot sells aluminum electric fence wire in 17ga. I've used it for a
> 160m horiz loop and it lasted 5 years in high winds due to it's light
> weight. At the feed point, smear it with dope and use wire nuts for the
> connection.

2638. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8v6j59tfj1@nnrp1.deja.com>
Source record: 176069

In article <8v4hjh$68a$1@neptunium.btinternet.com>,
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
> Bill said,
> > I guess I must be pretty dense, but this wave-chasing
> drives me nuts.
> ==========
>
> Bill, you are wrong. Your IQ is at least average. Probably
> appreciably higher. It is you who have retained sanity. It
> is only nutters who chase imaginary power waves and
> reflections.
>
> For them, with a vested interest in waves and reflections,
> to abolish waves means there is nothing left to waffle and
> bafflegab about.
>

Reg,
Speaking only for myself, I'm one of those "nutters" that is simply
trying to understand how things work from the point of view of waves
(voltage and current waves, not power). This may not be necessary
when designing and building things, but it is educational, and that's
the point. Sorry you don't want to participate.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2639. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v6jbcjmr0@208.207.71.167>
Source record: 176070

Brian Kelly wrote:
>
> > > Hey, Dick - Put another set of guys on that tower willya?
> > >
> >
> > I would've bet that was coming <BSEG>. Point is, the darn thing has
> > stood there 15 years, through some hellacious Midwestern winds, without
> > flinching. And after previously closely watching the freestander that
> > the iceload took down, I really believe *it* would still be there
> > without the ice storm. So really, What's the deal?
> > In fact, if I read your detailed info right, another set of guys would
> > add more vertical compression. I know that they would also stabilize the
> > middle and forestall twisting - but thats why I put them at 50 ft
> > instead of the top (60), and I haven't detected anything that looks like
> > a deficiency or any hint of problem. A middle set wouldn't keep it up if
> > one of the top guys failed. Explain for us all, pse. Us backyard
> > injuneers want to know.
>
> >
> It depends on how big your antennas are and I have no clue. But for discussion puposes
> I'll assume a healthy stack of HF beams on a longish mast which is to say a decent wind
> load. Visualize how the tower will bend in a heavy wind. The base ain't going anywhere.
> The point at which the tower is guyed ain't going nowhere, either. But given enough wind
> on the antennas the tower will rotate with the guy point acting as the upper pivot
> point. It'll bend outward into the wind in an arc with the point of maximum lateral
> deflection being around the midpoint between the guy bracket and the base. This could
> set up a really nasty potential column failure scenario. The guys will impose their
> compression load on a long skinny bent column. It's a double-whammy because the more you
> bend a column the weaker it becomes at a huge rate, it gets many times weaker per pound
> of compression load the more the tower gets bent and you can get into a runaway
> situation.
> >
> The fact that your guys are ten feet down from the top is not necessarily in the right
> direction. That configuration definitely increases the "leverage" the wind has for
> bending your tower. There's an optimum guy bracket location which could be determined by
> a lot of numerical engineery pushups and it could just be that the 50ft level ain't even
> close to where it should be guyed.
> >
> The purpose of the center set of guys is to prevent the tower from bending in the first
> place thus completely eliminating the prospect of a column bending failure. A straight
> tower can take many time more times downward guy-induced compression load than it can
> when it's a bent tower. In your particular case your tower might be plenty stiff enough
> for it's loading conditions and won't bend enough to be concerned about not having the
> second set of guys. Ya hafta get really specific about the numbers before any real-world

> conclusions can be drawn.
> >
> Gets back to the Rohn specs: If Rohn sez guys every 30 ft just do guys every 30 ft.
> Y'know?

Yep, now -thanks to you- I know. I've already got the guy cable, and if I can still climb that thing next spring your advice will be followed. Now I understand the dynamic forces that come to play on the installation.

Fact is I have only a medium size tribander just above the tower top, with a single 2meter 11-eleven element and a 5/8 wave 2m GP, all on an 8ft mast. I've been thinking about replacing all that anyway, so next spring looks like the time.
Tnx, Brian.

73, Dick

2640. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15551-3A16D068-14@storefull-113.iap.bryant.webtv.net>
Source record: 176071

Mark Keith wrote:
"Anyway, these theories make more sense to me than charged particles hitting the antenna."

Terman agrees:
"The term "precipitation static" denotes a type of interference frequently observed in an airplane passing through snow or rain. Under such circumstances, the airplane may become electrostatically charged to such a high potential with respect to the surrounding space that a corona discharge breaks out at some sharp point on the plane. The interference that this corona discharge produces with radio reception, termed "precipitation static" is particularly serious at short-wave and lower frequencies.

Precipitation static can be minimized by the use of antennas that are either insulated wires or shielded loops, by equipping the plane with dischargers that provide a noninterfering means of getting rid of the charge being acquired by the plane, and locating receiving antennas as far as possible from the corona discharges."

Best regards, Richard Harrison, KB5WZI

2641. New Fangled Antenna Technology?!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8v6kgq$ef9$1@bob.news.rcn.net>
Source record: 176072

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=497620443

2642. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Dan Yemiola <Dyemiola@LexComInc.Net>
Message-ID: <3A16E12A.92016889@LexComInc.Net>
Source record: 176073

It goes into the RF can on the floor.
It's over there on the floor right next to the bit-bucket for the computers
kill files.

:) ; 0 ;)

This message uses 100% recycled electrons.
NO elementary particles were harmed in the production of this missive.

LOL! its good for you!

Any serious content in this message is purely co-incidental.

Scott M. McClements wrote:

> I have a few questions about reflected and antenna tuners. First off,
> where does reflected power (SWR) actually go? Is it eventually radiated
> from the antenna, dissipated by PA transistors or is it more complex
> than that?
>
> Next, if you use an antenna tuner, this will improve how well your
> antenna "couples" with the feedline, correct? It can actually improve
> how much power is put into the feedline? However, the mismatch still
> occurs at the antenna feedpoint and the percentage of reflected power is
> still constant? With the antenna tuner in place, does this effect how or
> where a reflected wave acts?
>
> I know this sounds troll'ish..but I am serious about what I am asking.
>
> Thanks,
>
> Scott McClements.

2643. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8v6oio$1fv$1@nnrp1.deja.com>
Source record: 176074

In article <3A154675.5D482A09@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> A lossless antenna tuner provides a Z0-match which doesn't allow any
> reflected energy to reach the transmitter. The "SWR" between the
> transmitter and the antenna tuner is 1:1. There is simply nowhere else
> for the reflected > energy to go except back towards the antenna.

Let's see now, you're saying that the antenna tuner passes ALL power going from the transmitter toward the antenna. It would have to since you've already said that the SWR is 1:1. You're also saying that the antenna tuner passes NO power going from the antenna back toward the transmitter. In your description, the tuner has to be a non-reciprocal device. It just doesn't make sense for a tuner to treat incident waves differently only because they're going different directions.

> We know "what" happens from a scalar standpoint. "How" is really not
> important except to academics.

Not true. "How" is really important if you should try to explain what happens to a novice who is trying to reconcile your description with standard theory concepts like reciprocity.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2644. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A16F0F5.6293@wt.net>
Source record: 176075

Fractenna wrote:

> >
>
> I am not a public figure.

I would tend to agree. You are a public arsehole.
>
> Get your attorney to look at Sidis vs. New Yorker.

Get your own attorney to look it up. If he can....Myself, I wouldn't
waste 10 cents on one.
>
> And stop with the abuse.

Define abuse. My idea of abuse would be to throw you off a 90 ft tower.
You would end up looking like this:
http://web.wt.net/~nm5k/uhoh.jpg

Being as you are still typing away at that keyboard I can't have
possibly abused you. So what you say is surely a inflammatory statement
designed to confuse and mislead. Mr. Cohen: these deliberate distortions
and prevarication on your part MUST stop.

I am requesting that you cease and desist in this.

Thank you for your cooperation.

Mark B. Keith PD.h

--
http://web.wt.net/~nm5k

2645. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001118171814.20459.00000430@ng-bj1.aol.com>
Source record: 176076

> I can guarantee that it is more likely she has some affiliation to your aol account than mine.<

You can, 'eh? I don't think so.

Rick K1BQT

2646. Re: transmission question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8v6vt9$mj9$1@bob.news.rcn.net>
Source record: 176077

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20001111220751.12366.00003123@ng-md1.aol.com...
> Hi Group,
>
> I have a dc motor giving my receiver a noise problem. The receiver is a
remote
> on 372.5 MHz and the dc motor is generating some noise which limits my
flea
> power range to about 25 feet. In generally, I get 200 feet without the
motor
> on.
>
> I have tried bypassing the motor leads to motor chassis ground and pulling
a
> ferrite bead inline with the motor power. This has not really helped. I
can
> not relocate the reciever either.
>
> So, I would like to try a different method. Place a open ended RG-174
coax
> cable across the motor line. As I recall, if the RG-174 is electrically
1/4
> wave then the open at the other end becomes a short at the generator?
> true/false or is it 1/2 wave?
>
> If so, then, what length would I cut the RG-174? And what is the equation?
>
> Also, the motor is 230V so is this a safe voltage for the RG-174.
>
> Many thanks!!!
>
> Paul

Why is the motor generating has? Is this a DC motor with brushes? If AC,
is should run
"clean" once started.

You also need to determine how the noise is being propagated. Chances are
that simply using
a 1/4-wave coaxial stub across the line will become a common-mode 1/4-wave
radiator and
worsen the problem. You best bet is bypassing both power leads directly to
the motor case,
with shortest possible leads. This presents a problem, since your bypass
caps will need to be

UL rated for AC linepass service. You could also try using parallel
resonant circuits in series
with each of the power leads at motor case. Considering the proximity of
the receiver, it will
be very difficult to fully eliminate the noise.

A quarter wave stub on each side of the line might work, but you definately
need something more
substantial than RG-174. I would think teflon coax would be best, but that
still leaves some
safey issues in my mind.

Pete

2647. Re: Gilbert Mouget: DO NOT ANSWER F-WORD TROLLS.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <4BDR5.9416$en6.6448@newsfeed.slurp.net>
Source record: 176078

I am posting this, unread, as I will not communicate with the entity 'FRACTENNA' other than on the NG. After this, I will delete it and read the NG as usual. FRACTENNA: do not communicate with me other than via the NG. Got it?

K3BHJ
****
----- Original Message -----
From: "Fractenna" <fractenna@aol.com>
Newsgroups: rec.radio.amateur.antenna
To: <davidw@copper.net>
Sent: Saturday, November 18, 2000 10:27 AM
Subject: Re: Gilbert Mouget: DO NOT ANSWER F-WORD TROLLS.

> PRIVATE AND CONFIDENTIAL:
>
> >Hi, 'Julie', 'Yuri':
> >
> >Hmmm .. so, then, defining 'abuse' apparently depends on the resources
> >allocable to hiring practitioners from the priestcraft which depends on a
> >dead language to make and say things which have the force of law, the
> >translations of which into the vernacular make only occasional sense to
> >ordinary men .. ?!
> >
> >God Himself needed only a couple of stone tablets. Then came the priests
> >..
> >
> >Hmmm .. one set of priests creates the 'laws' for us fools, another set of
> >priests administers them to us fools, and a third set defends us luckless
> >fools from the depredations of the first two sets, in the process making yet
> >another body of 'law', and impoverishing us all the while. Another problem
> >for us luckless fools is that the defender-priestcraft and the other two
> >sets are joined at the hip, with all that that implies. What a potentially
> >incestuous 'love triangle'.
> >
> >I notice, in the response from the Bombast of Belmont, that he considers
> >himself competent to cite some priestcraftly wizardry as supporting his
> >position, and then proclaims himself incompetent to pronounce on the
> >putative relevance of the cite. He retreats to 'homework done' status,

an
> >uncharacteristically inferior, subordinate position for him. That's
what
> >they all say, 'The homework's done', before entering the courthouse
> >classroom, where, on occasion, the opposing 'priest' feeds the 'homework'
to
> >the obliging dogs.
> >
> >There are circumstances, the reality of which we do not need 'peers' or a
> >'priest' to persuade or adjudicate for us. I submit as Exhibit 1, that
> >deja's public record of around four thousand r.r.a.a off- and on-topic
> >posts, since 5/15/99, from the 'FRACTENNA' entity, do not qualify said
> >entity for, or contribute to, the obscurity it claims to seek, and so
richly
> >deserves to find.
> >
> >Obscurity abounds at this entity's website, and probably chafes.
> >
> >We have here the spectacle of an entity making 4000 public posts, some of
> >which claimed that anti-semitism and Nazi-ism are rife here, and then
> >invoking 'privacy' as a protection against disagreeable responses to
those
> >and other posts.
> >
> >Render BUBBA, Belmont's Unparalleled Bafflegab-er, BA, the privacy he so
> >publicly and plaintively covets:
> >
> >DO NOT ANSWER F-WORD TROLLS.
> >
>
>
> I appreciate the fact that you like to use dejanews as a source of
information.
>
> So does my attorney, and in the last 5 weeks I have assisted him in
exactly
> that.
>
> So, let me state, categorically, that your statement is prevarication. If
you
> continue to promulgate such lies, with deliberate intent to deceive, it
will be
> a basis for litigation against you. As it stands, this is libel.
>
> This is a public cease and desist request which will be followed by
written
> confirmation if you do not abide by my wishes.
>
> Thank you for abiding by my wishes.
>

> Nathan Cohen, Ph.D.
>

2648. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A17128D.19B1@wt.net>
Source record: 176079

Yuri Blanarovich wrote:
>
> >There probably are many stories of success and failure in the attempt to
> >eliminate precipation static.
> >
> >Best regards, Richard Harrison, KB5WZI
> >
>
> Possible.
> There are basically two problems with "precipitation static." One is a grounded
> or unchoked antenna acquiring static electricity charge and then arcing over to
> something. (That is easily solved with draining choke or resistors.) The second
> one is wideband noise caused by charged particles (snow, rain) hitting metallic
> things, having to discharge themselves and creating the hash, regardless of
> antenna, it shows up as about 20 over S9.
> We had this happen during WRTC in Slovenia for about 8 hours, virtually
> paralyzing our reception. We were not allowed to have another antenna, even
> piece of wire lying on the ground.

>
> Yuri, K3BU

I've been kicking this around in my head. I think a lightning rod would cure it. I thought about the ball or ball discharger as some call them, but seems to me if the antenna streams ok as is, I don't really see how using a ball in the area would help much except for the tower or mast it was attached to. It would keep the tower from easily streaming, but don't think it would keep the antenna from streaming if it would be inclined to do it anyway. I thought about possible noise from the arcing of a streamer itself, and maybe that would make things worse, but if you can have the bottom antenna quiet while the top is streaming, seems to me you could be fairly close to a "designed streamer" and not have too bad a noise. So I kind of think adding a lightning rod above the top antenna would help a lot. The rod would stream much easier than the top antenna and would be above it a bit. This should "act" as another antenna above the top one, and make both quiet. I can't try it here, as don't even have one layer of beam up, much less two, but might be worth a try for someone who does. MK
--
http://web.wt.net/~nm5k

2649. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1729F6.7946@wt.net>
Source record: 176080

Yuri Blanarovich wrote:
>
> More TROLL, TROLL, TROLL
> SUE SUE SUE
> LAWYER LAWYER, LAWYER
> garbage, garbage, garbage
>
> go to Florida and help Al-bore and Lie-berman to "sue - win" presidency

I think they have the same attorney. I notice now he wants a rematch on 10m. What happened last time? I tuned and tuned and tuned again last time with not a peep. I don't see how I could have missed him being as he should have had a signal strong enough to peel paint according to his description. My old TS-830 works to utter perfection, so doubt that was a problem. Also I was listening for any AMEX types that talk 22,056 wpm. Heard a few, some even in 1 land, but no chirps from chip. I guess when the big Dodge City gunfight was going on, he was ducking in at the long branch. MK
--
http://web.wt.net/~nm5k

2650. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8516-3A174321-81@storefull-112.iap.bryant.webtv.net>
Source record: 176081

Bill, N3WK wrote:
"It just doesn`t make sense for a tuner to treat incident waves
differently only because they`re going different directions."

You`re on to something. The tuner is behaving as a bidirectional
transformer.

The tuner may transform whatever load it feeds, say 20 ohms or 200 ohms,
to 50 ohms so that standing waves (sorry Reg) are minimized on the coax
connecting the tuner and the radio. The radio should then behave as it
was designed.

Who knows what the radio output impedance is or needs to know what the
radio output impedance is? Or, do you think we have a conjugate match or
need a conjugate match with the radio? This might affect re-reflection.

Best regards, Richard Harrison, KB5WZI

2651. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A175745.CAEF09D7@IEEE.org>
Source record: 176082

Dick Carroll wrote:
> George, I believe the longevity of aluminum in soil is a function of
> the acid level in the soil, or more accurately its alkalinity, which is
> what actually 'eats' the aluminum. Where I live it will last underground
> forever.

"Forever"? Prove it! :-)
--
http://www.mindspring.com/~w6rca

2652. Re: Help...Tower Rental Rates

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15144-3A17592D-65@storefull-118.iap.bryant.webtv.net>
Source record: 176083

Lee Smith wrote:
"I would appreciate your assistance in developing a formula to present to the building owners which is fair to both sides of the negotiation process."

Tower space is worth whatever the market will pay. You need more than space for your antenna. You probably need air conditioned equipment space, access, power, and other accommodiations. You also need not to trouble or be troubled by each other and others around you.

You need renewal options which won`t price you out while you would like to stay. You also want to be able to get out when you do want to move, without too much penalty. New construction can block too much of your coverage, or other big problems can appear. We had one of our broadcasters claim that our air conditioning equipment was corroding his antenna. He really just wanted out of his lease.

What use you make of your accommodations probably won`t affect what you have to pay. What you pay usually depends on what revenue your lease space can bring a lessee. In a larger market you can expect to pay more.

So, you should survey the price paid for what you want in similar market areas if there is no data for your area.

I worked for a corporation that leased accommodations to FM broadcasters atop its company headquarters. We also leased space for our operations all over the USA. Abroad we mostly bought the property we used. There are likely tower rental companies in or around your area which have standard contracts and schedules of prices and accommodations. Ask for their contracts and prices, or tell them what you need and ask for quotations.

Best regards, Richard Harrison, KB5WZI

2653. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A175935.315BFF3F@IEEE.org>
Source record: 176084

Fred Hambrecht wrote:
> My personal opinion is reflected power dos not exist! It is a figment that
> allows us to understand why the darn SWR bridge works.

Will you let me pulse a long unterminated transmission line with a
megawatt pulse and grab the wires to prove your personal opinion?
Of course reflected power exists. If you don't want to blow your
hands off, you can at least boil water with it.
--
http://www.mindspring.com/~w6rca

2654. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A175981.89950C18@IEEE.org>
Source record: 176085

Jeff Anderson wrote:
> Simply illustrating a small nit...
> Every two seconds (when the next "wave" of reflections arrives from
> the antenna end of the xmission line), you'll have to readjust your
> tuner for a Z0 match until, many seconds later, you finally reach
> steady state.

Naaaahhhhhh Jeff, it's an autotuner. :-)
--
http://www.mindspring.com/~w6rca

2655. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A175D45.24D280EF@IEEE.org>
Source record: 176086

klocko@toad.net wrote:
> Let's see now, you're saying that the antenna tuner passes ALL power
> going from the transmitter toward the antenna. It would have to since
> you've already said that the SWR is 1:1. You're also saying that the
> antenna tuner passes NO power going from the antenna back toward the
> transmitter. In your description, the tuner has to be a non-reciprocal
> device. It just doesn't make sense for a tuner to treat incident waves
> differently only because they're going different directions.

The generated energy and the reflected energy indeed do see different conditions because part of what the generated energy sees is the reflected energy and part of what the reflected energy sees is the generated energy.

A transformer treats reflected energy differently from generated energy. It steps one up and the other down. Why can't an antenna tuner treat the two signals differently?

There is only generated power into the tuner input. There is forward power out of and reflected power into the tuner output. Forward power out of the tuner equals generated power into the tuner plus reflected power into the tuner. Conservation of energy indeed does make sense. With a Z0-match in a lossless system, there is simply no place else for the reflected energy to go except back towards the antenna.
--
http://www.mindspring.com/~w6rca

2656. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A175F03.D96F3D44@IEEE.org>
Source record: 176087

Reg Edwards wrote:
> And I've just noticed my G5RV is about 12 inches longer than
> yours ! Which should be added to the list of differences in
> computer input data.

Looks like your program does a darned good job, Reg. Isn't a
G5RV standardized at 102 feet?
--
http://www.mindspring.com/~w6rca

2657. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A176003.735F82D@IEEE.org>
Source record: 176088

Reg Edwards wrote:
> Cec, you won't have to re-write your website !

Thanks, Reg, I really appreciate that. I've forgotten how to post
files to geocities.

> Can you persuade your 450-ohm ladder-line supplier to
> re-advertise the stuff as 385-ohms?

"450 ohm ladder-line" is an identifier, not a specification. :-)
--
http://www.mindspring.com/~w6rca

2658. Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Chuck Oliver <jcoliver@sisna.com>
Message-ID: <3a16b5cb_1@news.sisna.com>
Source record: 176089

I travel in a 35 foot motorhome with a rubber roof. I currently use a verticle Outbacker Perth into an Icom 725.

I would like to see a design that would allow me to built a horizontal dipole by laying iton the roof. Maybe epoxyed down and fed from two directions (end, side) to give some directionability.

Obviously I would need multiband options 10/80 using tuning coils. I want to be able to do this with the least amount of intrusion into the motorhome.

Any help would be appreciated. 73

Chuck WB7VEG

2659. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001118070856.20381.00000283@ng-bj1.aol.com>
Source record: 176150

>John Burrell wrote:
>>
>> > Ask an attorney's counsel on this.
>>
>> counsel = advice
>
>Yep, I'm aware of the meaning of counsel, but since frac likes to play
>Perry Mason I like to mess with his head.
>>
>> He's right, you are wrong. Now why not back off and give the guy a chance.
>> On the evidence of the last week's postings he is obviously trying a new
>> approach and surely deserves to be given another chance. How about a fresh
>> start all round?
>
>But I'm not wrong. The whole issue was his reply to W1RFI, in which he
>stated that w1rfi's statement was incorrect, and that he that he should
>consult counsel.
>
>quote from W1RFI:
>The number of public posts that you have made, Chip, suggest otherwise.
>The
>personal life that I am sure you lead that extends significantly past
>the
>content of your posts is not a news item, but the posts you have made
>here
>certainly are.
>
>Frac says thats not true. W1RFI's statements were very correct. This is
>a public forum, and if Frac is not the #1 poster I'll eat my hat. I'd
>almost bet $$$ he's the "ALL TIME" #1 poster as far back as deja news
>goes. If you post here , you are a public figure. I'm not trying to stir
>up controversy, but the facts are facts. As far as the NG goes he is
>very public. And I don't see any change in his approach at all. He's
>right, the other person is wrong, and as usual needs counsel. It will
>never change. I'm sorry now I even brought it up, but he provoked me
>with his "your wrong, I'm always right, get counsel", attitude. I'm so
>sick of his legal advice , I'm about to puke. If he had left counsel out
>of it, I probably wouldn't have bothered with him. MK
>
>
>--
>http://web.wt.net/~nm5k
>

I am not a public figure.

Get your attorney to look at Sidis vs. New Yorker.

And stop with the abuse.

NC

2660. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <3a168020.1154962@nntp.mindspring.com>
Source record: 176151

On Fri, 17 Nov 2000 08:53:41 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Jeff Anderson wrote:
>>
>> On Thu, 16 Nov 2000 20:47:24 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>> wrote:
>> > Assume a 100 joules/second transmitter with
>> >a one second long lossless transmission line and a load which causes
>> >reflected power to equal half of the forward power. Key the transmitter.
>> >
>> >After one second, no power has reached the load and there is 100 joules
>> >in the transmission line.
>> >
>> >After two seconds, 50 joules has reached the load, 50 joules has been
>> >reflected, and 100 joules is in the forward wave. NOTE THAT 150 JOULES
>> >EXISTS IN THE TRANSMISSION LINE, MORE THAN THE GENERATED ENERGY.
>> >
>> >Assuming a Z0-match which blocks reflected power from reaching the
>> >transmitter, after three seconds forward energy equals 150 joules and
>> >reflected energy equals 50 joules.
>>
>> Given the 1-second long transmission line, how does the Z0-match block
>> reflected power at the 2nd second?
>
>A lossless antenna tuner provides a Z0-match which doesn't allow any
>reflected energy to reach the transmitter. The "SWR" between the transmitter
>and the antenna tuner is 1:1. There is simply nowhere else for the reflected
>energy to go except back towards the antenna. We know "what" happens from
>a scalar standpoint. "How" is really not important except to academics.
>--
Simply illustrating a small nit...
Every two seconds (when the next "wave" of reflections arrives from
the antenna end of the xmission line), you'll have to readjust your
tuner for a Z0 match until, many seconds later, you finally reach
steady state.

2661. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: maxim1066@aol.com
Message-ID: <20001118081256.18054.00000864@ng-fi1.aol.com>
Source record: 176152

Abuse is wrong!

However, I don't understand your argument with respect to Sidis vs. New Yorker. This case refers to the boy genius who burned out at Harvard...if memory serves me. No disrespect Dr. Cohen, I just need additional information about the case you referenced to better understand the privacy protection we all deserve.

All I have is:

Sidis vs. F-R Pub. Corp
Federal Reporter, 1941, #113, 807-811

In a 5 - 4 opinion, hence by a single vote, the US Supreme Court decided that when fame is cast upon one's shoulders, that person shoulders the burden of losing one's rights of privacy. Chief Justice Brandeis, the deciding vote, said The New Yorker article was, "...merciless in its dissection of intimate details of its subject's life," and further admitted that ALL have the "... right to be protected from the prying of the press..." But he proceeded to deny Sidis that right because he was a public figure! This case set the precedent which has come up time and again in celebrity libel cases against the press.

Thanks,
Julie

>John Burrell wrote:
>>
>> > Ask an attorney's counsel on this.
>>
>> counsel = advice
>
>Yep, I'm aware of the meaning of counsel, but since frac likes to play
>Perry Mason I like to mess with his head.
>>
>> He's right, you are wrong. Now why not back off and give the guy a chance.
>> On the evidence of the last week's postings he is obviously trying a new
>> approach and surely deserves to be given another chance. How about a fresh
>> start all round?
>
>But I'm not wrong. The whole issue was his reply to W1RFI, in which he
>stated that w1rfi's statement was incorrect, and that he that he should
>consult counsel.
>
>quote from W1RFI:
>The number of public posts that you have made, Chip, suggest otherwise.
>The

>personal life that I am sure you lead that extends significantly past
>the
>content of your posts is not a news item, but the posts you have made
>here
>certainly are.
>
>Frac says thats not true. W1RFI's statements were very correct. This is
>a public forum, and if Frac is not the #1 poster I'll eat my hat. I'd
>almost bet $$$ he's the "ALL TIME" #1 poster as far back as deja news
>goes. If you post here , you are a public figure. I'm not trying to stir
>up controversy, but the facts are facts. As far as the NG goes he is
>very public. And I don't see any change in his approach at all. He's
>right, the other person is wrong, and as usual needs counsel. It will
>never change. I'm sorry now I even brought it up, but he provoked me
>with his "your wrong, I'm always right, get counsel", attitude. I'm so
>sick of his legal advice , I'm about to puke. If he had left counsel out
>of it, I probably wouldn't have bothered with him. MK
>
>
>--
>http://web.wt.net/~nm5k
>

I am not a public figure.

Get your attorney to look at Sidis vs. New Yorker.

And stop with the abuse.

NC

2662. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001118082654.22467.00000324@ng-ff1.aol.com>
Source record: 176153

>
>Abuse is wrong!
>
>However, I don't understand your argument with respect to Sidis vs. New
>Yorker.
> This case refers to the boy genius who burned out at Harvard...if memory
>serves me. No disrespect Dr. Cohen, I just need additional information about
>the case you referenced to better understand the privacy protection we all
>deserve.
>
>All I have is:
>
>Sidis vs. F-R Pub. Corp
>Federal Reporter, 1941, #113, 807-811
>---
>In a 5 - 4 opinion, hence by a single vote, the US Supreme Court decided that
>when fame is cast upon one's shoulders, that person shoulders the burden of
>losing one's rights of privacy. Chief Justice Brandeis, the deciding vote,
>said
>The New Yorker article was, "...merciless in its dissection of intimate
>details
>of its subject's life," and further admitted that ALL have the "... right to
>be protected from the prying of the press..." But he proceeded to deny Sidis
>that right because he was a public figure! This case set the precedent which
>has come up time and again in celebrity libel cases against the press.
>
>
>Thanks,
>Julie
>
>
>
>
>>John Burrell wrote:
>>>
>>> > Ask an attorney's counsel on this.
>>>
>>> counsel = advice
>>
>>Yep, I'm aware of the meaning of counsel, but since frac likes to play
>>Perry Mason I like to mess with his head.
>>>
>>> He's right, you are wrong. Now why not back off and give the guy a chance.
>>> On the evidence of the last week's postings he is obviously trying a new

>>> approach and surely deserves to be given another chance. How about a fresh
>>> start all round?
>>
>>But I'm not wrong. The whole issue was his reply to W1RFI, in which he
>>stated that w1rfi's statement was incorrect, and that he that he should
>>consult counsel.
>>
>>quote from W1RFI:
>>The number of public posts that you have made, Chip, suggest otherwise.
>>The
>>personal life that I am sure you lead that extends significantly past
>>the
>>content of your posts is not a news item, but the posts you have made
>>here
>>certainly are.
>>
>>Frac says thats not true. W1RFI's statements were very correct. This is
>>a public forum, and if Frac is not the #1 poster I'll eat my hat. I'd
>>almost bet $$$ he's the "ALL TIME" #1 poster as far back as deja news
>>goes. If you post here , you are a public figure. I'm not trying to stir
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>>very public. And I don't see any change in his approach at all. He's
>>right, the other person is wrong, and as usual needs counsel. It will
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>>sick of his legal advice , I'm about to puke. If he had left counsel out
>>of it, I probably wouldn't have bothered with him. MK
>>
>>
>>--
>>http://web.wt.net/~nm5k
>>
>
>
>I am not a public figure.
>
>Get your attorney to look at Sidis vs. New Yorker.
>
>And stop with the abuse.
>
>NC

I am not surprised that you do not understand it. But frankly I did not pose this as a source for speculation and efforts to misunderstand. In fact, I did not find nor study it myself. Nor am I sufficiently informed to comment upon it myself.

My point is that the homework is done: I am not a public figure, and that even 'borderline' public figures can successfully sue for malicious libel, of which this NG has abounded.

So before we have Mr. Keith wallowing in a sea of MORE malicious libel, it seems in his best interest that he respect the privacy and decency of others. And if you take exception to that, then please leave me out of said discussion.

Thank you.

Cordially,

NC

2663. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001118083503.22431.00000370@ng-ff1.aol.com>
Source record: 176154

>Thanks to all who responded to my posting. Because of continued quite good
>receiving performance I think the problem is most likely an open outer braid
>connection in one of the co-ax joins. The balun is a Japan RAK rated at 4KW
>ssb and 2KW cw so the power available to me should not trouble it. Anyway I
>think the antenna will have to come down for proper checking....
>Thanks again.
>73 Colin VK2LV Sydney
>Colin Marks <cbm@zip.com.au> wrote in message
>news:3a13a119.13273@nancy.pacific.net.au...
>> I use a half-wave dipole antenna tuned for 20 m. band and fed with about
>50
>> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre
>of
>> the antenna. There is a RAK balun at the antenna centre. I have had
>> excellent results with swr never more than 1.3 to 1 until recently the swr
>> suddenly shot up to about 5 to 1 - a level to high for me to operate. This
>> happened in the middle of a QSO. I operate ssb and the power would be
>about
>> 400 watts pep.(legal limit here) but sometimes possibly tested briefly at
>> 700.
>> The antenna is very difficult to access and I do not wish to take it down
>> for testing unless unavoidable.
>> The fault must be either in the balun (which is fairly new) or in a co-ax
>> connector.
>> My question : can I check the balun from the shack in some simple way to
>> avoid taking down the antenna?
>> From the shack the two sides of the co-ax feedline test open-circuit. This
>> seems to indicate a fault because I think both sides of the balun should
>be
>> short circuit to DC (open circuit to RF). This could mean a break in
>either
>> a connector or internally in the balun.
>> Any comments would be appreciated - preferably by email.
>> Thanks.
>> 73 Colin VK2LV Sydney Australia
>>

Yes; as I said.

Here's what I do to assure braid continuity at the feed over a long period of time:

1) solder the braid as well as I can;
2) use copper tape to sheath the braid and connector;
3) cover with a second sheath of coax seal or good electrical tape. Or, better

yet, shrink wrap.

Water is an absolute killer of coax! How it gets in is beyond my ken, but I've seen oxidation 20 feet in sometimes.

I just replaced some coax after only 2 1/2 years. Its insidious too, because often times, with the braid connected, the oxidation adds to ohmic loss and can actually improve the SWR in some cases--while cutting back gain (slightly).

But I am sure there are others with worse coax war stories.

Best of luck on the antenna!

73
Chip N1IR

2664. Re: AR-33 & AR-40 Rotators- Need info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001118084543.24694.00000318@ng-cd1.aol.com>
Source record: 176155

Mike, Call N8DJB weekdays during business hours 10-5 Eastern time.
419-352-4465
Craig has been repairing CDE/HyGain rotors for over 20 years and will sell you
the Docs you need cheap.
73 Doug

>I am repairing 2 rotators- an AR-33 & AR-40 CDE rotator. The AR-33
>rotator has the Autorotator control box with 5 adjustable preset
>headings selectable by front panel pushbuttons. The AR-40 has a front
>panel knob which is rotated to select the desired heading. Both are the
>5 wire type without a solenoid brake.
>
>I would appreciate someone Faxing or mailing me a copy of the shematic
>diagrams for either or both of these rotators. I will reimburse you for
>any costs involved.
>
>
>Many thanks...
>--
>Mike Wood, K1MW
>Wake Forest, NC
>Send your FAX to 919-556-0115
>mail to P.O. Box 1979, Wake Forest, NC 27588
>
>
>

2665. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: maxim1066@aol.com
Message-ID: <20001118091051.28214.00000706@ng-md1.aol.com>
Source record: 176156

No arguments from me, Dr. Cohen. We should all respect the privacy and decency of others.

Julie

2666. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001118095429.12501.00000347@ng-bg1.aol.com>
Source record: 176157

More TROLL, TROLL, TROLL
SUE SUE SUE
LAWYER LAWYER, LAWYER
garbage, garbage, garbage

go to Florida and help Al-bore and Lie-berman to "sue - win" presidency

2667. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001118100908.22479.00000418@ng-ff1.aol.com>
Source record: 176158

>More TROLL, TROLL, TROLL
>SUE SUE SUE
>LAWYER LAWYER, LAWYER
>garbage, garbage, garbage
>
>go to Florida and help Al-bore and Lie-berman to "sue - win" presidency

My points on thesew issues have been made.

Now: I reiterate my challenge to you in the upcoming 10M contest.

I submit that i will beat you handily, using the 10m FQY described on the ham page of:

http://www.fractenna.com

As I have demonstrated, in recent weeks, the ability and viability of making the claim that I can and will beat you--witness my 350 plus an hour QSO rates during NON contest periods-- you should either accept the challenge or gve a compelling reason why you cannot do so.

The FQY is a superior performance Yagi for its size. That antenna, and my operating skills, will easily beat any effort (in this contest) you make with far larger and higher antennas at the same power.

Expecting your constructive competition,

73
Chip N1IR

2668. Re: Gilbert Mouget: DO NOT ANSWER F-WORD TROLLS.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <TTwR5.8696$en6.6021@newsfeed.slurp.net>
Source record: 176159

Hi, 'Julie', 'Yuri':

Hmmm .. so, then, defining 'abuse' apparently depends on the resources allocable to hiring practitioners from the priestcraft which depends on a dead language to make and say things which have the force of law, the translations of which into the vernacular make only occasional sense to ordinary men .. ?!

God Himself needed only a couple of stone tablets. Then came the priests ..

Hmmm .. one set of priests creates the 'laws' for us fools, another set of priests administers them to us fools, and a third set defends us luckless fools from the depredations of the first two sets, in the process making yet another body of 'law', and impoverishing us all the while. Another problem for us luckless fools is that the defender-priestcraft and the other two sets are joined at the hip, with all that that implies. What a potentially incestuous 'love triangle'.

I notice, in the response from the Bombast of Belmont, that he considers himself competent to cite some priestcraftly wizardry as supporting his position, and then proclaims himself incompetent to pronounce on the putative relevance of the cite. He retreats to 'homework done' status, an uncharacteristically inferior, subordinate position for him. That's what they all say, 'The homework's done', before entering the courthouse classroom, where, on occasion, the opposing 'priest' feeds the 'homework' to the obliging dogs.

There are circumstances, the reality of which we do not need 'peers' or a 'priest' to persuade or adjudicate for us. I submit as Exhibit 1, that deja's public record of around four thousand r.r.a.a off- and on-topic posts, since 5/15/99, from the 'FRACTENNA' entity, do not qualify said entity for, or contribute to, the obscurity it claims to seek, and so richly deserves to find.

Obscurity abounds at this entity's website, and probably chafes.

We have here the spectacle of an entity making 4000 public posts, some of which claimed that anti-semitism and Nazi-ism are rife here, and then invoking 'privacy' as a protection against disagreeable responses to those and other posts.

Render BUBBA, Belmont's Unparalleled Bafflegab-er, BA, the privacy he so publicly and plaintively covets:

DO NOT ANSWER F-WORD TROLLS.

2669. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001118102231.09847.00000332@ng-cu1.aol.com>
Source record: 176160

RE: "Marginal Public Figures":

"Julie", Maxim1066@aol.com, has no Usenet posting history recent enough to be archived--except what's been posted here today. Moreover, "Julie's" well-turned resoponse followed fractenna's by only 14 minutes and shows similar routing. Like self-help pseudo-theapist Hugh Prather, could someone on here be writing "letters to himself"?

Rick K1BQT

2670. Help...Tower Rental Rates

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <kaxR5.9$i16.879@news1.mts.net>
Source record: 176161

Hello All:

I am in the process of negotiating a lease to place a two bay circular polarized FM broadcast antenna on the roof of a building which is 450 feet high in the centre of the city and need your help in determining a fair monthly rental rate.

The station is an Adult Standards music format, aimed at persons aged 45+ and the transmitter will operate at 1 Kw. As with any new business, the first 3 years are very critical with respect to profitability.

I will not have exclusivity, and there will be no revenue competition for other services by adding highspeed Internet, paging services, trunk communications, etc.

I would appreciate your assistance in developing a formula to present to the building owners which is fair to both sides of the negotiation process.

Please reply either via the newsgroup, or direct email to lee@ckvn.com

Thank-you for the help.
Lee Smith
http://www.ckvn.com

2671. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001118112850.22503.00000319@ng-ff1.aol.com>
Source record: 176162

>RE: "Marginal Public Figures":
>
>"Julie", Maxim1066@aol.com, has no Usenet posting history recent enough to be
>archived--except what's been posted here today. Moreover, "Julie's"
>well-turned resoponse followed fractenna's by only 14 minutes and shows
>similar
>routing. Like self-help pseudo-theapist Hugh Prather, could someone on here
>be
>writing "letters to himself"?
>
>Rick K1BQT
>

Rick,

I am really tired of this.

I have no idea who 'Julie' or 'maxim 1066@aol.com' is; and I can guarantee that it is more likely she has some affiliation to your aol account than mine . It certainly has NOTHING to do with mine.

If you have other information, then kindly bring it to the attention of the newsgroup. If not, please don't feed the incorrect and malicious tone.

Thank you.

73
Chip N1IR

2672. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A16BE98.B35A9079@dvol.com>
Source record: 176163

Dick Carroll wrote:

> Brian Kelly wrote:
>
>
> Nutshell/thumbnail, the weight of all that ice, probably a lot more
> than the tower itself, moving in the same direction as the wind gust
> that broke it, just proved too much load, and at the fulcrum, at the
> base, it gave way. No way I could have forseen that, but I DID plan it
> to be far enough away from the house to miss it if it did come down.
> Except for the raingutter, I was right on that score.

>
Might have been some additional nasties at work. You indicated in an earlier post that the tower was swaying before it flopped over. Might be that with all that ice there could have been a big inertial "flywheel effect" in play in addition to the straight-in wind load. Basically the tower was fighting the swaying but the weight of the ice simply overstressed a leg at the base during the terminal rotation. These sorts of considerations move the matter into the realm of dynamic mechanics, vibrations and material fatigue which becomes a whole new rat's nest. In the end you probably had a combination of sources of stresses at work. The weight of the tower itself, the weight of the ice, the static wind load and a cyclic rotational dynamic load. They all added together at a critical moment and over she went.
>

>
> > In the case of a freestander the primary function of the (much larger) base is to
> > act as a sort of counterweight which balances out the wind load at the tipover
> > pivot point. Gets into soil mechanics, etc. In all cases more concrete deeper is
> > always better.
>
> Outfit I used to work for had a 350 footer, wide base freestanding,
> that was hit by a tornado on the other end of the state. For a long time
> I kept a photo of the hunk of concrete that one leg pulled out of the
> ground. Helluva a chunk it was, too. MANY cubic yards. Then it laid the
> tower across US36.

>
When you get into tornados all bets are off, you forget the book, run like hell and pray. Some time when you get to downtown St. Louis check out what's left of their ancient monster radio tower. A tornado blew most of the thing over I think sometime in the 30s or 40s and dropped it thru an apartment building and killed something like 14 people.
>

>
> > >
> > You got bit too hard. Lotsa freestanders out there which can take the loads.
> > Lookit all the freestanding cell phone poles. Ya just don't push the numbers.
> > >
>
> After all my towering experiences, it just seems natural to ask- just
> how much are these installations professionally overengineered?

>
All of them. "Depending".
>

> I think
> its a given that any vendor or engineer would make absolutely,
> positively sure that no one ever could, for any concievable reason, be
> able to point the finger backward after any tower came down, so that
> naturally means "overdone". By how much?

>
The grunt engineer can run the numbers and via straight up physics design a tower which has a specific failure load and expected life. From there it gets "overdesigned" by it's chosen design safety factor which is some number like 2X, 4X, 10X etc. It basically gets down to management decisions on risk vs. cost, tower industry design standards, building codes and lawyers and fear thereof. None of which have much if anything to do with the physics. I'm not in that biz but I'll guess they get overdesigned by somewhere around 500%.
>

>
>
> > Hey, Dick - Put another set of guys on that tower willya?
> >
>
> I would've bet that was coming <BSEG>. Point is, the darn thing has
> stood there 15 years, through some hellacious Midwestern winds, without
> flinching. And after previously closely watching the freestander that
> the iceload took down, I really believe *it* would still be there
> without the ice storm. So really, What's the deal?
> In fact, if I read your detailed info right, another set of guys would
> add more vertical compression. I know that they would also stabilize the
> middle and forestall twisting - but thats why I put them at 50 ft
> instead of the top (60), and I haven't detected anything that looks like
> a deficiency or any hint of problem. A middle set wouldn't keep it up if
> one of the top guys failed. Explain for us all, pse. Us backyard
> injuneers want to know.

>
It depends on how big your antennas are and I have no clue. But for discussion puposes I'll assume a healthy stack of HF beams on a longish mast which is to say a decent wind load. Visualize how the tower will bend in a heavy wind. The base ain't going anywhere. The point at which the tower is guyed ain't going nowhere, either. But given enough wind on the antennas the tower will rotate with the guy point acting as the upper pivot

point. It'll bend outward into the wind in an arc with the point of maximum lateral deflection being around the midpoint between the guy bracket and the base. This could set up a really nasty potential column failure scenario. The guys will impose their compression load on a long skinny bent column. It's a double-whammy because the more you bend a column the weaker it becomes at a huge rate, it gets many times weaker per pound of compression load the more the tower gets bent and you can get into a runaway situation.
>
The fact that your guys are ten feet down from the top is not necessarily in the right direction. That configuration definitely increases the "leverage" the wind has for bending your tower. There's an optimum guy bracket location which could be determined by a lot of numerical engineery pushups and it could just be that the 50ft level ain't even close to where it should be guyed.
>
The purpose of the center set of guys is to prevent the tower from bending in the first place thus completely eliminating the prospect of a column bending failure. A straight tower can take many time more times downward guy-induced compression load than it can when it's a bent tower. In your particular case your tower might be plenty stiff enough for it's loading conditions and won't bend enough to be concerned about not having the second set of guys. Ya hafta get really specific about the numbers before any real-world conclusions can be drawn.
>
Gets back to the Rohn specs: If Rohn sez guys every 30 ft just do guys every 30 ft. Y'know?
>

>
> BTW I did a bit of reading back when working about how towers fail in
> earthquakes, since I had New Madrid in my area of responsibility. Turns
> out that the freestanders fare better than guyed types, which suffer
> slackening in one set of guys as the first earthquake wave arrives, and
> the opposite guys, still tight, pull the beast down. The freestander
> just sways and stays put....some of the time, anyway.

>
Yupper! Tornados = 'quakes = BOOGIE outta there right now!

>
>
> tnx, Brian
>
> Dick
>

Brian dit dit.

2673. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8516-3A16BAE0-24@storefull-112.iap.bryant.webtv.net>
Source record: 176164

EHS, Jr. wrote:
"And like you, I would have liked to seen a stronger mention of feedline loss."

A perfect r-f transmission line has uniformly distributed series inductance and shunt capacitance. These reactive characteristics store energy per unit length. When r-f sets out on its journey through the line it is slightly retarded in velocity by the time needed to get current flowing through the line`s series inductance and to get voltage across the line`s shunt capacitance charged up to the applied voltage. It takes more time for r-f to flow through a transmission line than through free space.

There is energy stored in the line. When a transmitter stops, r-f continues flowing from the transmission line for the short while required to empty the line.

A perfect transmission line has no resistance in its conductors and no leakage conductance. Paradoxically, the ideal line having no series resistance and no shunt conductance has a current flow which is exactly in phase with the voltage across the transmission line.

Any loss in the line produces some phase shift from the pure resistive in-phase relation of an ideal line. Nothing is perfect, but most transmission lines are good enough for practical purposes. The characteristic impedance (surge impedance) , or Zo is a resistance, but not a resistor which consumes power.

Zo is called a surge impedance because any burst of energy applied to the line is forced by the line`s construction to conform to the voltage to current ratio dicted by that construstion. If we put 100 volts across a Zo of 50 ohms, 2 amps flows, unless and until an energy reflection comes back to alter the apparent impedance of the line. Obviously, if a line were infinitely long, no reflection could return.

If a real resistor equal to the Zo is placed across the far end of a transmission line, all energy is accepted from the line. So, none returns as a reflection to produce an impedance on the line other than Zo. If a reactance, or resistance other than Zo, terminates the transmission line it can`t absorb all the energy the transmission line is able to povide, so some or all of the traveling energy is reflected.

The cyclical energy traveling toward the load, and the part reflected, produce an SWR pattern on the transmission line, given the mismatch and enough line to show a pattern. The varying phase in a long enough line produces a repeating pattern of a wide range of complex impedances as

indicated by SWR.

High impedance is shown by voltage maxima. Low impedance is shown by current maxima. These are 90 degrees apart in a line.

A circle diagram or Smith chart can be used to determine the impedance at any point on a mismatched line. All the values fall on a VSWR circle on the chart if line loss is negligible. We need to know the load impedance and the characteristic impedance of the line to use a chart.

The rub is that the charts used to show impedance at any point are far easier to use by assuming lossless transmission line, so that will be the usual starting place.

Best regards, Richard Harrison, KB5WZI

2674. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v6fnh$4ka$0@208.207.71.167>
Source record: 176165

Fractenna wrote:
>
> >
> I am not surprised that you do not understand it. But frankly I did not pose
> this as a source for speculation and efforts to misunderstand. In fact, I did
> not find nor study it myself. Nor am I sufficiently informed to comment upon it
> myself.
>
> My point is that the homework is done: I am not a public figure, and that even
> 'borderline' public figures can successfully sue for malicious libel, of which
> this NG has abounded.
>
> So before we have Mr. Keith wallowing in a sea of MORE malicious libel, it
> seems in his best interest that he respect the privacy and decency of others.
> And if you take exception to that, then please leave me out of said discussion.
>
> Thank you.
>
> Cordially,
>
> NC

Ah. Act like an expert on the subject until a *real* one shows up, then
plead ignorance. Typical.

Might as well do that with antennas, too.

2675. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A16B7FB.3C4D@pacbell.net>
Source record: 176166

Rick Littlefield wrote:
>
> RE: "Marginal Public Figures":
>
> "Julie", Maxim1066@aol.com, has no Usenet posting history recent enough to be
> archived--except what's been posted here today. Moreover, "Julie's"
> well-turned resoponse followed fractenna's by only 14 minutes and shows similar
> routing. Like self-help pseudo-theapist Hugh Prather, could someone on here be
> writing "letters to himself"?
>
> Rick K1BQT

"We should all respect the privacy and decency of others" is a
phrase disinctly in the tradition of the Fractennal school of
fractal rhetoric. Mistress Malaprop's ghost still lives.

Tom Donaly KA6RUH

2676. Re: Cushcraft R8 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: James Mosier <jimm@gatecom.com>
Message-ID: <3A16C796.7F723666@gatecom.com>
Source record: 176167

Dick,

I did the same to my R8000. First contact was Ukraine on the monopole......

Jim KD8GS

Richard Arnold wrote:

> Sheet metal screws (assuming stainless) won't make any difference in
> performance, but why would you do it? The clamps supply sufficient pressure
> to keep tubes secure and if you want to retune or disassemble the antenna,
> the burrs caused by the screws might make it very difficult. If you are
> having problems with the antenna and think the screws will solve it, think
> again. I had an R 8000 which after a mind numbing season of problems, fixed
> it by cutting it up, throwing away the traps and assembled a 20 meter
> monopole with the pieces. Good luck.
>
> --
> Dick
> k8rja@flashcom.net
> "trout" <trout@cityusa.net> wrote in message
> news:i3a01t812qu288tnvebje2s81h739im8u7@4ax.com...
> >
> >
> >
> > The R8 has stainless straps holding together different
> > parts of this antenna. Would drilling the tubes and using
> > small sheet metal screws in addition to the straps cause
> > performance problems ???
> >
> >
> >
> >
> >
> >

2677. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <RccWOkuhmN5qdydY9yZDGjqL1P2p@4ax.com>
Source record: 176168

On Sat, 18 Nov 2000 09:10:19 -0800, Donaly <dtdonaly@pacbell.net>
wrote:

>Rick Littlefield wrote:
>>
>> RE: "Marginal Public Figures":
>>
>> "Julie", Maxim1066@aol.com, has no Usenet posting history recent enough to be
>> archived--except what's been posted here today. Moreover, "Julie's"
>> well-turned resoponse followed fractenna's by only 14 minutes and shows similar
>> routing. Like self-help pseudo-theapist Hugh Prather, could someone on here be
>> writing "letters to himself"?
>>
>> Rick K1BQT
>
>"We should all respect the privacy and decency of others" is a
>phrase disinctly in the tradition of the Fractennal school of
>fractal rhetoric. Mistress Malaprop's ghost still lives.
>
>Tom Donaly KA6RUH

Fractethics

2678. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:01:57 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v4gtl$b3s$1@208.207.71.159>
Source record: 176137

When I installed my base (3x3x3ft)I first dug the hole then drove
several 2ft steel rods into the sides of the empty hole, so that the
earth was effectively tied to the concrete after it was poured. This
effectively gives you the ground surrounding the base as a part of it.

73, Dick W0EX

B Nehl wrote:
>
> Thanks for all the comments guys.
> FWIW, when I contacted Rohn, they told me I needed a 4x4x4' base.
> A bit bigger than I had expected, but I'm over half there now.
>
> I would still like to hear about pitfalls to avoid, etc.
> This is my first go around with a tower, so I'm
> trying to "learn from others mistakes."
>
> I'll be making my base slightly deeper than 4' so I can line the
> bottom with gravel - for drainage. I've heard some people also
> put a first layer of sand down. However, an army engineer
> that I talked with reccommended skipping the sand. We have
> a mostly clay & rock soil here and he thought it would just
> hold the moisture.
>
> The base of the tower will be wider at the bottom than the top.
> The sides are "scalloped." The corners are square.
>
> I will have at least 4" of concrete above ground so that water
> won't run over and into the base where the bottom section
> protrudes.
>
> I will be making a "basket" of 1/2" re-bar around and through
> the bottom section. (Neither the re-bar nor the section will
> be in contact with soil. Avoid rust.)
>
> My ground rod will go into the earth beneath the base,
> attaching to re-bar/tower section and protrude through top
> of concrete.
>
> The Army engineer also suggested I coat the bottom section with
> oil to help with rust prevention.
>
> I guess one of the fun parts will be trying to get the bottom section
> aligned correctly. (I'll be using a standard 10' section.)
> I'm thinking 4' level and/or maybe a plum-bob.

>
> I'll be using 4500psi concrete as it's only $4 more a yard then
> 3000psi. (Oh yeah, make sure ground is damp before pouring so
> that the ground doesn't suck the moisture out of the concrete.)
>
> I'll let the concrete cure for 30+ days before going to the tower
> erection phase.
>
> Am I missing anything?
>
> 73,
>
> Bryan
> k0emt@dbbear.com
> http://www.dbbear.com/k0emt

2679. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:09:05 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A15C869.49126671@dvol.com>
Source record: 176138

Fractenna wrote:

> >Rick Littlefield wrote:
> >
> >> >Something good has gotten lost<.
> >>
> >> You're right, but Les Cushman didn't grow that business on good will. What
> >got
> >> lost was the contents of your wallet--probably at the local computer store.
> >> Good things only get lost when more interesting things get found.
> >>
> >>
> >You completely lost me.
> >>
> >>
> >> Rick K1BQT
> >>
> >>
> >w3rv
> >
>
> You know, Steve Best is an active participant in this forum and the Cushcraft
> web page readily states he is the President.
>
> Why don't you ask him about this, via e-mail, rather than continuing a thread
> that clearly is meant to malign Cushcraft?
>
> Frankly, all of this is just in bad taste at this point. And whether I or you
> or anyone else likes Cushcraft or not, magnifying intangible gripes doesn't
> belong here IMHO.
>
> Cordially,
>
> NC

>
Fracky, go back and read my original post, you'll find that I stated that in my
opinion Cush made the best commercial antenna I ever owned, I don't have any bones
to pick with anybody in this topic. Rick responded with some comments about
computers which went completely over my head, now your nonsense.
>
Tail end somebody else and/or YOU take it to e-mail.
>
w3rv

2680. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:16:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v4hjh$68a$1@neptunium.btinternet.com>
Source record: 176139

Bill said,
> I guess I must be pretty dense, but this wave-chasing
drives me nuts.
==========

Bill, you are wrong. Your IQ is at least average. Probably appreciably higher. It is you who have retained sanity. It is only nutters who chase imaginary power waves and reflections.

For them, with a vested interest in waves and reflections, to abolish waves means there is nothing left to waffle and bafflegab about.

Listen to the silence . . . . . .

Reg.

2681. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:32:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v4im4irl0@208.207.71.159>
Source record: 176140

Andrew J. O'Brien wrote:
>
> Let me see if people with a better brain than I can figure this out....
>
> I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm
> ladderline to an MFJ941C tuner. I bought the tuner used six months ago but
> had never got around to using it. The ladder line is brand new.
>
> I have made many dipoles before over the years with no major problems. So I
> was quite surprised , when I got the thing up in the air (only 20 feet at
> this point) , that the receive was VERY bad. I have not even tried to xmit
> on the antenna yet. I checked the ladder line connection to the antenna and
> all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV
> gets an S9 usually, this new dipole gets an S1 to S2 regardless of settings
> on the 941C. I double checked the short coax cable between the rig and 941C
> and it too appears okay. Just for the fun of it, I took the ladderline our
> of the 941C , stuck one end of the ladder line into my coax connector on
> my rig, when I do that the receive on WWV increases to S7. Also when I
> connected my existing G5RV via the 941C it works fine.
>
> So, I am baffled as to why when I connect both side of the ladder line with
> an antenna connected to it via the 941C that I get S1 to S2.
>
> Any thoughts?????

I'd be suspicious of the balun in the tuner, it may be either bad or
miswired.

Does that tuner require the "jumper" wire to enable the balun? If it
does and the wire isn't connected it won't work right.

Dick

2682. Re: 6m Beam Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:46:28 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <EjkR5.145661$ib7.19721608@news1.rdc1.nj.home.com>
Source record: 176141
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Peter,
You really need to be able to turn it, or you defeat the purpose of having a beam. If a rotator is not a possibility, mount it on a piece of pipe fastened to the side of the house or garage, loose enough that you can turn it by hand. For skip propagation, height is not a big deal; A 6 m beam at 20 feet has the same takeoff angle as a 20 meter beam at 72 feet. I have talked to numerous W0s and 9s who had their antenna at 15 feet - but pointed this way. Regardless of which way you point it, you will be able to work some stations off the back, but not off the side.

Tam/WB2TT
****
"Peter" <ve9ptr@hotmail.com> wrote in message
news:6z1R5.3953$rm4.82874@sodalite.nbnet.nb.ca...
> I'm wondering what would be the best direction to point a 6m beam? I do
not
> have a rotor available at this time. My location is on the east coast of
> Canada (grid FN65) and am very new to 6m. In fact, this will be my first
> antenna for this band!
>
> Peter
>
>
>

2683. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 00:51:11 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A15D27E.1215AEEC@home.com>
Source record: 176142

CJ wrote:

> I think that there is a jumper that must be connected in order to put
> the internal balun in the circuit. I don't have a '941 tuner here, but I
> have two others and they both require the jumper. Look on the back for
> an indication of a "wire" between two posts. Connect the wire and try
> again.
>
> Good luck and 73, CJ K0CJ
>
> "Andrew J. O'Brien" wrote:
> >
> > Let me see if people with a better brain than I can figure this out....
> >
> > I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm
> > ladderline to an MFJ941C tuner. I bought the tuner used six months ago but
> > had never got around to using it. The ladder line is brand new.
> >
> > I have made many dipoles before over the years with no major problems. So I
> > was quite surprised , when I got the thing up in the air (only 20 feet at
> > this point) , that the receive was VERY bad. I have not even tried to xmit
> > on the antenna yet. I checked the ladder line connection to the antenna and
> > all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV
> > gets an S9 usually, this new dipole gets an S1 to S2 regardless of settings
> > on the 941C. I double checked the short coax cable between the rig and 941C
> > and it too appears okay. Just for the fun of it, I took the ladderline our
> > of the 941C , stuck one end of the ladder line into my coax connector on
> > my rig, when I do that the receive on WWV increases to S7. Also when I
> > connected my existing G5RV via the 941C it works fine.
> >
> > So, I am baffled as to why when I connect both side of the ladder line with
> > an antenna connected to it via the 941C that I get S1 to S2.
> >
> > Any thoughts?????
> >
> > Andy KB2EOQ

I'll second the motion. I use the 941 and have never had a problem. A jumper is required between the "Wire" terminal and the nearest of the two "Balanced Line" terminal.
Lots of luck!

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2684. Re: Aluminum (Hardened) wire for LONG wire arrays etc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 01:18:04 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A15D8C6.3DDEC219@att.net>
Source record: 176143

Thanks, Ed - that's what I was afraid of! <:{

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

n5nug wrote:
>
> I used bare aluminum wire for my sixty radials here in N. Texas
> several years ago. Within about six months most of the radials were
> gone due to the alkaline nature of our soil here. I replaced all of
> the aluminum radials (what was left) with insulated wire. 73, Ed -
> N5NUG

2685. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 01:43:04 UTC
From: k3bu@aol.com
Message-ID: <20001117204304.02585.00000206@ng-cq1.aol.com>
Source record: 176144

>So anyway, maybe trying a
>lightning rod above the top beam would help it. Worth a try maybe..Also
>I would think if something in the area is streaming it would generate
>noise that could be heard in the receiver. After all, it's an arc of
>sorts. Should be noise from dc-light nearly I would think. MK
>--
>http://web.wt.net/~nm5k
>

It doesn't, I had Ringo ranger 2m vertical, which is basically grounded "lightning rod" on the top of the tower, tip being about 20 ft up from the 62ft boom on the Razor and it did nothing for suppressing the hash.
The only thing that works is the lower antennas, below another set of antennas higher up.
When you think about it, the top antenna (say at 100 ft) gets hash at 20 over 9 (just about standard signal level regardless of antennas used), while lower antenna (say at 50 ft) gets NOTHING, zilch, absolutely quiet with no traces of hash. You would think that Hash "signal" 50 ft higher would be also "heard" by the lower antenna, but it isn't!
Now the quantum scientwists can speculate what is going on.

Saw interesting quote the other day (I hope it is not copyrighted :-)

"Never be afraid to try something new;
remember amateurs built the Ark,
professionals built the Titanic"

Yuri, K3BU
Tesla RC N2EE in CQ WW CW on 10m

2686. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 02:11:32 UTC
From: fractenna@aol.com
Message-ID: <20001117211132.09901.00000247@ng-cu1.aol.com>
Source record: 176145

>Fractenna wrote:
>
>> >Rick Littlefield wrote:
>> >
>> >> >Something good has gotten lost<.
>> >>
>> >> You're right, but Les Cushman didn't grow that business on good will.
>What
>> >got
>> >> lost was the contents of your wallet--probably at the local computer
>store.
>> >> Good things only get lost when more interesting things get found.
>> >
>> >>
>> >You completely lost me.
>> >>
>> >
>> >> Rick K1BQT
>> >
>> >>
>> >w3rv
>> >
>>
>> You know, Steve Best is an active participant in this forum and the
>Cushcraft
>> web page readily states he is the President.
>>
>> Why don't you ask him about this, via e-mail, rather than continuing a
>thread
>> that clearly is meant to malign Cushcraft?
>>
>> Frankly, all of this is just in bad taste at this point. And whether I or
>you
>> or anyone else likes Cushcraft or not, magnifying intangible gripes doesn't
>> belong here IMHO.
>>
>> Cordially,
>>
>> NC
>
>>
>Fracky, go back and read my original post, you'll find that I stated that in
>my
>opinion Cush made the best commercial antenna I ever owned, I don't have any

>bones
>to pick with anybody in this topic. Rick responded with some comments about
>computers which went completely over my head, now your nonsense.
>>
>Tail end somebody else and/or YOU take it to e-mail.
>>
>w3rv
>

That's nice. Not that it has any relevance to my statement.

Cordially,

NC

2687. Re: Cushcraft isn't the only one ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 04:16:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A16025F.57584E50@dvol.com>
Source record: 176146

Dick Carroll wrote:

> Yep, that's what has happened to the venerable Kenwood TS940S/AT. I
> have a pair of them in the closet, one that is pristine but has had a
> lil' "static discharge" into its antenna port,(but the PLL's are alive)
> and another thats pretty much a beater, but which does work, albeit with
> a couple minor tribulations. Maybe this winter I'll get around to
> combining the two into a really nice oldtimer.

>

> Hey, a TS940 is old????? Doan bet the farm on that.

>
Lab prototype supposedly first went on the air in '80 in JA land. First exported production units hit the U.S. ham store shelves sometime a year give or take later. So I'm told. I wasn't there because around '75 I pulled the plug on ham radio to tend more pressing priorities and bailed away from my short stacks of Collins and Drake treasures for the best part of a quarter century. Until three years ago to be more precise. Got my last brat outta her degree program and my wallet, Dad's turn, decided to jump back in. Took milliseconds to understand that if I wuz gonna play the game the way it's played today Colllins & Drake were history, I'd better do a today radio. 'Way back then I ran with the big dawgs in the cw dx contests so I sed to self, "Go visit some of the those-days big dawgs in the game who are still at it and get up to speed on today radio and radios". Which I did in volume. Felt like I'd stepped out of a time machine actually, but I got the drift.
>
We have a big dawg club (FRCC) relector in which I finally posted a query, ""OK, I'm back guys but there is no way I'm gonna pop $5k for any of the xcvrs you guys are into, maybe later, not a discussion at this point, what decent used radio is out there which is currently available for under $2k I can glom to get back into the game?"
>
Yeah, I know, this is getting to be another rant. I paid for this bandwidth, fuggit, deal with it. Dialed back in the next day and I thought the masses were attacking my inbox, one download after another. Couple dozen responses, "Do a 940 Kelly!!" I'll spare you the gory details but I wound up driving three hours each way from Philly to northern Virginia to lay down $1,250 for a pristine maxed-out 940 from a member of a competitor club. Humpf. The autotuner of course, the computer interface card of course (try to find one of *those* suckers today: As if!) and the entire set of third-party IRC xtal filters of course.
>
Got the damned thing home and hit the "on" button and absolutely nothing

happened, dead, terminally kilt, despite the fact that I'd spent two hours getting operating checkouts and running the thing in enemy 4-land country. Having no clue whatsoever and going into panic mode I figgered I'd screwed the thing up on the rather raunchy three hour trip home and shipped it off to the east coast Kenwood repair facility in Newport News.
>
Cupple days later the Kenwood tech calls, "Mr. Kelly, your 940 is fine, apparently the clock timer was set to "radio off" when you tried to use it." The pore guy tried really hard to suppress his giggles, din work A clueless dipshit is a dipshit, *SELF*, no escape, no way, end of. I'll never live that one down.
>
One thing led to another during the ensuing discussions despite my chagrin, yadda, yadda. Bottom line being that since I'd already shipped the stupid thing to Kenwood I tossed carte blanche at it bought the uncataloged full upgrade of my 940 to it's last production design revision circa sometime in the early 90s when it finally disappeared from the U.S. ham store shelves. The guy billed me for his two-page carefully itemized sixty-something new components installed bill of materials plus his labor all of which totaled a lousy $168 plus shipping and he had it back to me in eight days flat via surface UPS.
>
There are tales of woe about the likes of Cushcraft and there are the upside counterparts, take yer pick and welcome to ham radio.Bring yer MP on, seeya on 3.505, you got a reality check enroute.
>
>Dick
>
Brian

2688. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 05:10:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v52v8$ml5$1@208.207.71.159>
Source record: 176147

Tom W8JI wrote:
>
> If you listen closely to rain staic (or snow static) during a storm,
> you'll hear it build up into a high pitched high level peak, then when
> lightning hits anywhere in the area it totally and immediately stops.
> You also find that rain or snow MISSING the top antenna and stricking
> the bottom antenna will NOT cause any noise at all in cases wher the
> antenna is mounted lower on the tower. If the charges were in the
> droplets, and transferred to the antenna by the contact...this would
> clearly not be the case.

Early in my much-noted experience as a Highway Parol radio op we used a 1/4 wave ground plane antenna mounted atop a 350 ft freestanding tower, with the active element insulated from ground in the conventional manner. Often when a storm involving turbulence would move into the area, the three FM 42 mHz receivers squelches would come open and the static would build to a howling cresendo, after which either there was an 'snap', an arc which discharged things or lightning would strike. Theniet would start again, and would repeat several times during a given storm, until the turbulance passed out of the area. The static would desense the recievers so much that it was not possible to receive a car from even a few miles distance while it was happening.
Later the ground plane antenna system was replaced with a colinear type consisting of four folded dipoles mounted on each tower leg, spaced from the top of the tower down. These antennas operated at DC ground with respect to the tower. That was the end of the rain static. I never once heard it on the new colinear antenna.
That antenna system was in use for over 15 years before I got there, and during turbulent thunderstorms it would virtually paralyze the receivers. Fortunately such a storm rarely lasted more than a few minutes.

Dick

2689. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 05:20:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v53i0$ml5$2@208.207.71.159>
Source record: 176148

Dick Carroll wrote:
>
> When I installed my base (3x3x3ft)I first dug the hole then drove
> several 2ft steel rods into the sides of the empty hole, so that the
> earth was effectively tied to the concrete after it was poured. This
> effectively gives you the ground surrounding the base as a part of it.
>

I should have said "drove several 2ft steel rods a about halfway into
the sides of the empty hole..."
Rebar pieces will work.

Dick

2690. FCC Covenants Ruling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 06:04:41 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <ZZoR5.208714$g6.95771694@news2.rdc2.tx.home.com>
Source record: 176149

FCC Order Declines to Include CC&Rs in PRB-1

NEWINGTON, Nov 17, 2000--The FCC has denied an ARRL Petition for Reconsideration calling on the Commission to declare that PRB-1 applies to amateurs living in areas governed by CC&Rs or condominium regulations just as it does to hams regulated solely by local zoning laws. The FCC Order, released Wednesday, also seeks to "amplify" the definition of the oft-cited "reasonable accommodation" phrase in PRB-1 with respect to local land use and zoning.

"The Order provides some additional clarification on the extent of PRB-1 preemption, but it falls short of providing the relief that ARRL was seeking," said ARRL Executive Vice President David Sumner, K1ZZ. Because Deputy Wireless Telecommunications Bureau Chief Kathleen O'Brien Ham issued the November 13 Order under what's known as "delegated authority," the ARRL now is mulling whether to submit an application for review by the full Commission.

Ham was the same WTB staff member who denied the initial ARRL request on the subject a year ago. Sumner said the denial was "not particularly surprising at this point, especially when you're asking the same person to 'rethink' their original decision." The ARRL, he said, believes the issue is critically important and continues to gather additional information and plan on how to present its arguments more persuasively before the FCC.

In requesting that the FCC extend PRB-1 to restrictive covenants, the League said it wanted hams to be free to negotiate reasonable accommodation provisions with local homeowners' associations as they now may do with governmental land use regulators. This week's Order said the League failed to demonstrate any "significant change in the underlying rationale of the PRB-1 decision" that would necessitate revisiting the issue. "In the absence of such showing, we believe that the PRB-1 ruling correctly reflects the Commission's preemption policy in the amateur radio context," the FCC Order said.

The FCC Order said that even if the Commission does have authority to address CC&Rs within the context of Amateur Radio facilities, "this alone does not necessarily warrant revisiting the exclusion of CC&Rs from the Commission's limited preemption policy." The ARRL has argued that since PRB-1 was promulgated in 1985, the FCC has made it clear that it has Congressional authority to prohibit restrictive covenants that could keep property owners and even renters from installing antennas to receive TV, satellite and similar signals. The same principle applies to Amateur Radio, the ARRL asserted.

The FCC Order says, however, that ham antennas are not like over-the-air reception device antennas, "which are very limited in size in residential areas." Regardless of the extent of the FCC's discretion with respect to CC&Rs generally, "we are not persuaded by ARRL's arguments that it is appropriate at this time to consider exercising such discretion with respect to amateur station antenna preemption," the Order said.

In its initial denial a year ago, the FCC said PRB-1 excludes restrictive covenants in private contracts as "outside the reach of our limited preemption," although it strongly encouraged associations of homeowners and private contracting parties to "follow the principle of reasonable accommodation" with respect to Amateur Radio.

The problem of restrictive covenants has been exacerbated in recent years as planned developments have drawn new residents from among the growing number of retired hams, who then learn they may not install a tower or outside antenna of any type. The League's Regulatory Information Branch reports that the topic of restrictive covenants and antennas is one of the most frequently raised by members contacting the ARRL for information.

The FCC Order also took the opportunity to clarify by example what PRB-1 means by "reasonable accommodation" in terms of amateur antennas. The Order says the FCC does not believe that zoning regulations providing for extreme or excessive prohibition of amateur communications "could be deemed to be a reasonable accommodation." As an example, the Order said, "we believe that a regulation that would restrict amateur communications using small dish antennas, antennas that do not present any safety or health hazard, or antennas that are similar to those normally permitted for viewing television" is not reasonable accommodation or minimum practicable regulation.

On the other hand, the Order said, communities wanting to "preserve residential areas as livable neighborhoods" would be free to adopt zoning that forbids antennas "commonly and universally associated with those that one finds in a factory area or an industrialized complex." The FCC conceded that while such rules could constrain amateur communications, "we do not view it as failing to provide reasonable accommodation to amateur communications."

The FCC Order also turned away the ARRL's request to provide greater definition via PRB-1 to protect amateurs from "prohibitive and excessive fees" that localities might impose. "Excessive costs associated with burdensome screening requirements are also often imposed by municipalities seeking a mechanism to preclude amateur antennas, notwithstanding the PRB-1 policy," the League had argued. Such costs "are the functional equivalent of a prohibition of amateur communications."

The FCC Order stuck to the earlier conclusion that the current standards for "reasonable accommodation and minimum practicable regulation" spelled out in PRB-1 "are sufficiently specific to cover

any concerns related to unreasonable fees or onerous conditions." The FCC said that with these guidelines in place, "an amateur operator may apprise a zoning authority that a permit fee is too high, and therefore unreasonable, or that a condition is more than minimum regulation, and, therefore, impracticable to comply with."

The FCC also said that it continues to believe that it should "not specify precise height limitations below which a community may not regulate, given the varying circumstances that may occur."

The Order combined the FCC's response to the ARRL Petition for Reconsideration with its response to a similar filing from Barry N. Gorodetzer, N4IFE, and Kathy Conrad-Gorodetzer, KF4IDH, of Ft Lauderdale, Florida. In their petition, the Gorodetzers asserted that membership in a homeowners' association typically was mandatory, thus rendering moot any argument about "voluntarily entering into private agreements" with respect to CC&Rs.

A copy of the FCC Order is available from the ARRLWeb.

Page last modified: 09:42 AM, 17 Nov 2000 ET
Page author: awextra@arrl.org
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++
"we believe that a regulation that would restrict amateur communications using small dish antennas, antennas that do not present any safety or health hazard, or antennas that are similar to those normally permitted for viewing television" is not reasonable accommodation or minimum practicable regulation.

At least a little gain here...with a little ingenuity one could do quite a bit with this... (6m yagi, capacitive hat vertical, ect..)

Cliff N0HC

2691. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-18 13:27:13 UTC
From: Colin Marks <cbm@zip.com.au>
Message-ID: <3a1683d7.1e25c@nancy.pacific.net.au>
Source record: 176090

Thanks to all who responded to my posting. Because of continued quite good
receiving performance I think the problem is most likely an open outer braid
connection in one of the co-ax joins. The balun is a Japan RAK rated at 4KW
ssb and 2KW cw so the power available to me should not trouble it. Anyway I
think the antenna will have to come down for proper checking....
Thanks again.
73 Colin VK2LV Sydney
Colin Marks <cbm@zip.com.au> wrote in message
news:3a13a119.13273@nancy.pacific.net.au...
> I use a half-wave dipole antenna tuned for 20 m. band and fed with about
50
> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the centre
of
> the antenna. There is a RAK balun at the antenna centre. I have had
> excellent results with swr never more than 1.3 to 1 until recently the swr
> suddenly shot up to about 5 to 1 - a level to high for me to operate. This
> happened in the middle of a QSO. I operate ssb and the power would be
about
> 400 watts pep.(legal limit here) but sometimes possibly tested briefly at
> 700.
> The antenna is very difficult to access and I do not wish to take it down
> for testing unless unavoidable.
> The fault must be either in the balun (which is fairly new) or in a co-ax
> connector.
> My question : can I check the balun from the shack in some simple way to
> avoid taking down the antenna?
> From the shack the two sides of the co-ax feedline test open-circuit. This
> seems to indicate a fault because I think both sides of the balun should
be
> short circuit to DC (open circuit to RF). This could mean a break in
either
> a connector or internally in the balun.
> Any comments would be appreciated - preferably by email.
> Thanks.
> 73 Colin VK2LV Sydney Australia
>
>

2692. Re: Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A18B02E.43D7@wt.net>
Source record: 176019

KG4GGX wrote:
>
> Hi all
> I hope this is the correct news group to field this question.I have been made
> an offer to buy an antenna tuner that is an older unit.It is described to me as
> a 3 KW tuner. Name is Murch model UT 2000A.Does anyone know anything about this
> tuner.Any info or experiences with this tuner will be greatly appreciated.The
> asking price is very low so it will not be a big cost.I just would like to know
> a little about it.I know it is in working order, and have been invited to try
> it out to see it work.
> Thanks for any info.
> 73 de Rob KG4GGX

I'm not familiar with that tuner itself, but have heard the brand name
many times. It's probably a good deal if it's cheap. Of course you
always have to take the power ratings with a grain of salt. That will
vary with what you are trying to feed. Usually a tuner rated for 3KW is
good for about 700-900 watts CW. maybe less, maybe more. Just depends.
That doesn't mean a whole lot as all of them will do about the same
power if they are using equal componants. You will need a real brute
tuner to do 3 KW cw. Few qualify. A roller coil is a plus to my way of
thinking as seems more precise, but a tapped coil can be ok as long as
enough taps. If it's cheap, you can try it and if you didn't like , I'm
sure you could get your money back. Pretty good demand for tuners these
days. MK
--
http://web.wt.net/~nm5k

2693. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A18AECC.DCA8DADA@IEEE.org>
Source record: 176020

klocko@toad.net wrote:
> All a wave component sees are the components of the tuner. What you see
> when you perform a measurement is the sum of the generated and the
> reflected components. Are you saying an incident wave component behaves
> differently based on the conditions at the incidence point?

If a Z0-match exists, the reflections at the Z0-point will be exactly
canceled by complimentary reflections arriving from the load. There
will be no reflections on the coax to the transmitter. The reflected
energy has nowhere to go except back toward the antenna.
--
http://www.mindspring.com/~w6rca

2694. Re: Where'd the messages go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A18B5D6.8020109@hiwaay.net>
Source record: 176021

Roger- I thought it was obvious- they went where the reflected power goes.

Bill

Roger Halstead wrote:

> In the last few days I've made a number of posts to RRAA. A number of them
> have disappeared.
>
> I read one a few minutes ago (posted earlier today). Then went back to
> check some comments. I came up with the message that the post is no longer
> on the server. This has happened with over 4 posts today.
>
> Any ideas?
> Didn't think I'd pissed any one off, but those posts are going somewhere.
>
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2

2695. Re: RS 2006 Scanner, RS 20-043 Discone, RG-58 Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A17960E.F2B837CA@oio.net>
Source record: 176101

Pervert_Extraordinaire wrote:
>
> <Idiot Mode>
>
> I recently purchased a Radio Shack Pro 2006 Scanner. I've been
> monitoring typical newby stuff like 800MHz trunked emergency
> etc. I've just begun investigating satallite monitoring like
> the ISS. My present antennae setup is a recently purchased
> Radio Shack 20-043 discone located at ground level inside my house.
>
> My questions are:
> How much better will my reception be with the antenna in the attic?
> How much better will my reception be with the antenne outside ~30' up?
> I have about 40' of RG-58. Is this coax length overly excessive?
> Does this antennae have to be grounded? Via a metal mast?
> Are the typical Radio Shack solderless connections sufficient?
> Should I disconnect the stock arial when using the 20-043?
>
> Thanks for tolerating my ignorance.
>
> </Idiot Mode>

The reception would be better if the antenna was outside
and higher. With VHF and UHF height makes the biggest
difference. I wouldn't worry too much about the RG-58 or
grounding your antenna...
'Doc

2696. Re: Gilbert Mouget: Frac disses wishes of others

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <fkOR5.9937$en6.6659@newsfeed.slurp.net>
Source record: 176102

I asked to be contacted by the entity 'FRACTENNA' via the news group group
only. This is the latest evidence I have, unread as usual, of that
entity's respect for the wishes of others. Got it yet, FRACTENNA? Via
the NG or it doesn't get read. If you're ashamed to write something
publicly, then don't write it. Got it yet?

K3BHJ
****

>FRACTENNA: do not communicate with me other than via the
>NG. Got it?
>
>K3BHJ

PRIVATE AND CONFIDENTIAL

One or before 1 December, 2000, you will receive a registered letter
providing
a written and court-submittable confirmation that you have been requested to
cease and desist in your malicious libel against me.

This private e-mail is not intended for public transmission. It is meant as
a
private request before, and to make unnecessary, legal action as deemed
necessary.

Nathan Cohen Ph.D.

2697. A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Otto Schtierlitz <oschtierlitz@hotmail.com>
Message-ID: <8v8g0n$7je$1@nnrp1.deja.com>
Source record: 176103

I apologize for distracting you guys from serious discussions, but I have a question which all you radio and electronics gurus might help me to answer in a blink of eye. Thanks in advance!

Here it is. I was solving a quiz in our local newspaper and there was a question I could not answer. The question is: "if you multiply the current passing through antenna (A) to the antenna's height (m), how is this production called". So I believe there should be some special name (a term) in radioelectronics or physics for this I�h production, meaning some antenna characteristic or whatever.

I've looked through tons of reference materials I was able to get, including search in Internet, all to no avail. I am absolutely unfamiliar with this field of knowledge, so I believe it would be easier for me just to address this honorable forum for help.

And, oh, one important notice: I've already sent the answers for this quiz, so this particular question remained unanswered, so I am not cheating by asking you. The paper will publish the answers only in two weeks and I am going to die if I don't get an answer for this damned antenna question right now!!!

Thanks in advance!
Otto

Sent via Deja.com http://www.deja.com/
Before you buy.

2698. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001119071111.06912.00000420@ng-mj1.aol.com>
Source record: 176104

>I travel in a 35 foot motorhome with a rubber roof. I currently use a
>verticle Outbacker Perth into an Icom 725.
>
>I would like to see a design that would allow me to built a horizontal
>dipole by laying iton the roof. Maybe epoxyed down and fed from two
>directions (end, side) to give some directionability.
>
>Obviously I would need multiband options 10/80 using tuning coils. I want to
>be able to do this with the least amount of intrusion into the motorhome.
>
>Any help would be appreciated. 73
>
>Chuck WB7VEG
>

Hi Chuck--

I recommend against it. Even if you got the antenna to load properly and not be too lossy, its just too low to be useful. Horizontal antennas are very sensitive to height. At a low height they point almost straight up. Thus they very much favor fairly local propagation.

If you can improve the ground plane by using the wires taped to the trailer roof, that strikes me as your best bet. On the other hand I don't know how practical it is for you to attach the vertical driven element you have.

Perhaps there are more suggestions?

73
Chip N1IR

2699. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001119080359.22431.00000562@ng-ff1.aol.com>
Source record: 176105

I know that I'm probably wrong, but...
Db/M
Decibles per Meter
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

2700. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001119093740.22343.00000533@ng-da1.aol.com>
Source record: 176106

>I Highly and inthusiastically suggest you check out Force 12's V-3 or ZR-3!
(snip) They deserve a look!<

Take a very close look. From what I see (from a distance), it is a very short and fat center-fed vertical dipole with multiple "combination loading" components added to each end to resonate the short vertical dipole radiator on each band of interest. Further, I'm guessing there's a frequency-compensated matching network of some sort at the center to transform the very low impedance of the short radiator into a 50-ohm system. A wound feedline choke is probably used at the base to allow the feedline to exit without becoming part of the lower half-element. Can anyone who's looked more closely confirm or disclaim my admitedly speculative assessment?

It's no secret that, as a dipole element grows significantly shorter than .25-WL, efficiency drops rapidly due to a near-exponential increase in losses. Of course, that doesn't mean a really short dipole won't work stations: See Shiller, T, "Everything Works, QST, July, 2000, pp47-50. Heck, last spring, I got an S9 report on 20 meters running 100 watts into a 3-foot long meander-line dipole.

Never the less, a short heavily loaded multiband vertical is just that, and even with very careful management of losses, you can only fool mother nature to a point!
Will a ZR-3 short dipole work better than a lightbulb? Of course! But, I'm not sure how the ZR-3 can possibly rise much above Tom's "Missing A Lot" catagory in performance--short of employing a combination of superconduction and black magic.

Rick K1BQT

2701. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A17E7DA.7D38CAFD@oio.net>
Source record: 176107

Otto,
Field strength...
'Doc

2702. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A17E8AB.E2A88007@oio.net>
Source record: 176108

Chuck,
If someone finds an answer... ((patent it))!
'Doc

2703. yaesu atas-100 for base use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Joe Ponkey <jponkey@mediaone.net>
Message-ID: <iPRR5.13487$JU.473995@typhoon.mw.mediaone.net>
Source record: 176109

i ahve a atas-100 antenna and would like to use it as a base station antenna. space is limited. i was told i need to spread out 8 32' radial wires as a ground plane or counterpoise. is this right?

can anyone advise me on the proper install of this ant for stationary use? i'd hate to have to put a $100 shell of a vehicle in my back yard to mount it on just to have the proper ground.

2704. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A17F521.BFD5C4E@earthlink.net>
Source record: 176110

hey chuck what you could do is rig some PVC poles on each corner of the RV and string a loop around it or do a bend dipole then when you need to take off you can just unhook the poles and stoe them inside good luck

Chuck Oliver wrote:

> I travel in a 35 foot motorhome with a rubber roof. I currently use a
> verticle Outbacker Perth into an Icom 725.
>
> I would like to see a design that would allow me to built a horizontal
> dipole by laying iton the roof. Maybe epoxyed down and fed from two
> directions (end, side) to give some directionability.
>
> Obviously I would need multiband options 10/80 using tuning coils. I want to
> be able to do this with the least amount of intrusion into the motorhome.
>
> Any help would be appreciated. 73
>
> Chuck WB7VEG

2705. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v8slv$1to$3@208.207.71.158>
Source record: 176111

Fractenna wrote:
>
> >I travel in a 35 foot motorhome with a rubber roof. I currently use a
> >verticle Outbacker Perth into an Icom 725.
> >
> >I would like to see a design that would allow me to built a horizontal
> >dipole by laying iton the roof. Maybe epoxyed down and fed from two
> >directions (end, side) to give some directionability.
> >
> >Obviously I would need multiband options 10/80 using tuning coils. I want to
> >be able to do this with the least amount of intrusion into the motorhome.
> >
> >Any help would be appreciated. 73
> >
> >Chuck WB7VEG
> >
>
> Hi Chuck--
>
> I recommend against it. Even if you got the antenna to load properly and not
> be too lossy, its just too low to be useful. Horizontal antennas are very
> sensitive to height. At a low height they point almost straight up. Thus they
> very much favor fairly local propagation.
>
> If you can improve the ground plane by using the wires taped to the trailer
> roof, that strikes me as your best bet. On the other hand I don't know how
> practical it is for you to attach the vertical driven element you have.
>
> Perhaps there are more suggestions?
>

There sure are, and one is that your assertion is not wholly correct.

As a Novice in 1957 I used a 40 meter dipole that was never above 10
feet in height at any point, and while I didn't make WAS on 40 CW I sure
came close in the three months that I was a Novice. More recently, I use
as my motorhome portable antenna, an autotuner-fed 60 ft wire that
attaches at the roof level of my motorhome and runs to whatever support
I find available 60 ft away, usually a collapsable 10 ft aluminum tent
pole that I carry for the purpose, lashed to a tree, shrub or whatever.
The counterpoise is 40 ft of enameled copper wire lying on the ground
under the motorhome, laid in a rough configuration to fit under it. I
works well, and I never have problems making contacts.
Sure, the major radiated component is something like NVIS. Its
inevitable, but there is still a useful component that takes off at

lower angle. And for ~200 - 500 miles it works very well as NVIS.
I also have a Hustler whip system on th back bumper (fiberglass tail on the MH) to use when not set up in a campground.

I'm not sure I'd want the antenna incorporated into my motor home rubber roof for other ressons, though. One is the possiblity of high voltages being developed at some frequencies that could cause arcing to hidden metal and creating a fire hazard.
I once read of a ham who had an attic-mounted dipole fed by a 150 watt AM transmitter that caught his house on fire with it. That's much more likely with a full carrier tramsnitter such as an AM rig than with SSB, or even CW, since when an AM carrier is on it just sits there and 'fries' until standby time. But one still usually transmits full carrier at some time when tuning up. It's certainly not out of the question. Attic dipoles and any roof antenna installation should be carefully done with such hazards in mind keeping the antenna well insulated and isolated.

Dick W0EX

2706. For Sale Cushcraft R7

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: ktheo7707@aol.com
Message-ID: <20001119105330.08436.00000470@ng-mk1.aol.com>
Source record: 176112

Used Cushcraft R7 for sale. Great shape asking $250.00 Neg.
TNX Karl K2CWT

2707. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: ardujenski@aol.com
Message-ID: <20001119111416.02615.00000441@ng-cq1.aol.com>
Source record: 176113

Chuck,
Two problems with the dipole on the roof is (1)interaction with metal in the motorhome roof/structure and (2) low elevation will give it primarily a vertical lobe on most of the lower bands. Now this is not bad if you are looking for local coms.

An approach you may want to take is to get a vertical pole and run either an inverted vee or inverted-L. I have used an end-fed 66 ft wire fed against the ground and was able to work 160-10m QRP fairly well with the max height of 25 ft.

For a support mast I would recommend you look at getting one of the paint extention ploes (you can find at many hardware stores) that is 23ft long. Cost is about $39.

For a little more height you can make a telescoping mast from aluminum tubing from Texas Towers (about 33-40ft) for under $65.

For your wire you can use the STEALTH flexweave wire about #26 guage from WIREMAN.

Alan KB7MBI in Woodinville, WA

2708. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <S2TR5.14846$mq1.1030566@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176114

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:3A15C2FB.D18F6A45@mwci.net...
>
>
> VE9SRB wrote:
>
> > The only impedance
> > that the amplifier ever "sees" is the transmission line characteristic
> > impedance ZO. It never really ever "sees" any other physical impedance.
>
> This is not true. The transmission line equations definitely predict very
> accurately the input admittance (conductance and susceptance) of a
transmission
> line that is connected to some arbitrary load impedance. The real power
that is
> delivered to that admittance from the amplifier is the voltage squared
times the
> input conductance. [This power, minus line loss, is the load power.
Extremely
> easy to calculate.] This complex admittance is what the amplifier sees.
The
> value of this admittance is determined by the composite voltage (forward
and
> reflected) and by the composite current (forward and reflected).
>
> The output admittance of the amplifier, which is essentially a lossless
dynamic
> resistance, should be considered to be part of the amplifier, and not of
the
> coax input admittance. Also, re-reflections do not have any influence on
the
> input admittance of the coax.
>

> The output connector of the amplifier is a "reference plane", just like in
a
> network analyzer. To the left of this plane is the generator, a current
source
> in parallel with a dynamic resistance (this is slightly idealized, of
course).
> To the right of the plane is a coax input admittance that is due entirely
to the
> vector sum of forward and reflected voltages and forward and reflected
currents.

> This plane is a point of precise equilibrium between the voltage and
current
> arriving from the left and the voltage and current leaving to the right.
At this
> point of equilibrium, all so-called re-reflections are reconciled, and as
a
> result they do not play any further role. For example, re-reflections do
not
> influence coax input admittance.
>
> Re-reflections influence the voltage and current levels into the coax (but
not
> the admittance), but only if there is a reflection. No reflection, no
> re-reflection. From a circuit standpoint, the bottom line on
re-reflection is
> that the output admittance of the amplifier is in parallel with the actual
load
> admittance. If the load is not Z0 then the dynamic output admittance
produces
> an effect that we have been describing by the so-called "re-reflection".
This
> is an example of how a very simple circuit idea gets screwed up with a lot
of
> wave mechanical claptrap.
>
> I guess I must be pretty dense, but this wave-chasing drives me nuts. The
> "circuit" approach in the amplifier and the transmission line equations on
the
> coax (derived directly from Maxwell's equations) are so elegant and
> straightforward and correct, that I really do get bored with the
confusions of
> chasing waves back and forth. Once we have mastered the basic ideas of how
wave
> mechanics works, its time to move on.
>
> Back in the old days when complex computations by hand were difficult, we
needed
> these mental intuition-aids. Nowadays, with personal computers, the Smith
chart
> and the highly perfected mathematical equations and simulations, I keep
> wondering why we don't move into the new millenium.
>
> Bill W0IYH
>

Hi Bill:

Thank you for the comments.

I would like to respond to this from two perspectives. One is understanding what happens at an antenna and the other is from the derivation of the

general transmission line equation, re: Johnson, since I know you have the book to look at as I discuss it.

First as a general comment, in the steady state, the total voltage and current developed across a physical load (ZL) connected directly to an amplifier is exactly the same as that developed at the input to a transmission line having an input impedance equal to ZL. However, in one case we have a circuit problem and in the other we have a combined circuit-transmission line problem. The issue is relating the circuit-transmission line problem to the purely circuit problem.

Let's assume that we have an antenna connected at the end of a one-wavelength lossless transmission line. Let's assume that there is a steady state forward traveling voltage arriving at this antenna. What is the total steady state voltage developed across the antenna? It is equal to the vector sum of the steady state forward voltage and the steady state reflected voltage. This is demanded by general transmission line theory. At this point, we see that the total voltage developed at the end of the TL is a direct function of the reflected voltage developed at the end of the TL. Why would TL theory work any differently at the input end of the line? In fact, it does not. At the input end of the transmission line, if the amplifier output impedance is not equal to ZO, there will be some level of voltage reflection (or re-reflection) which must be a component of the total voltage developed at the line input as TL theory demands.

The problem that most people have is that they consider only the steady state conditions and only understand that there is a forward and a reflected voltage at the line input. The real issue is understanding how these forward and reflected voltages develop.

In the example above, at the input to the line, the total voltage will be the same as the total voltage at the antenna since the TL is lossless and one-wavelength long. At the input to the transmission line, what voltage components comprise this total voltage? Obviously, they are the steady state forward and reflected voltages, which are exactly the same as those which exist at the antenna. So, at least at this point, we should agree that the total voltage at any point on the transmission line is equal to the forward voltage + the reflected or rearward voltage. The input impedance at the input to the transmission line is equal to the ratio of total steady state voltage / total steady state current.

So now, the issue is what voltage components comprise the total steady state voltage at the TL input? And, does the re-reflected voltage have any effect on the TL input impedance? In order for the re-reflected voltage to have an effect on the TL input impedance, it must be a component of the total voltage developed at the input to the TL. My post of Friday, indicated that the total voltage at the input to the TL is comprised of three components: 1) The forward source voltage which is a function of ZO, 2) the reflected voltage and 3) the re-reflected voltage.

Let's look at the general transmission line equation as presented by Johnson:

The equation is (4.23) on page 100: The total voltage at any point on the line is given as follows:

E = A B

where A = Eg Zo / [(Zo + Zg) (1 - rhoA rhoG e^-(2 gamma L)]

and

where B = [e^-(gamma x) + rhoA e^-(2 gamma L) e^+(gamma x)]

Eg is the source voltage. rhoA and rhoG are the antenna and source reflection coefficients, respectively.

The equation for total voltage at any point on the line is explicitly a function of rhoG, which is the reflection coefficient of the source indicating the level of re-reflected voltage is in fact a component of the total voltage. The input impedance of the line is therefore a function of the re-reflected voltage.

Consider the derivation of the equation further beginning on page 98 and the three voltage components comprising the total are clearly evident. One is the forward source voltage, a function of Zo. Vsource = Eg Zo / (Zo + Zg). The other two components are the reflected and re-reflected voltages as discussed on page 99.

To see all of this we need to look beyond our view of only the steady state. The amplifer really only sees the Zo of the TL and this is the basis for the true forward source voltage. The other voltages in the TL only develop as a function of reflections and re-reflections on the line. No physical impedances in the system change, only the total voltage and total current.

Steve VE9SRB

2709. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <v8TR5.502$EI3.48475@newshog.newsread.com>
Source record: 176115

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter Bertini" <commquart@erols.com> wrote in message
news:8v4m8ljbn1@bob.news.rcn.net...
>
> "B Nehl" <k0emt@dbbear.com> wrote in message
> news:5ncb1tomtk7lm517pda7pb2arlqgunln4v@4ax.com...
> > Thanks for all the comments guys.
> > > The Army engineer also suggested I coat the bottom section with
> > oil to help with rust prevention.

The towers (ROHN) are double hot dipped galvanized. There is nothing (that
I've ever seen) in their engineering and parts catelog about coating with
oil, or tar.

What they do have is a detailed section on prepareing the bottom of the hole
to get proper drainage for the tower base legs.

I'd be a bit concerned about using oil to coat the bottom as it would
migrate down and probably contaminate the material at the bottom and hinder
drainage.
It would depend on how much were used, but oil is not a permanent cure.
If I felt the need to coat the bottom of a tower (non galvanized like the
old American Standard, or American Steel ?), I'd use a material that would
not flow after application. Tar would be one that comes to mind.

Roger (K8RI)

> >
> > Am I missing anything?
> >
> > 73,
> >
> > Bryan
> >
> Check with Rohn on this, but I believe they recommend coating the tower
with
> tar
> {roofing cement?) where it will be in contact with the cement. It should
> also be
> mentioned in the spec sheets.
>
> Pete
>
>

2710. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <GdTR5.504$EI3.48469@newshog.newsread.com>
Source record: 176116

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A171F7E.4DFD8571@dvol.com...
>
>
> Dick Carroll wrote:
>
> >
> > Yep, now -thanks to you- I know. I've already got the guy cable, and if
> > I can still climb that thing next spring your advice will be followed.
>
> >
> Climbing "issues" are one of the big reasons I'll be putting up some small
crankup next time

I'm past 60 and still do all my own climbing. (97 foot ROHN 45G and a 90
foot American Standard) My wife put her foot down though and I had to quit
climbing towers for the young guys.<:-))

The past few weeks I've been climbing that 45G up to 6 times a day. I seem
to be getting in pretty good shape <G>Antenna installation and working on
the multiple rotor system.

The system uses concentric masts and will eventually have a rotor for each
once I get my machine shop set up.

Roger (K8RI)

> around. Heh.
> >
>
> >
> > Now I understand the dynamic forces that come to play on the
> > installation.
> >
> > Fact is I have only a medium size tribander just above the tower top,
> > with a single 2meter 11-eleven element and a 5/8 wave 2m GP, all on an
> > 8ft mast. I've been thinking about replacing all that anyway, so next
> > spring looks like the time.
> > Tnx, Brian.
>
> >
> Go for it, you'll sleep better.
> >

>
> >
> > 73, Dick
>
> >
> Brian
>
>

2711. Re: Beam Antenna Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A180285.F04A0B6C@bellatlantic.net>
Source record: 176117

Thank you! I shortened the director by 6.5" (106 to 99.5)
and got the bandwidth I was looking for. Ref is 115.5,
DE is 111, spacing is 46" between elements.

"Dr. Robert Suding" wrote:

> I generally figure on a 3 element beam that the director would be 5%
> shorter and the Reflector 5% longer than the driven element. To get
> greater bandwidth, you could make the directer even shorter, maybe as
> much as 8% and the reflector longer by 8%.
>
> Another trick would be to use thicker elements or even a bow tie
> radiator.
>
> In today's software ham world, I would model the different options on
> AO, EZNEC, or NEC WIN + and select the one that best fits your
> parameters. Less than a few hours would save days of cutting & drilling!
>
> ehsjr@bellatlantic.net wrote:
>
> > If I build a 3 element, 6 meter yagi using 7/8" diameter elements,
> > 1 1/2 diameter boom 8' long, gamma match, "plumbers delight" and
> > optimize for swr 1.5 to 1 bandwidth, what is the best I can do?
> >
> > The initial consideration is swr bandwidth only. Gain and F/B
> > should be reasonable but not necessarily optomized. The
> > design frequency is 50.6 Mhz

2712. Re: Beam Antenna Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1802C2.4E98C0E1@bellatlantic.net>
Source record: 176118

Nice program - thanks for the URL !

Anon Sindre wrote:

> <ehsjr@bellatlantic.net> wrote in message
> news:3A0C31BA.A52D9930@bellatlantic.net...
> > If I build a 3 element, 6 meter yagi using 7/8" diameter elements,
> > 1 1/2 diameter boom 8' long, gamma match, "plumbers delight" and
> > optimize for swr 1.5 to 1 bandwidth, what is the best I can do?
> >
> > The initial consideration is swr bandwidth only. Gain and F/B
> > should be reasonable but not necessarily optomized. The
> > design frequency is 50.6 Mhz
> >
>
> You can easily and quickly experiment with various yagi design parameters, using
> the free Quickyagi modeling/auto-optimizing software. It gives a nice VSWR
> bandwidth graph - one of its many features... You can download a copy from
> http://www.raibeam.com/wa7rai.html

2713. Antenna spacing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <QnTR5.505$EI3.47941@newshog.newsread.com>
Source record: 176169

I decided I'd have enough room at the top of the mast (above the top of the tower) to install a quadature array of UHF TV antennas.

The spacing for the 440 antennas of comparable length and number of elements is about 6 feet. Soooo...I figured that 5 feet should work fairly well.

Well, they did work kinda sorta, but that thing has more side lobes than any system I ever used. At least three of the side lobes (on each side) are down, only slightly, from the main lobe. The system certainly has more gain than a single antenna (even on a couple of the side lobes.

I'm guessing that the extra and strong side lobes indicate inadequate spacing.
I could go out to 10 feet, but it would end up as a stacked pair as I do not have the room for the extra five feet of vertical spacing.

I've not found any information on spacing these in the E and H plane.

Any ideas?

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

2714. Re: 6 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A180A58.CB0AD819@bellatlantic.net>
Source record: 176170

Ed,

Thanks! Your numbers proved the key. Your director length
blew me out of the water - I never thought of making it that
short. But it got me to thinking - so I installed a replacement
director cut to 99" and bingo! (Thats about 12% off the DE)
I still don't know what I should get from the antenna if built
to spec in terms of swr bandwidth, but at this point I am getting
the expected performance from the gamma match. I just
couldn't tune it to where I wanted until I cut that director way
down. The purpose of this antenna was to experiment with the
gamma, and my focus on the problem was always on it (the gamma)
rather than on element length. I figured there was something wrong
with the gamma I built. Now I can "play"!

I do undertsand that the widening the swr bandwidth impacts gain
and F/B, and the modeling programs show that. But I never knew
you could reduce the director length as much as your numbers
showed (your director is about 73" long) and still get some gain
(about 4DBd). I get about 1 Db more with the 99" director
at enough swr bandwidth for my purposes. So, a hearty thank you!

"Ed Hare, W1RFI" wrote:

> Unfortunately, I accidentally deleted a post from a fellow looking for a 6 M
> beam that had a good SWR across the band. I used Antenna Optimizer and came
> up with the following. The dimensions are for just the elements, no boom,
> but they can be corrected for the presence of a boom using the usual
> correction factors (ARRL Antenna Book, other sources). Being lazy, I won't
> do all the math to translate the variables that AO calculated into the
> acutal dimensions, but I trust the format of the AO .ant file is reasonably
> self explanatory.
>
> 3-Element Yagi
> Over Ground
> 52.000 MHz
> 3 wires, feet
> seg = 7
> height = 10.5
> dia = .625
> f = 52
> refl = 239.4162
> del = 213.2212
> dirr = 158.2793
> ref = refl/f

> de=del/f
> dir=dirr/f
> front = 4.18
> middle = 0
> back = -4.18
> seg back -ref height back ref height dia
> seg middle -de height middle de height dia
> seg front -dir height front dir height dia
> 1 source
> Wire 2, center
>
> The lines that start with "seg" are the antenna element lines. They are
> formatted as follows:
>
> end 1 end 2 conductor diameter
> #segments X Y Z X Y Z diameter
>
> where #segments is the number of segments I used in the program
> calculations, X, Y and Z are the coordinates for the ends of each wire used.
>
> The performance of the antenna is:
>
> +---+
> ï¿½Freqï¿½50.000ï¿½51.000ï¿½51.000ï¿½53.000ï¿½54.000ï¿½MHzï¿½
> +----+------+------+------+------+------+---ï¿½
> ï¿½Gainï¿½ 10.28ï¿½ 10.41ï¿½ 10.41ï¿½ 10.68ï¿½ 10.82ï¿½dBiï¿½
> ï¿½F/B ï¿½ 15.99ï¿½ 16.60ï¿½ 16.60ï¿½ 14.19ï¿½ 12.90ï¿½ dBï¿½
> ï¿½Zr ï¿½ 43.6ï¿½ 47.4ï¿½ 47.4ï¿½ 56.5ï¿½ 60.6ï¿½ _ï¿½
> ï¿½Zi ï¿½ -8.76ï¿½ -2.02ï¿½ -2.02ï¿½ 14.41ï¿½ 23.2ï¿½ _ï¿½
> ï¿½SWR ï¿½ 1.29ï¿½ 1.11ï¿½ 1.11ï¿½ 1.32ï¿½ 1.55ï¿½ ï¿½
> +----+------+------+------+------+------+---ï¿½
> ï¿½Gainï¿½ 10.29ï¿½ 10.42ï¿½ 10.42ï¿½ 10.69ï¿½ 10.82ï¿½dBiï¿½
> ï¿½F/B ï¿½ 16.03ï¿½ 16.56ï¿½ 16.56ï¿½ 14.18ï¿½ 12.89ï¿½ dBï¿½
> ï¿½Zr ï¿½ 43.8ï¿½ 49.1ï¿½ 49.1ï¿½ 56.7ï¿½ 60.9ï¿½ _ï¿½
> ï¿½Zi ï¿½ -8.17ï¿½ -0.26ï¿½ -0.26ï¿½ 15.15ï¿½ 24.0ï¿½ _ï¿½
> ï¿½SWR ï¿½ 1.27ï¿½ 1.06ï¿½ 1.06ï¿½ 1.34ï¿½ 1.57ï¿½ ï¿½
> +---+
> ï¿½Variableï¿½ Valueï¿½ □_
> ï¿½ reflï¿½ 239.4162ï¿½ 0_
> ï¿½ delï¿½ 213.2212ï¿½ 0_
> ï¿½ dirrï¿½ 158.2793ï¿½ 0_
>
> This was just a quick calculation -- I could have probably played more with
> element spacing, or not worried about having a 50 ohm feed point. AO is
> MININEC based, so may not be as accurate as NEC-based models. What I have
> done for other antenas I have optimized is first us AO to optimize, then
> re-enter the program into EZNEC, find out what it really does, then make
> minor tweaks in EZNEC to get it right. If my explanation of the AO file
> left anything to be desired, email me this weekend at w1rfi@aol.com. For

> now, I still have my AOL account. :-)
>
> 73, Ed Hare, W1RFI

2715. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A180BE3.4E218CAA@mwci.net>
Source record: 176171

VE9SRB wrote:

> The problem that most people have is that they consider only the steady
> state conditions and only understand that there is a forward and a reflected
> voltage at the line input. The real issue is understanding how these
> forward and reflected voltages develop.

I know exactly how the steady state is developed, and I don't need (or want) any "lectures" on this subject.

In the steady state the power delivered to a 10 ohm resistor at the output of the amplifier, and the power delivered to the same 10 ohm resistor at the end of a 1 wavelength coax are exactly the same. The amplifier looks out and sees exactly the same impedance in both cases. That is the essence of Johnson's equations.

And as for Johnson's Equation 4.23, I understand all of that discussion and derivation as least as well, and (I'm beginning to think) maybe even better than you do. I know that it is a steady state solution and that the final result is exactly and precisely what I have been posting.

Believe it or not, I am an expert on Equation 4.23.

This "thing" is obviously turning into some kind of very unpleasant macho pissing contest and dominance game, and I really don't want anything more to do with it.

I stand by what I have been saying, and for me personally that is the *end* of it.

Bill W0IYH

2716. Free Worldradio Magazine Backissues

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: cauchy24@my-deja.com
Message-ID: <8v9384$ko8$1@nnrp1.deja.com>
Source record: 176172

Have five (5) 1998 issues Worldradio; can send you for a few stamps.
Aerials articles, etc. good for new hams. 73, Ted K6KIM

Sent via Deja.com http://www.deja.com/
Before you buy.

2717. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v924s$mb6$1@iac5.navix.net>
Source record: 176173

If it exists, where does it go?

"Cecil" <Cecil.A.Moore@IEEE.org> was heard muttering

> Will you let me pulse a long unterminated transmission line with a
> megawatt pulse and grab the wires to prove your personal opinion?
> Of course reflected power exists. If you don't want to blow your
> hands off, you can at least boil water with it.
> --
> http://www.mindspring.com/~w6rca

2718. Re: RS 2006 Scanner, RS 20-043 Discone, RG-58 Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Pervert_Extraordinaire <valued_customer@att.com>
Message-ID: <3A18369D.E4EF4EE4@att.com>
Source record: 176174

'Doc wrote:
> Pervert_Extraordinaire wrote:
> > Radio Shack 20-043 discone located at ground level inside my house.
>
> > How much better will my reception be with the antenna in the attic?
> > How much better will my reception be with the antenne outside ~30' up?
>
> The reception would be better if the antenna was outside
> and higher. With VHF and UHF height makes the biggest
> difference. I wouldn't worry too much about the RG-58 or
> grounding your antenna...
> 'Doc

Thanks doc,

Do I need to use these two antenna's mutually exclusively? IOW,
must I remove the stock arial when plugging in an auxiliary antennea?

Thanks for tolerating my ignorance

2719. 70cm turnstile

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Ash <ash@gravitywell.org>
Message-ID: <3A1810F9.D1E6CFA3@gravitywell.org>
Source record: 176175

Anyone got a design for a 70cm turnstile with reflector?

Thanks

2720. Sky King Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Ellen Bj&#65533;rgan <allegt15@swipnet.se>
Message-ID: <kkUR5.3720$Sl4.15271@nntpserver.swip.net>
Source record: 176176

I have a problem with my Rotor , It&#65533;s a Sky King Rotor , model : SU-2000-5E
Maybee it is a elektrik problem but I dont now.. So If you have paper on
this send a E-mail to
allegt15@swipnet.se
73 de
Odd

2721. Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: kg4ggx@aol.com
Message-ID: <20001119124517.12514.00000508@ng-bg1.aol.com>
Source record: 176177

Hi all
I hope this is the correct news group to field this question.I have been made an offer to buy an antenna tuner that is an older unit.It is described to me as a 3 KW tuner. Name is Murch model UT 2000A.Does anyone know anything about this tuner.Any info or experiences with this tuner will be greatly appreciated.The asking price is very low so it will not be a big cost.I just would like to know a little about it.I know it is in working order, and have been invited to try it out to see it work.
Thanks for any info.
73 de Rob KG4GGX

2722. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v946p$b4e$1@uranium.btinternet.com>
Source record: 176178

A length of an antenna in metres is a measure of its radiation resistance. To multiply by a current in amperes gives something which has measurement units of volts. Something to do with field strength laid down by a radio transmitter when 1 ampere flows through a wire length of 1 metre ?

Reg G4FGQ

****

Otto Schtierlitz <oschtierlitz@hotmail.com> wrote in message news:8v8g0n$7je$1@nnrp1.deja.com...
> I apologize for distracting you guys from serious discussions, but I
> have a question which all you radio and electronics gurus might help me
> to answer in a blink of eye. Thanks in advance!
>
> Here it is. I was solving a quiz in our local newspaper and there was a
> question I could not answer. The question is: "if you multiply the
> current passing through antenna (A) to the antenna's height
> (m), how is this production called". So I believe there should be
> some special name (a term) in radioelectronics or physics for this I�h
> production, meaning some antenna characteristic or whatever.
>
> I've looked through tons of reference materials I was able to get,
> including search in Internet, all to no avail. I am absolutely
> unfamiliar with this field of knowledge, so I believe it would be easier
> for me just to address this honorable forum for help.
>
> And, oh, one important notice: I've already sent the answers for this
> quiz, so this particular question remained unanswered, so I am not
> cheating by asking you. The paper will publish the

answers only in two
> weeks and I am going to die if I don't get an answer for
this damned
> antenna question right now!!!
>
> Thanks in advance!
> Otto
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2723. Satellite antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Brew99 <bruce-icq@home.com>
Message-ID: <0_UR5.11273$3j.3291405@news1.gvcl1.bc.home.com>
Source record: 176179

Hello,

Does anyone have a suggestion for a design of antenna to operate satellite on 401 or 406 MHz (ARGOS and GOES respectively). I am obviously looking for a design which directs most of the energy above the horizon (say from 15 to 90 degrees). This antenna needs to be physically small (say max. of 3 feet tall and 1 foot wide) with no ground plane required.

Is a quadra helical design suited for this application? Any web pages or other info. with design parameters would be appreciated.

Cheers,
Bruce

2724. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <3nVR5.1707$Ur5.178717@monger.newsread.com>
Source record: 176180

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Fred Hambrecht" <Fred@w4jle.com> wrote in message
news:8v924s$mb6$1@iac5.navix.net...
>
> If it exists, where does it go?

I came in the middle of this and did not see the original, nor do I find it on my server.

In plain terms, the power just keeps going back and forth with bits getting radiated at the antenna each time it gets there and bits getting turned into heat by resistive losses.

If you had a theoretical lossless line, all of the power would get radiated... eventually, although some would be more than a bit late.

Starting with a lossless line and a conjugetae match *at* the transmitter, lets say that 50% of the power is reflected at the antenna. 50 watts would be radiated and 50 watts would be reflected back tot he transmitter, where due to the cojnugetate match it would head back out again, in phase with, and added to, the output power. We'd now have 150 watts on the line andwhen getting to the antenna we'd find 75 watts radiated and 75 watts reflected back.

If you do the math you will find 100 watts being pumped into the line and 100 watts radiated from the antenna. The feed line would have 200 watts and they are real.

Unfortunately we don't have lossless lines, some and the mismatch at the antenna would result in some of the reflected power probably ending up on the outside of the shield which would radiate. Most of the power is lost in the form of heat as it runs back anf forth.

But if the run is relativley short and of good quality and low loss, most of the reflected power (assuming a match at the transmitter end) will end up being radiated from the antenna.

However that's not all good as there will be many cycles (depending on frequency)which are well delayed from the initial radiated power.

In CW and SSB these are not usually a problem, but with data and television they can be real problems.

Now, if you were talking about reflected power and no tuning network (as I understand it) which eliminates tube type equipment, then it depends on the sign of the returning power. Then you can end up with either excessive

voltage, or current in the final network and transistors. The power is again reflected, or most of it is, but the excess voltage, or current can create a bit of mischief .

Roger (K8RI)

>
> "Cecil" <Cecil.A.Moore@IEEE.org> was heard muttering
>
>
> > Will you let me pulse a long unterminated transmission line with a
> > megawatt pulse and grab the wires to prove your personal opinion?
> > Of course reflected power exists. If you don't want to blow your
> > hands off, you can at least boil water with it.
> > --
> > http://www.mindspring.com/~w6rca
>
>

2725. *** FA: Hy-Gain 414 Big Gun II Quad ***

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: grimesday@aol.com
Message-ID: <20001119135753.21328.00000653@ng-co1.aol.com>
Source record: 176181

I am auctioning off my never used, never opened Hy-Gain 414 Big Gun II 4 Element 11 Meter Cubical Quad on eBay:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=503748452

The 414 Big Gun II is easily tuned for 10 meters.

Thanks!
Day Grimes, W3MXE

2726. Antenna spacing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <PsVR5.1710$Ur5.178836@monger.newsread.com>
Source record: 176182

I made this post some time back, but I never saw it on the newsgroup, yet several posts made later did show up, so my apologies if this comes up twice.

I decided I'd have enough room at the top of the mast (above the top of the tower) to install a quadature array of UHF TV antennas.

The spacing for the 440 antennas of comparable length and number of elements is about 6 feet. Soooo...I figured that 5 feet should work fairly well.

Well, they did work kinda sorta, but that thing has more side lobes than any system I ever used. At least three of the side lobes (on each side) are down, only slightly, from the main lobe. The system certainly has more gain than a single antenna (even on a couple of the side lobes.

I'm guessing that the extra and strong side lobes indicate inadequate spacing.
I could go out to 10 feet, but it would end up as a stacked pair as I do not have the room for the extra five feet of vertical spacing.

I've not found any information on spacing these in the E and H plane.

Any ideas?

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

2727. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <RGVR5.1343$IR6.180460@news.uswest.net>
Source record: 176183

Otto,

Although the description is rather unusual and IMO, incomplete, I would assume
the answer would be "a method used to calculate ERP (Effective Radiated Power)".

Chuck

Otto Schtierlitz <oschtierlitz@hotmail.com> wrote in message
news:8v8g0n$7je$1@nnrp1.deja.com...
> I apologize for distracting you guys from serious discussions, but I
> have a question which all you radio and electronics gurus might help me
> to answer in a blink of eye. Thanks in advance!
>
> Here it is. I was solving a quiz in our local newspaper and there was a
> question I could not answer. The question is: "if you multiply the
> current passing through antenna (A) to the antenna's height
> (m), how is this production called". So I believe there should be
> some special name (a term) in radioelectronics or physics for this I�h
> production, meaning some antenna characteristic or whatever.
>
> I've looked through tons of reference materials I was able to get,
> including search in Internet, all to no avail. I am absolutely
> unfamiliar with this field of knowledge, so I believe it would be easier
> for me just to address this honorable forum for help.
>
> And, oh, one important notice: I've already sent the answers for this
> quiz, so this particular question remained unanswered, so I am not
> cheating by asking you. The paper will publish the answers only in two
> weeks and I am going to die if I don't get an answer for this damned
> antenna question right now!!!
>
> Thanks in advance!
> Otto
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2728. newbie question (help)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <20073-3A182C78-17@asg-storefull-1111.public.svc.webtv.net>
Source record: 176184

I recently installed a WINEGARD CA-7210 ghost kller antenna on my roof
with a philips powered rotator. I got all the VHF to come in good, but
NO UHF channels are coming in... Any help would be appreciated!

~J~
BOSTON, MA. 02135

2729. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A183780.2AC3D4F0@netscape.net>
Source record: 176185

Roger Halstead wrote:
>
....
> The system uses concentric masts and will eventually have a rotor for each
> once I get my machine shop set up.

Could you elaborate a bit? It has occurred to me that concentric masts, with the big multi-band yagi on the outer mast and the vhf/uhf beams on the inner (taller) mast, would be nice, but I have not seen any commercial rotors that would work with the outer mast, allowing the inner to pass through. And everyone else that I mention it to seems to think that I'm daffy.

--
Jim Fuller

2730. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A183A7F.6724@wt.net>
Source record: 176186

Brian Kelly wrote:

> >
> Check out any serious aircraft and you'll find what look like little
> "probes" with sharp points aimed aft, usually somewhere on the vertical or
> horizontal stabilzers or both and occasionally on the ailerons.

Hummm, sure those aren't vortex disturbers? Many smaller jets etc use those. I haven't really noticed the sharp points on too many, but guess I didn't look too hard. A vortex disturber looks like a short metal strip sticking up off the wings etc. You will see a whole row of them on many planes like learjets etc. They would probably look kinda like little probes from a distance. But, these may be totally different items from what you describe. I'll have to look into that sometime. The vortex disturbers do as their name describes. The reason I'm familiar with these is a friend of mine works on learjets. I went over there one time, and noticed all those short strips all over the wing, and asked him what they heck they were. Weird looking little things. But you can tell those as they just look like a strip of metal like they were cut out with scissors. MK
--
http://web.wt.net/~nm5k

2731. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A183BA0.E0D@wt.net>
Source record: 176187

Brian Kelly wrote:

> >
> Check out any serious aircraft and you'll find what look like little
> "probes" with sharp points aimed aft, usually somewhere on the vertical or
> horizontal stabilzers or both and occasionally on the ailerons.

Actually, thinking about it, if the ones you describe point aft, they
are probably different from the disturbers. The vortex disturbers point
straight up nearly. MK
--
http://web.wt.net/~nm5k

2732. Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Tim Taylor <tim-taylor@home.com>
Message-ID: <kVWR5.96285$65.949761@news1.rdc1.fl.home.com>
Source record: 176188

I have access to both stainless steel and galvanized steel hardware such as shackles, bolts and pins available for use in guying my tower. Is there any reason to prefer galvanized steel over stainless (other than price)? Is there a fatigue or dis-similar metal issue with stainless?

Thanks,
Tim

2733. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A184263.4986@wt.net>
Source record: 176189

Richard Harrison wrote:
>
> Mark Keith wrote:
> "Anyway, these theories make more sense to me than charged particles
> hitting the antenna."
>
> Terman agrees:
> "The term "precipitation static" denotes a type of interference
> frequently observed in an airplane passing through snow or rain. Under
> such circumstances, the airplane may become electrostatically charged to
> such a high potential with respect to the surrounding space that a
> corona discharge breaks out at some sharp point on the plane. The
> interference that this corona discharge produces with radio reception,
> termed "precipitation static" is particularly serious at short-wave and
> lower frequencies.

Many planes will build up a corona that nearly surrounds the jet. Or the front end anyway. Many times pilots can see the blue glow all around the windshield, windows etc. Looks pretty wild at night.
>
> Precipitation static can be minimized by the use of antennas that are
> either insulated wires or shielded loops, by equipping the plane with
> dischargers that provide a noninterfering means of getting rid of the
> charge being acquired by the plane, and locating receiving antennas as
> far as possible from the corona discharges."

Huumm, kinda surprised insulated wires would help that much. Doesn't seem to make a whole lot of difference here on the ground. But then again, I've never really tested it to compare. All my current ant wires are insulated, but I still hear the noise from time to time I think. I don't notice much noise at all from my small 3 el yagi for 2m. But it has very rounded element ends. It's one of those 2m beams that Alex sells at City electronics. A very nicely built yagi I think. I think some friend of his makes them. MK

--
http://web.wt.net/~nm5k

2734. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v9fmprrh1@iac5.navix.net>
Source record: 176190

Two items, one is a static wick, normally black in color with what appears to be loose string hanging out the ends. These are used to bleed off static charges. What you are referring to are Vortex Generators. On the Lear 23 with the original wing they were mounted on both the top and bottom of the wing. Later models had them only on the top and they were removed entirely if a MK1 wing was installed. The are a NO GO item if more than 3 are missing as I recall.

Many times while descending through a snow storm I have seen continuos balls of blue static emanating from the nose of the tip tank and along the windshield pillar.

I hold Commercial ASMEL with instrument. Type ratings include LearJet, Cessna Citation, and DC3 ratings. The old prop jobs use to get rings of static around the edge of the prop. At 8000 feet in the winter between Buffalo and Detroit it would be so bright on the old Beech BE8T's it would light up the cockpit.

"Mark Keith" <nm5k@wt.net> wrote in message news:3A183A7F.6724@wt.net...
> Brian Kelly wrote:
>
> > >
> > Check out any serious aircraft and you'll find what look like little
> > "probes" with sharp points aimed aft, usually somewhere on the vertical
or
> > horizontal stabilzers or both and occasionally on the ailerons.
>
> Hummm, sure those aren't vortex disturbers? Many smaller jets etc use
> those. I haven't really noticed the sharp points on too many, but guess
> I didn't look too hard. A vortex disturber looks like a short metal
> strip sticking up off the wings etc. You will see a whole row of them on
> many planes like learjets etc. They would probably look kinda like
> little probes from a distance. But, these may be totally different items
> from what you describe. I'll have to look into that sometime. The vortex
> disturbers do as their name describes. The reason I'm familiar with
> these is a friend of mine works on learjets. I went over there one time,
> and noticed all those short strips all over the wing, and asked him what
> they heck they were. Weird looking little things. But you can tell those
> as they just look like a strip of metal like they were cut out with
> scissors. MK
> --
> http://web.wt.net/~nm5k

2735. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001119161253.20876.00000703@ng-fc1.aol.com>
Source record: 176191

>Fractenna wrote:
>>
>> >I travel in a 35 foot motorhome with a rubber roof. I currently use a
>> >verticle Outbacker Perth into an Icom 725.
>> >
>> >I would like to see a design that would allow me to built a horizontal
>> >dipole by laying iton the roof. Maybe epoxyed down and fed from two
>> >directions (end, side) to give some directionability.
>> >
>> >Obviously I would need multiband options 10/80 using tuning coils. I want
>to
>> >be able to do this with the least amount of intrusion into the motorhome.
>> >
>> >Any help would be appreciated. 73
>> >
>> >Chuck WB7VEG
>> >
>>
>> Hi Chuck--
>>
>> I recommend against it. Even if you got the antenna to load properly and
>not
>> be too lossy, its just too low to be useful. Horizontal antennas are very
>> sensitive to height. At a low height they point almost straight up. Thus
>they
>> very much favor fairly local propagation.
>>
>> If you can improve the ground plane by using the wires taped to the trailer
>> roof, that strikes me as your best bet. On the other hand I don't know how
>> practical it is for you to attach the vertical driven element you have.
>>
>> Perhaps there are more suggestions?
>>
>
>
> There sure are, and one is that your assertion is not wholly correct.
>
> As a Novice in 1957 I used a 40 meter dipole that was never above 10
>feet in height at any point, and while I didn't make WAS on 40 CW I sure
>came close in the three months that I was a Novice. More recently, I use
>as my motorhome portable antenna, an autotuner-fed 60 ft wire that
>attaches at the roof level of my motorhome and runs to whatever support
>I find available 60 ft away, usually a collapsable 10 ft aluminum tent
>pole that I carry for the purpose, lashed to a tree, shrub or whatever.

>The counterpoise is 40 ft of enameled copper wire lying on the ground
>under the motorhome, laid in a rough configuration to fit under it. I
>works well, and I never have problems making contacts.
> Sure, the major radiated component is something like NVIS. Its
>inevitable, but there is still a useful component that takes off at
>lower angle. And for ~200 - 500 miles it works very well as NVIS.
> I also have a Hustler whip system on th back bumper (fiberglass tail on
>the MH) to use when not set up in a campground.
>
> I'm not sure I'd want the antenna incorporated into my motor home
>rubber roof for other ressons, though. One is the possiblity of high
>voltages being developed at some frequencies that could cause arcing to
>hidden metal and creating a fire hazard.
> I once read of a ham who had an attic-mounted dipole fed by a 150 watt
>AM transmitter that caught his house on fire with it. That's much more
>likely with a full carrier tramsnitter such as an AM rig than with SSB,
>or even CW, since when an AM carrier is on it just sits there and
>'fries' until standby time. But one still usually transmits full carrier
>at some time when tuning up. It's certainly not out of the question.
>Attic dipoles and any roof antenna installation should be carefully done
>with such hazards in mind keeping the antenna well insulated and
>isolated.
>
>Dick W0EX
>

Excuse me;

What statement that I made did you find incorrect? I can find nothing in yours that either addresses or contradicts it. Yet you begin with an assertion that I am incorrect...

73
Chip n1IR

2736. Re: Satellite antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8v9fq8rto1@iac5.navix.net>
Source record: 176192

Let me suggest an antenna called the Texas potato masher. A quick net search should locate it for you, it is a modified eggbeater.

"Brew99" <bruce-icq@home.com> wrote in message news:0_UR5.11273$3j.3291405@news1.gvcl1.bc.home.com...
> Hello,
>
> Does anyone have a suggestion for a design of antenna to operate satellite
> on 401 or 406 MHz (ARGOS and GOES respectively). I am obviously looking
> for a design which directs most of the energy above the horizon (say from
15
> to 90 degrees). This antenna needs to be physically small (say max. of 3
> feet tall and 1 foot wide) with no ground plane required.
>
> Is a quadra helical design suited for this application? Any web pages or
> other info. with design parameters would be appreciated.
>
> Cheers,
> Bruce
>
>

2737. Re: question, ABOVE (help)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <20067-3A183E2A-101@asg-storefull-1111.public.svc.webtv.net>
Source record: 176193

Any assistance would be appreciated!

2738. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <4EXR5.4359$BL.316676@bgtnsc05-news.ops.worldnet.att.net>
Source record: 176194

That's fine Bill. I simply thought we were having a technical discussion.
I apolgize if you felt lectured and offended.

Steve

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:3A180BE3.4E218CAA@mwci.net...
>
>
> VE9SRB wrote:
>
> > The problem that most people have is that they consider only the steady
> > state conditions and only understand that there is a forward and a
reflected
> > voltage at the line input. The real issue is understanding how these
> > forward and reflected voltages develop.
>
> I know exactly how the steady state is developed, and I don't need (or
want) any
> "lectures" on this subject.
>
> In the steady state the power delivered to a 10 ohm resistor at the output
of
> the amplifier, and the power delivered to the same 10 ohm resistor at the
end of
> a 1 wavelength coax are exactly the same. The amplifier looks out and
sees
> exactly the same impedance in both cases. That is the essence of Johnson's
> equations.
>
> And as for Johnson's Equation 4.23, I understand all of that discussion
and
> derivation as least as well, and (I'm beginning to think) maybe even
better than
> you do. I know that it is a steady state solution and that the final
result is
> exactly and precisely what I have been posting.
>
> Believe it or not, I am an expert on Equation 4.23.
>
> This "thing" is obviously turning into some kind of very unpleasant macho
> pissing contest and dominance game, and I really don't want anything more
to do
> with it.
>

> I stand by what I have been saying, and for me personally that is the
end of
> it.
>
> Bill W0IYH
>

2739. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8v9h3u$sc7$1@plutonium.btinternet.com>
Source record: 176195

Bill said -
> I stand by what I have been saying, and for me personally
that is the *end* of
> it.
==========

Good for you Bill. Well, at least for the time being,
anyway.

;o) Reg.

2740. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a184778.85893579@news.akorn.net>
Source record: 176196

On 18 Nov 2000 01:43:04 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>It doesn't, I had Ringo ranger 2m vertical, which is basically grounded
>"lightning rod" on the top of the tower, tip being about 20 ft up from the 62ft
>boom on the Razor and it did nothing for suppressing the hash.
>The only thing that works is the lower antennas, below another set of antennas
>higher up.
>When you think about it, the top antenna (say at 100 ft) gets hash at 20 over 9
>(just about standard signal level regardless of antennas used), while lower
>antenna (say at 50 ft) gets NOTHING, zilch, absolutely quiet with no traces of
>hash. You would think that Hash "signal" 50 ft higher would be also "heard" by
>the lower antenna, but it isn't!

The reason you can't hear the noise, is the energy of the noise is
very very low. It is caused by tiny corona discharges from the
elements in the antenna. All the charges do is leak off into the air
around the antenna. It isn't a "path" up to the clouds in the sky, if
it was you'd be in deep crap when the ionized air suddenly discharged
the cloud!

That's why a quad is purported to be quieter than a yagi. The corona
on a quad is at a low impedance point, not like a yagi with the tips
of the elements sticking out in the air. The yagi is closer matched to
the exteremly low current high voltage discharge caused by the high
voltage gradient between the earth and the clouds.

The LAST thing you want to do is add more corona near the antenna,
although if you add it higher up it will "neutralize" the charge seen
by the lower antenna and stop it from having corona streamers.

73 Tom

2741. Re: Satellite antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Schneider <js@sprintmail.com>
Message-ID: <3A184ADD.62A5B040@sprintmail.com>
Source record: 176197

http://members.aol.com/k5oe/ eggbeater2

73's
Jeff

--
http://www.homestead.com/KK5UFO/

2742. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A184CEA.FF7BA307@mwci.net>
Source record: 176198

VE9SRB wrote:

> That's fine Bill. I simply thought we were having a technical discussion.
> I apolgize if you felt lectured and offended.
>
> Steve

Thanks, Steve. I just feel that I have nothing more to talk about on this particular topic. I am *really* weary of it and I am not an enthusiastic journeyman-in-training wave mechanic.

Bill W0IYH

2743. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A184A61.5CF8A5D8@IEEE.org>
Source record: 176199

Fred Hambrecht wrote:
> If it exists, where does it go?

I don't understand the question. The reflected energy stored in the transmission line is dissipated/radiated *AFTER* the transmitter is disconnected. I've already shown that 300 joules is stored in a one second long transmission line when the SWR is 5.83:1 and the transmitter is putting out 100 joules/second. There is a transient condition when the transmitter is turned off. The reflected energy is dissipated and radiated during that transient time.
--
http://www.mindspring.com/~w6rca

2744. Re: Jewishness has been ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Solomon Fernblatt <fernblatt@spicednondairyham.com>
Message-ID: <V7YR5.1636$dG2.6036@news3.atl>
Source record: 176200

Gray Frierson Haertig <gfh@haertig.com> wrote in message
>
> Using a computer on Shabbat would not be condoned in most orthodox
> communities; allowed in some conservative communities and not allowed in
> others; and not be a problem in most reform communities.
>

You could always have nice Shabbots Goy do the work for you!
Yea, I know it is not nice to make fun of God's Law, but *shrug*
with this newsgroup, I had to say something amusing with the thread.

Surprisingly this has not been a really vicious thread yet, and am glad.
Is nice to NOT see the folks on this newsgroup hacking each other
into slimey gobbits for once.

Sol

2745. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <QuYR5.10939$en6.9258@newsfeed.slurp.net>
Source record: 176201

Clap your hands once when you are in the center of a 10,000-ft radius
totally-reflecting sphere. What, when, and how many times do you hear ..
it, or them .. ?

K3BHJ

2746. Re: Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A185E18.AAE7B343@oio.net>
Source record: 176202

KG4GGX,
Murch made some good tuners. I guess it would depend
on the price...
'Doc

2747. Re: newbie question (Dean)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <16725-3A185C79-83@asg-storefull-1112.public.svc.webtv.net>
Source record: 176203

For a TV I have the Sony 36XBR400 hdtv ready, as for antenna inputs
there is (1) UHF & VHF are combined...

2748. need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: w4th@webtv.net
Message-ID: <13687-3A1859C3-22@storefull-106.iap.bryant.webtv.net>
Source record: 176204

Can someone please email me the instructions on building the 160 20ft
receive loop. I had them bookmarked, but I have lost them.
Thanks and 73
Tom
W4TH

==========
Be sure to visit my web sites.
Tom's Tubes, Svetlana Amateur Radio Amp Tubes.
http://msnhomepages.talkcity.com/ClassifiedsCt/tomstubes/index.html

Ham Radio Homepage.
http://www.geocities.com/bamagramps/

2749. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A186D20.2C2@bellsouth.net>
Source record: 176205

Chuck,

Why not a screwdriver? I have seen in QST, as well as installed these on motorhomes in a semi-horizontal position. They work very WELL! I have even seen them mounted on a hinged mount so they could be used either way--horizontal or vertical. Even heard of motorized raise/lower mechanisms so they could be put into the desired position as well as resonated from the driver's seat!

73

Jerry
K4KWH

2750. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A18722A.73CC@wt.net>
Source record: 176206

ARDUJENSKI wrote:
>
> Chuck,
> Two problems with the dipole on the roof is (1)interaction with metal in the
> motorhome roof/structure and (2) low elevation will give it primarily a
> vertical lobe on most of the lower bands. Now this is not bad if you are
> looking for local coms.
>
> An approach you may want to take is to get a vertical pole and run either an
> inverted vee or inverted-L. I have used an end-fed 66 ft wire fed against the
> ground and was able to work 160-10m QRP fairly well with the max height of 25
> ft.
>
> For a support mast I would recommend you look at getting one of the paint
> extention ploes (you can find at many hardware stores) that is 23ft long. Cost
> is about $39.
>
> For a little more height you can make a telescoping mast from aluminum tubing
> from Texas Towers (about 33-40ft) for under $65.
>
> For your wire you can use the STEALTH flexweave wire about #26 guage from
> WIREMAN.
>
> Alan KB7MBI in Woodinville, WA

I'd go with your idea if possible. A dipole at 20-25 ft will work fine
for 85% of the stuff. In the past I just tried to camp next to a few
trees, and I would string a dipole between tree branches. Rarely was the
antenna over 20 ft, ans this was usually 80/40 meter dipoles. Worked
great for what I do. "Mostly close in" What I have now, but haven't
used yet is a drive on mast support. A friend of mine made it from ship
steel down at the shipyard. It's indestructable. It's made to be a
perfect fit with either fence top rail, or the rat shack mast sections.
I use the fence rails myself as they are cheaper. The only drawback to
fence rails are they are 10 ft long usually, and the rat shack masts can
be had in 5 ft sections. Maybe easier to carry. I can drive over this
ramp thing, and the mast is not going anywhere. So now I can have a good
mast anywhere I go. No trees required.
And the mast holder could be used for about any type antenna. You could
even have a small beam, and turn the mast to point. It's that sturdy.
Also I'd expect any antennas mounted close to metal to work poorly. For
about the same reason you don't want the coils or whip on a bugcatcher
close to metal. You'll couple to the body and will act like a big RF
soak...g The SWR etc, might look fine, but the radiation will be in the

league of a dummy load. I'd try to avoid that at all costs. A dipole strung away from the camper likely wouldn't have this problem to any large degree. The drive on mast holders can be bought in QST I think from one place. Fairly similar to what I have. Luckily mine was free. Helps to know people at the shipyards where they repair ships...g I did a little work there running a plasma cutter for a while. Cuts thick steel like butter and puter controled. It cut the base of my ramp. MK
--
http://web.wt.net/~nm5k

2751. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A187D0E.15B1EC8B@oio.net>
Source record: 176207

Tim Taylor wrote:
>
> I have access to both stainless steel and galvanized steel hardware such as
> shackles, bolts and pins available for use in guying my tower. Is there any
> reason to prefer galvanized steel over stainless (other than price)? Is
> there a fatigue or dis-similar metal issue with stainless?
>
> Thanks,
> Tim

Tim,
There really isn't any need for stainless steel hardware. The
common galvanized hardware will work fine. Dis-simular metal is
not an issue.
'Doc

2752. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12811-3A188A27-38@storefull-112.iap.bryant.webtv.net>
Source record: 176208

Otto Schtierlitz wrote:
"If you multiply the current passing through the antenna (A) to the antenna`s height (m), how is this called?"

Field intensity of an "elemental antenna" (small in terms of wavelength) is directly proportional to the current. Field intensity is also directly proportional to the length of the element.

The length should only be a few degrees or less so that the current may be, for purposes of calculation, considered uniform.

An appropriate name for the product of current and length is: Ampere Meters

The (A) and (m) Otto gave hint at this result, but it needs the qualification of short with respect to wavelength, but no limit on current.

Best regards, Richard Harrison, KB5WZI

2753. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8va383mf1@bob.news.rcn.net>
Source record: 176209

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:v8TR5.502$El3.48475@newshog.newsread.com...
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Peter Bertini" <commquart@erols.com> wrote in message
> news:8v4m8ljbn1@bob.news.rcn.net...
> >
> > "B Nehl" <k0emt@dbbear.com> wrote in message
> > news:5ncb1tomtk7lm517pda7pb2arlqgunln4v@4ax.com...
> > > Thanks for all the comments guys.
> > > > The Army engineer also suggested I coat the bottom section with
> > > oil to help with rust prevention.
>
> The towers (ROHN) are double hot dipped galvanized. There is nothing
(that
> I've ever seen) in their engineering and parts catelog about coating with
> oil, or tar.
>
> Roger (K8RI)
>
> > >
> > > >
> > > Check with Rohn on this, but I believe they recommend coating the tower
> with
> > tar
> > {roofing cement?) where it will be in contact with the cement. It
should
> > also be
> > mentioned in the spec sheets.
> >
> > Pete
> >

The following is quoted in part from the Rohn Engineering Data and
Specifications Handbook;
copyright 1970 by Rohn Mfg. Co.

From the page titled INSTALLATION INSTRUCTIONS FOR #25 FOLD-OVER TOWER
dated Sept. 15, 1969...

"..... Before pouring the concrete, coat the base section in an area about
3" above and 3" below
the space where the top of the concrete base will be, using a waterproof
asphalt type material..."

Regards

Pete, K1ZJH

2754. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: wayne_N3TNS
Message-ID: <3A1891B3.35339005@attglobal.net>
Source record: 176210

Well, I was certainly optimistic for a short period of time, Chip was restraining himself, but some of them couldn't leave it alone.

It's a shame this carries on like this, maybe you guys should look back through the threads and see exactly where this thing hit critical mass... it's pretty obvious!

Maybe in the future we can try to control ourselves... it isn't always Chip's fault!

To Everyone, a Blessed and Thankful Thanksgiving!

Wayne

email wgvideo at attglobal dot net

2755. Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8va3uu$4b4$1@bob.news.rcn.net>
Source record: 176211

Anyone have information on why Rohn discontinued the FK series?

Was it a lack of sales, or safety related issues?

I called Rohn the other day looking for info on my FK25 foldover section,
and the person I spoke to didn't know they ever made a foldover kit for the
25G or 45G series!

I need info on the hinge bolts used in the FK25, size, specs, etc. so I can
replace
the old ones in the used section I just picked up with proper new ones.

Pete

2756. Base Insulator for Rohn 25G Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: WR4T <wr4t@fuse.net>
Message-ID: <t1h5pbfp990rbd@corp.supernews.com>
Source record: 176212

I was wondering if any one has any ideas on how to fabricate a base insulator for a 160M vertical made from ROHN 25G. The factory base insulator requires a special tapered tapered 10ft base section and then an expensive insulator together they run over $1200. I was thinking about other ways to fabricate an insulator.

One thought was to use a large sheet of HDPE under the standard BCP25 concrete base plate. However the HDPE plate about 8" thick 22x22 was over $600 dollars.

Any ideas thoughts on a less expensive alternatives (Not interested in shunt feed need insulated base).

Thanks,

T.R. WR4T

2757. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14401-3A1899D2-86@storefull-114.iap.bryant.webtv.net>
Source record: 176213

Doc wrote:
"Field strength---"

I agree that field strength is proportionally produced so long as the height (length) of the antenna is only a few degrees or less.

It happens because a straight conductor carrying an electric current produces a magnetic field proportional to the current. A varying current creates a varying magnetic field which begets a varying electric field which creates a varying magnetic field etc.

The magnetic field intensity is: H.
H = 2I / r
I = amperes
r = distance from the wire in meters

The magnetomotive force around the current carrying wire is 4 pi times the current. No limit is placed on distance from the wire, this is an integral and it makes no difference how large the circle around the wire is.

The question didn`t specify which product was to be named. The immediate product is volts times amps, but this produces field strength

Best regards, Richard Harrison, KB5WZI.

2758. Re: yaesu atas-100 for base use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: WE0H <mikereid1@uswest.net>
Message-ID: <Pa1S5.2381$IR6.418990@news.uswest.net>
Source record: 176214

If you can get quarter wave (234/freq in mhz), or odd multiples of a quarter wave, ground radials laid out in as uniform of a pattern as you can get, this will work better. 120 radials would be nice, but just put down at least 4. I have 48 65' and 48 135' radials under my 75 and 160 inverted L's. They work very good.
Good luck, Mike> WE0H.

2759. Re: newbie question (help)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8va7afmis1@bob.news.rcn.net>
Source record: 176215

"~J~" <JER67@webtv.net> wrote in message
news:20073-3A182C78-17@asg-storefull-1111.public.svc.webtv.net...
> I recently installed a WINEGARD CA-7210 ghost kller antenna on my roof
> with a philips powered rotator. I got all the VHF to come in good, but
> NO UHF channels are coming in... Any help would be appreciated!
>
> ~J~
> BOSTON, MA. 02135
>
If you have a recent manufacture set, see if it is cable ready.. If so,
you may have the switch in
the CABLE rather than the ANT positition. Cable channels above VHF are
different than the
television frequencies.

Peter

2760. Re: Where'd the messages go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8va849rnr1@slb1.atl.mindspring.net>
Source record: 176216

Roger Halstead <rdhalste@tm.net> wrote in message
news:Q71S5.57$7d.5969@newshog.newsread.com...
> In the last few days I've made a number of posts to RRAA. A number of
them
> have disappeared.
>
> I read one a few minutes ago (posted earlier today). Then went back to
> check some comments. I came up with the message that the post is no
longer
> on the server. This has happened with over 4 posts today.
>
> Any ideas?
> Didn't think I'd pissed any one off, but those posts are going somewhere.
>

They are converted into heat in the fiber optic cables.

Yerpal, Corry
--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

2761. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14402-3A189F44-42@storefull-114.iap.bryant.webtv.net>
Source record: 176217

David, K3BHJ wrote:
"Clap your hands once when you are in the center of a 10,000 ft radius totally reflecting sphere."

You will hear echos repeat until the clapper soaks up so much sound that it`s no longer perceptible. Sound velocity depends on several variables and we don`t know how absorbant the clapper is.

Best regards, Richard Harrison, KB5WZI

2762. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <14401-3A18A829-87@storefull-114.iap.bryant.webtv.net>
Source record: 176218

Tim Taylor wrote:
"I have access to both stainless steel and galvanized steel hardware
such as shackles, bolts, and pins available for use in guying my tower."

Use the galvanized hardware if you ever intend to loosen or tighten any
threaded parts later on. Stainless deforms and binds. Galvanized does
not.

Best regards, Richard Harrison, KB5WZI

2763. Re: What does QSO mean?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:12:02 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A171A94.2D6D0BA2@dvol.com>
Source record: 176091

Dick Carroll wrote:

>
> Extending the story of my years with the Highway Patrol to this
> subject, on occasion we would find a ham working CW on the 40 meter band
> interfering with one of the several receivers we continuously monitored
> in the 42 mHz range, from the 6th harmonic of his signal. You'd be
> surprised how little radiated energy it takes to open the squelch on a
> sensitive FM receiver. I soon learned to keep a ham callbook in the
> drawer so that I could quickly find who the culprit was and get him on
> the phone. To copy his callsign, I'd just openthe squelch on the
> receiver he was hitting and capy the noise quieting. Worked quite well,

>
sheeesh . .
>

> until we moved to a new building with newly installed equipment which
> had NO consolemounted squelch controls. All you could hear would be a
> "thumppity, thump thump" sound which was not possible to copy as Morse
> code

>
New, improved radios."
>
> I soon learned to take a walkie talkie or a signal generator and

> provide a beat note.
> I don't know what they do nowdays. There's no one left there who can
> copy CW. But maybe they don't have such interference these days due to
> lessened activity on 40 CW.

>
Are they still using 42 Mhz? All the PDs around here moved up the spectrum years ago
although I think the fire board is still in the 40-50Mhz band. .
>

>
> At one time early on I lived a couple blocks from the station, and a
> couple of times *I* got the call, while beeping at home on 40, and soon
> learned to carefully avoid a couple of particular discrete frequencies
> there.
> Since we used a number of remote talk-in repeaters as well as the
> local receivers, there was a lot of opportunity for this sort of
> interference over all of the state. At that, it didn't happen often.

>
w3rv

2764. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:32:49 UTC
From: Colin Marks <cbm@zip.com.au>
Message-ID: <3a171fd5.7dbd@nancy.pacific.net.au>
Source record: 176093

Tnx Chip for ur further comments. All noted.
Colin VK2LV Sydney
Fractenna <fractenna@aol.com> wrote in message
news:20001118083503.22431.00000370@ng-ff1.aol.com...
> >Thanks to all who responded to my posting. Because of continued quite
good
> >receiving performance I think the problem is most likely an open outer
braid
> >connection in one of the co-ax joins. The balun is a Japan RAK rated at
4KW
> >ssb and 2KW cw so the power available to me should not trouble it. Anyway
I
> >think the antenna will have to come down for proper checking....
> >Thanks again.
> >73 Colin VK2LV Sydney
> >Colin Marks <cbm@zip.com.au> wrote in message
> >news:3a13a119.13273@nancy.pacific.net.au...
> >> I use a half-wave dipole antenna tuned for 20 m. band and fed with
about
> >50
> >> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the
centre
> >of
> >> the antenna. There is a RAK balun at the antenna centre. I have had
> >> excellent results with swr never more than 1.3 to 1 until recently the
swr
> >> suddenly shot up to about 5 to 1 - a level to high for me to operate.
This
> >> happened in the middle of a QSO. I operate ssb and the power would be
> >about
> >> 400 watts pep.(legal limit here) but sometimes possibly tested briefly
at
> >> 700.
> >> The antenna is very difficult to access and I do not wish to take it
down
> >> for testing unless unavoidable.
> >> The fault must be either in the balun (which is fairly new) or in a
co-ax
> >> connector.
> >> My question : can I check the balun from the shack in some simple way
to
> >> avoid taking down the antenna?
> >> From the shack the two sides of the co-ax feedline test open-circuit.
This

> >> seems to indicate a fault because I think both sides of the balun
should
> >be
> >> short circuit to DC (open circuit to RF). This could mean a break in
> >either
> >> a connector or internally in the balun.
> >> Any comments would be appreciated - preferably by email.
> >> Thanks.
> >> 73 Colin VK2LV Sydney Australia
> >>
>
>
> Yes; as I said.
>
> Here's what I do to assure braid continuity at the feed over a long
period of
> time:
>
> 1) solder the braid as well as I can;
> 2) use copper tape to sheath the braid and connector;
> 3) cover with a second sheath of coax seal or good electrical tape. Or,
better
> yet, shrink wrap.
>
> Water is an absolute killer of coax! How it gets in is beyond my ken, but
I've
> seen oxidation 20 feet in sometimes.
>
> I just replaced some coax after only 2 1/2 years. Its insidious too,
because
> often times, with the braid connected, the oxidation adds to ohmic loss
and can
> actually improve the SWR in some cases--while cutting back gain
(slightly).
>
> But I am sure there are others with worse coax war stories.
>
> Best of luck on the antenna!
>
> 73
> Chip N1IR

2765. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:32:56 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A171F7E.4DFD8571@dvol.com>
Source record: 176092

Dick Carroll wrote:

>
> Yep, now -thanks to you- I know. I've already got the guy cable, and if
> I can still climb that thing next spring your advice will be followed.

>
Climbing "issues" are one of the big reasons I'll be putting up some small crankup next time
around. Heh.
>

>
> Now I understand the dynamic forces that come to play on the
> installation.
>
> Fact is I have only a medium size tribander just above the tower top,
> with a single 2meter 11-eleven element and a 5/8 wave 2m GP, all on an
> 8ft mast. I've been thinking about replacing all that anyway, so next
> spring looks like the time.
> Tnx, Brian.

>
Go for it, you'll sleep better.
>

>
> 73, Dick

>
Brian

2766. Re: Testing a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 00:36:33 UTC
From: fractenna@aol.com
Message-ID: <20001118193633.22443.00000445@ng-ff1.aol.com>
Source record: 176094

>Tnx Chip for ur further comments. All noted.
>Colin VK2LV Sydney
>Fractenna <fractenna@aol.com> wrote in message
>news:20001118083503.22431.00000370@ng-ff1.aol.com...
>> >Thanks to all who responded to my posting. Because of continued quite
>good
>> >receiving performance I think the problem is most likely an open outer
>braid
>> >connection in one of the co-ax joins. The balun is a Japan RAK rated at
>4KW
>> >ssb and 2KW cw so the power available to me should not trouble it. Anyway
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>> >think the antenna will have to come down for proper checking....
>> >Thanks again.
>> >73 Colin VK2LV Sydney
>> >Colin Marks <cbm@zip.com.au> wrote in message
>> >news:3a13a119.13273@nancy.pacific.net.au...
>> >> I use a half-wave dipole antenna tuned for 20 m. band and fed with
>about
>> >50
>> >> feet of RG8 co-ax plus about 25 feet RG58 for the last run to the
>centre
>> >of
>> >> the antenna. There is a RAK balun at the antenna centre. I have had
>> >> excellent results with swr never more than 1.3 to 1 until recently the
>swr
>> >> suddenly shot up to about 5 to 1 - a level to high for me to operate.
>This
>> >> happened in the middle of a QSO. I operate ssb and the power would be
>> >about
>> >> 400 watts pep.(legal limit here) but sometimes possibly tested briefly
>at
>> >> 700.
>> >> The antenna is very difficult to access and I do not wish to take it
>down
>> >> for testing unless unavoidable.
>> >> The fault must be either in the balun (which is fairly new) or in a
>co-ax
>> >> connector.
>> >> My question : can I check the balun from the shack in some simple way
>to
>> >> avoid taking down the antenna?
>> >> From the shack the two sides of the co-ax feedline test open-circuit.
>This

>> >> seems to indicate a fault because I think both sides of the balun
>should
>> >be
>> >> short circuit to DC (open circuit to RF). This could mean a break in
>> >either
>> >> a connector or internally in the balun.
>> >> Any comments would be appreciated - preferably by email.
>> >> Thanks.
>> >> 73 Colin VK2LV Sydney Australia
>> >>
>>
>>
>> Yes; as I said.
>>
>> Here's what I do to assure braid continuity at the feed over a long
>period of
>> time:
>>
>> 1) solder the braid as well as I can;
>> 2) use copper tape to sheath the braid and connector;
>> 3) cover with a second sheath of coax seal or good electrical tape. Or,
>better
>> yet, shrink wrap.
>>
>> Water is an absolute killer of coax! How it gets in is beyond my ken, but
>I've
>> seen oxidation 20 feet in sometimes.
>>
>> I just replaced some coax after only 2 1/2 years. Its insidious too,
>because
>> often times, with the braid connected, the oxidation adds to ohmic loss
>and can
>> actually improve the SWR in some cases--while cutting back gain
>(slightly).
>>
>> But I am sure there are others with worse coax war stories.
>>
>> Best of luck on the antenna!
>>
>> 73
>> Chip N1IR
>

No worries, mate:-)!

73
Chip N1IR

2767. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 02:26:34 UTC
From: fractenna@aol.com
Message-ID: <20001118212634.20345.00000418@ng-bj1.aol.com>
Source record: 176095

>Yuri Blanarovich wrote:
>>
>> More TROLL, TROLL, TROLL
>> SUE SUE SUE
>> LAWYER LAWYER, LAWYER
>> garbage, garbage, garbage
>>
>> go to Florida and help Al-bore and Lie-berman to "sue - win" presidency
>
>I think they have the same attorney. I notice now he wants a rematch on
>10m. What happened last time? I tuned and tuned and tuned again last
>time with not a peep. I don't see how I could have missed him being as
>he should have had a signal strong enough to peel paint according to his
>description. My old TS-830 works to utter perfection, so doubt that was
>a problem. Also I was listening for any AMEX types that talk 22,056 wpm.
>Heard a few, some even in 1 land, but no chirps from chip. I guess when
>the big Dodge City gunfight was going on, he was ducking in at the long
>branch. MK
>--
>http://web.wt.net/~nm5k
>

Which date, Mark? As always, I am happy to excerpt my log.

73
Chip N1IR

2768. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 03:52:35 UTC
From: dennis@wawa.juniper.net
Message-ID: <8v7iq3$27v5$1@heap.juniper.net>
Source record: 176096

VE9SRB <srbest@worldnet.att.net> wrote:
>In the transmission line problem, the load impedance the amplifier "sees"
>has everything to do with the waves traveling in the TL. The only impedance
>that the amplifier ever "sees" is the transmission line characteristic
>impedance ZO. It never really ever "sees" any other physical impedance.
>From the perspective of your discussion above, just like power, the steady
>state load or line impedance at the amplifier output is a derived quantity
>and it too is a function of the traveling voltages and currents.

Steve,

After Bill Sabin's response I am so keen to see the punch line for
this that I want to ask with an example I can understand.

Suppose I plug a transmission line terminated by something I'm unaware
of into my amplifier and turn it on. At the amplifier output terminal I
measure a voltage of 80V, a current of 1.6A and a phase angle of 36.9
degrees between them. I can immediately tell that the amplifier is
delivering about 102W to its load. If I know Z0 of the transmission line
is 50 ohms I might also be able to deduce that the VSWR is about 2:1, the
forward power is about 115W and the reflected power is about 13W, but
there doesn't seem to be any way for the amplifier to know this.

Suppose I now turn off the amplifier, unplug the transmission line and
replace it with lumped components with an impedance of 40+j30 ohms tied
directly to the amplifer output terminal. I turn the amplifier back on
and at the output terminal measure a voltage of 80V, a current of 1.6A
and a phase angle of 36.9 degrees between them. I can tell that the
amplifer is again delivering about 102W to the load.

Is there any possible way, from inside the amplifier, to tell any
difference at all between these two cases in the steady state? If the
amplifier "sees" Z0 in the first case isn't it seeing something that
doesn't exist in the second case? If I didn't tell you the transmission
line Z0 was 50 ohms in the first case, how could you have even determined
that this was what the amplifier was "seeing" from the only conditions
visible inside the amplifier (i.e. the voltage and current at its output
terminals)?

It seems to me that Bill Sabin must be precisely correct. The amplifier
can't "know" whether this is a transmission line problem or not from
anything that is measureable at its output. It can't determine Z0 from
anything it can see at the terminals in steady state, and if Z0 is
irrelevant to the operation of the amplifier then how could voltage
and current "waves" matter to it?

>From the perspective of the internal components in the amplifier, there are
>two "sources" in the system. One is the internal amplifier forward driving
>source and the other is the rearward driving source created from the
>reflections that arrive at the amplifier output. In all cases, except where
>the amplifier has a purely reactive output impedance, some level of voltage
>and current travel rearward into the amplifier.

The amplifier sees 80V and 1.6A out of phase by 36.9 degrees at its
output terminals. These are scalar (or phasor) voltage and current
values, they aren't "travelling" anywhere. It can't "see" Z0 in steady
state as far as I can tell, or distinguish a transmission line problem
from a circuit problem, so how could the distinction possibly matter to
its operation? Where's this other "source" when it is lumped components
instead of the transmission line?

I understand that amplifiers will run at higher output currents and/or
voltages higher when delivering power to loads other than their nominal
design output impedance, and that this may cause them to run less
efficiently or even suffer damage. This is what Bill Sabin said. I'm
still willing to believe there is something more to know about this
but I'm really not getting what it is.

Thanks,
Dennis Ferguson

2769. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 04:27:25 UTC
From: dinod@deltanet.com
Message-ID: <NEIR5.212942$g6.97643281@news2.rdc2.tx.home.com>
Source record: 176097
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Speaking of Force 12, I just received their catalog today! I was
blown away! Its not a standard item/price book. It is actually
educational!

Anyway, people have been talking about verticles in this thread. I
Highly and inthusiastically suggest you check out Force 12's V-3 or ZR-3!

I have no opinions as I have not operated this antenna. BUT, I'm
impressed with what I've read and the opinion of AA6PW who has run
Force 12 antennas.

They deserve a look!

Dino

>i couldent get parts for a a3s. they wouldent call back on there phone game
>and wouldent email/phone me back on there website game so i now own a brand
>new force12 :)
>
>N8TDL

2770. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 06:11:23 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A176ED3.BF7DA755@dvol.com>
Source record: 176098

Richard Harrison wrote:

> Mark Keith wrote:
> "Anyway, these theories make more sense to me than charged particles
> hitting the antenna."
>
> Terman agrees:
> "The term "precipitation static" denotes a type of interference
> frequently observed in an airplane passing through snow or rain. Under
> such circumstances, the airplane may become electrostatically charged to
> such a high potential with respect to the surrounding space that a
> corona discharge breaks out at some sharp point on the plane. The
> interference that this corona discharge produces with radio reception,
> termed "precipitation static" is particularly serious at short-wave and
> lower frequencies.
>
> Precipitation static can be minimized by the use of antennas that are
> either insulated wires or shielded loops, by equipping the plane with
> dischargers that provide a noninterfering means of getting rid of the
> charge being acquired by the plane, and locating receiving antennas as
> far as possible from the corona discharges."

>
Check out any serious aircraft and you'll find what look like little
"probes" with sharp points aimed aft, usually somewhere on the vertical or
horizontal stabilzers or both and occasionally on the ailerons.
>

>
>
> Best regards, Richard Harrison, KB5WZI

>
w3rv

2771. RS 2006 Scanner, RS 20-043 Discone, RG-58 Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 06:28:48 UTC
From: Pervert_Extraordinaire <valued_customer@att.com>
Message-ID: <3A179D45.6AB56748@att.com>
Source record: 176099

<Idiot Mode>

I recently purchased a Radio Shack Pro 2006 Scanner. I've been
monitoring typical newby stuff like 800MHz trunked emergency
etc. I've just begun investigating satallite monitoring like
the ISS. My present antennae setup is a recently purchased
Radio Shack 20-043 discone located at ground level inside my house.

My questions are:
How much better will my reception be with the antenna in the attic?
How much better will my reception be with the antenne outside ~30' up?
I have about 40' of RG-58. Is this coax length overly excessive?
Does this antennae have to be grounded? Via a metal mast?
Are the typical Radio Shack solderless connections sufficient?
Should I disconnect the stock arial when using the 20-043?

Thanks for tolerating my ignorance.

</Idiot Mode>

2772. Re: G5RV Misteries unraveled at last.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 06:30:52 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A177395.7F2BF4EA@att.net>
Source record: 176100

Careful, Cecil - Reg's is longer than yours! <:}

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Cecil wrote:
>
> Reg Edwards wrote:
> > And I've just noticed my G5RV is about 12 inches longer than
> > yours ! Which should be added to the list of differences in
> > computer input data.
>
> Looks like your program does a darned good job, Reg. Isn't a
> G5RV standardized at 102 feet?

2773. Re: yaesu atas-100 for base use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-19 23:54:00 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8v9pde$292f$1@news.kabelfoon.nl>
Source record: 176022

Hi Joe,

Why don't you use a metal table or some old oil drum. Buy some paint and
some brushes and decorate it with nice flowers and butterflies. It works
well and I can tell you that from my own experience with other car
antenna's. You can also use some metal boards that they use for shelves.
Just take precautions against corrosion.

Good luck and happy painting.
Adam

Joe Ponkey <jponkey@mediaone.net> schreef in berichtnieuws
iPRR5.13487$JU.473995@typhoon.mw.mediaone.net...
> i ahve a atas-100 antenna and would like to use it as a base station
> antenna. space is limited. i was told i need to spread out 8 32' radial
> wires as a ground plane or counterpoise. is this right?
>
> can anyone advise me on the proper install of this ant for stationary use?
> i'd hate to have to put a $100 shell of a vehicle in my back yard to mount
> it on just to have the proper ground.
>
>

2774. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A19A6DD.6020008@hiwaay.net>
Source record: 175919

Peter- I heard that it was because of insurance, among 'other things'- I dont really know. I checked the drawings in the Rohn book, and there is no mention of the bolts. They sell the folding assembly as a unit, according to the catalog.

The bolts on mine were in very good shape. It was first erected in the early 70's, and I got it about two years ago. In fact- all components except the winch were fine.

If you get in an absolute panic- I will go up and measure the bolts. just remember- it will have to be behind Iris's back (I'm 73). {that IS a real offer)

There are a couple of very helpful dealers on the 'TowerTalk' reflector, that can probably help you-- try there.

Bill-W4BSG

Peter Bertini wrote:

> Anyone have information on why Rohn discontinued the FK series?
>
> Was it a lack of sales, or safety related issues?
>
> I called Rohn the other day looking for info on my FK25 foldover section,
> and the person I spoke to didn't know they ever made a foldover kit for the
> 25G or 45G series!
>
> I need info on the hinge bolts used in the FK25, size, specs, etc. so I can
> replace
> the old ones in the used section I just picked up with proper new ones.
>
>
> Pete

2775. Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: WolfgangS <schliess@gmx.de>
Message-ID: <t1jbfoka64053f@corp.supernews.com>
Source record: 175920

Hi OM&#65533;s
i looking for a method to calculate the L (how much uH) from form 1 loop.
(for a magnetic antenna)

I have one, but is this ok ??

L/nH =2*pi*{(2.3*log((8*D)/d)-2)*D}

Has anyone a other idea ???

Tnx a lot for help me.

cu
Wolf aka DL6RCN

2776. Through-the-glass 2M antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Richard Smith <rsmith@NOSPAMplaneteer.com>
Message-ID: <a9cS5.321$s3.273@tor-nn1.netcom.ca>
Source record: 175921

Can anybody give me a rough idea of how well/bad these antennas perform. I am not looking for the best in DX, just something fairly discreet that will allow me to get on the local repeater while driving.

Also, my radio receives airband. Will it receive okay enough through one of these antennas ?

Thanks in advance,

Richard.

--
Please remove the "NOSPAM" from my address if replying via email.

2777. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8vcasnnph1@slb6.atl.mindspring.net>
Source record: 175922

"Fractenna" <fractenna@aol.com> wrote in message
news:20001120045901.24633.00000706@ng-cd1.aol.com...
> >
> >Well, I was certainly optimistic for a short period of time, Chip was
> >restraining himself, but some of them couldn't leave it alone.
> >
> >It's a shame this carries on like this, maybe you guys should look back
> >through
> >the threads and see exactly where this thing hit critical mass... it's
pretty
> >obvious!
> >
> >Maybe in the future we can try to control ourselves... it isn't always
Chip's
> >fault!
> >
> >To Everyone, a Blessed and Thankful Thanksgiving!
> >
> >
> >Wayne
> >
> >
> >email wgvideo at attglobal dot net
>
>
> Well Wayne,
>
> Here you go blaming the victim again.
>
> Please stop this. Its only makes me look bad. I will never, ever, ever,
accept
> a premise that I am the person portrayed here, for the simple reason that
I am
> not that person.
>
> I do not wish to convince you or anyone else of that: taking as an
assumption
> that a person is worthless, evil, and so on, until proven otherwise is so
> foreign from the value system I grew up with that I cannot, and will not,
> entertain it.
>
> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
here.
> Any more than you, or your mother, or your son should.

>
> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
>
> With best Wishes,
>
> Chip N1IR

About the only thing that makes sense now is that you have shown yourself to be a moron. May I ask WHY in the heck you are attacking someone that posted a message siding with you and condemning others for their posts about you?

> Here you go blaming the victim again.

What? He SPECIFICALLY says, "Chip was
restraining himself, but some of them couldn't leave it alone." and, "it isn't always Chip's
fault!" Sounds more like you crying about being a victim again.

> Please stop this. Its only makes me look bad. I will never, ever, ever, accept
> a premise that I am the person portrayed here, for the simple reason that I am
> not that person.
>
> I do not wish to convince you or anyone else of that: taking as an assumption
> that a person is worthless, evil, and so on, until proven otherwise is so
> foreign from the value system I grew up with that I cannot, and will not,
> entertain it.

What the hell are you going on about here? He didn't portray you as anything. Yet again it is you that is making you look bad. Are you feeling a little guilty about something? It seems thou doth protest far, far too much.

> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations here.
> Any more than you, or your mother, or your son should.

I, my mother and my not yet conceived son have never declared ourselves to be experts in any NG. We have not made 2600 posts to this NG since dejanews last started recording. We have never given "public notice" of anything in this or any other forum. We have never threatened to sue half a dozen or more people in any NG. We have never made it painfully clear what our profession was in an attempt to give our opinion more weight in any NG. We don't have a persecution complex.

Hope this helps,
kb9wfk

2778. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Znospam+noZs_0011@hpb13799Z.Zboi.hpZ.com.invalid
Message-ID: <slrn91jbno.co5.Znospam+noZs_0011@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 175923

On Mon, 20 Nov 2000 17:23:27 +0000, Ian White, G3SEK <G3SEK@ifwtech.com> wrote:
>Crazy George wrote:
>>seriously abused. About 30 years ago when I first started using stainless,
>>I quickly discovered the need for Loctite or self-locking nuts, but have
>>never had a problem with stainless deforming .
>
>The Loctite is probably why you've had no trouble. The technical term is
>"galling", which is when a very irregularity on one thread plows into
>the facing part, and rolls up material from both sides like a snowball
>which binds the thread. Stainless steel is apparently very prone to
>this.

stainless steel firearms are more prone to galling. Or used to be.
Supposedly the current stainless alloys are much better than they used
to be.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
"Don't Tread On Me!"

2779. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A19B4AD.10A470D5@oio.net>
Source record: 175924

Pete,
From what I've 'picked up', it was because of liability claims,
and a lack of maintenance. The way the public is 'sue' happy, I
don't doubt it....
'Doc

2780. Re: Through-the-glass 2M antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A19BD90.E30@bellsouth.net>
Source record: 175925

Ahhhhhh, well,

I still think at some point you will end up comparing the thru-glass antenna to something else and find yourself VERY disappointed. They work--after a <fashion>--but nothing to write home about. You will find receive to be several db less than a 5/8 wavelength and that even a 1/4 wave whip will beat it. It's, after all, your decision as to how much performance is "enough". Just remember; there are NO shortcuts in performance. You can have "Pretty". You can have "Performance". Almost never do they come in the same package.

73

Jerry
K4KWH

2781. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A19CB7B.B91351D8@IEEE.org>
Source record: 175926

Reg Edwards wrote:
> Why don't yawl put some numbers in the classical
> transmission line formulae and discover, before its too
> late, what really happens.

What really happens in a lossless steady-state purely sinusoidal condition with no modulation? :-) Reg, we know reflections exist because we can see them as ghosts on a TV screen.
--
http://www.mindspring.com/~w6rca

2782. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A19DA11.E046C00A@netscape.net>
Source record: 175927

Roger Halstead wrote:
>
....
> The innermost mast (1 1/2" steel pipe) sets into a conventional
> rotor...Hy-gain 300.
>
> The outer mast is driven via a heavy duty chain drive with the rotor mounted
> external to the tower, or it will when I get that far.
>
> There are several ways which this could be accomplished. Gears, or chains
> being the easiest.

That's sort of what I had concluded.-- that there is no off-the-shelf
equipment available to do it, so it would have to be custom. There
is also the matter of the thrust bearing(s) to take the weight of the
outer mast, and how to lock the rotor and boom(s) to the mast. Both
items seem to suggest welding plates onto the mast, since
throughbolts are not possible.

> As far as I know, no one is currently manufacturing systems like this, but
> there were similar systems a few years back.

I just got relicensed after a 20-year hiatus, and I am finding that
lots of things have changed. Lots of things haven't....

> BTW, extending more than a few feet above the tower top adds greatly to the
> wind load as well as adding a bending moment.

Few people consider that bending moment of a beam on a tall mast
until it's too late. Removing and lowering a hairpin-shaped mast and
the antenna(s) on it can be interesting.

Thanks, and good luck on the installation. Put pictures of it
somewehre for us to see....

--
Jim Fuller

2783. Re: Joseph Willson another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8vcmqpdsa1@slb7.atl.mindspring.net>
Source record: 175928

Umm, That would be Joseph D Willson
If you are going to be a fuck be a complete fuck and get it right.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001120203900.07539.00001565@ng-cs1.aol.com...
> >Subject: Re: Nathan Cohen another thread gone wrong
> >From: "KB9WFK" KB9WFK@mindspring.com
> >Date: 11/20/00 6:03 PM Eastern Standard Time
> >Message-id: <8vcasnnph1@slb6.atl.mindspring.net>
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20001120045901.24633.00000706@ng-cd1.aol.com...
> >> >
> >> >Well, I was certainly optimistic for a short period of time, Chip was
> >> >restraining himself, but some of them couldn't leave it alone.
> >> >
> >> >It's a shame this carries on like this, maybe you guys should look
back
> >> >through
> >> >the threads and see exactly where this thing hit critical mass... it's
> >pretty
> >> >obvious!
> >> >
> >> >Maybe in the future we can try to control ourselves... it isn't always
> >Chip's
> >> >fault!
> >> >
> >> >To Everyone, a Blessed and Thankful Thanksgiving!
> >> >
> >> >
> >> >Wayne
> >> >
> >> >
> >> >email wgvideo at attglobal dot net
> >>
> >>
> >> Well Wayne,
> >>
> >> Here you go blaming the victim again.
> >>
> >> Please stop this. Its only makes me look bad. I will never, ever, ever,
> >accept
> >> a premise that I am the person portrayed here, for the simple reason

that
> >I am
> >> not that person.
> >>
> >> I do not wish to convince you or anyone else of that: taking as an
> >assumption
> >> that a person is worthless, evil, and so on, until proven otherwise is
so
> >> foreign from the value system I grew up with that I cannot, and will
not,
> >> entertain it.
> >>
> >> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
> >here.
> >> Any more than you, or your mother, or your son should.
> >>
> >> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
> >>
> >> With best Wishes,
> >>
> >> Chip N1IR
> >
> >About the only thing that makes sense now is that you have shown yourself
to
> >be a moron. May I ask WHY in the heck you are attacking someone that
posted
> >a message siding with you and condemning others for their posts about
you?
> >
> >> Here you go blaming the victim again.
> >
> >What? He SPECIFICALLY says, "Chip was
> >restraining himself, but some of them couldn't leave it alone." and,
"it
> >isn't always Chip's
> >fault!" Sounds more like you crying about being a victim again.
> >
> >> Please stop this. Its only makes me look bad. I will never, ever, ever,
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> >> a premise that I am the person portrayed here, for the simple reason
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> >I am
> >> not that person.
> >>
> >> I do not wish to convince you or anyone else of that: taking as an
> >assumption
> >> that a person is worthless, evil, and so on, until proven otherwise is
so
> >> foreign from the value system I grew up with that I cannot, and will
not,

> >> entertain it.
> >
> >What the hell are you going on about here? He didn't portray you as
> >anything. Yet again it is you that is making you look bad. Are you
feeling
> >a little guilty about something? It seems thou doth protest far, far too
> >much.
> >
> >> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
> >here.
> >> Any more than you, or your mother, or your son should.
> >
> >I, my mother and my not yet conceived son have never declared ourselves
to
> >be experts in any NG. We have not made 2600 posts to this NG since
dejanews
> >last started recording. We have never given "public notice" of anything
in
> >this or any other forum. We have never threatened to sue half a dozen or
> >more people in any NG. We have never made it painfully clear what our
> >profession was in an attempt to give our opinion more weight in any NG.
We
> >don't have a persecution complex.
> >
> >Hope this helps,
> >kb9wfk
> >
>

2784. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A19DEC6.4050504@hiwaay.net>
Source record: 175929

Cecil just happens to be the latest on the list, according to my server,
so he gets to be the 'most recent reference'- ie, the one I answer.

Funny thing happened when I was looking for a reference to an Amp I saw-
I picked up the January 1995 issue of CQ, which is the 'Collectors
Edition' covering 50 years of Amateur Radio. Gues what the lead article was?

"Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY.
This article has several VERY well worked out diagrams, showing which
way the stuff goes, and where the waves are-

Very helpful- I need to study it, in detail, and compare with the LARGE
stack of print out from the recent "debate" (?)

Bill- W4BSG

Cecil wrote:

> Reg Edwards wrote:
>
>> Why don't yawl put some numbers in the classical
>> transmission line formulae and discover, before its too
>> late, what really happens.
>
>
> What really happens in a lossless steady-state purely sinusoidal
> condition with no modulation? :-) Reg, we know reflections exist
> because we can see them as ghosts on a TV screen.

2785. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1A0961.528CD297@IEEE.org>
Source record: 175930

"Richard A. Miles" wrote:
> CDMA (Code Division Multiple Access) as well as TDMA (Time Domain
> Multipe Access) are spread spectrum modulation schemes and have nothing
> to do with the frequencies used.

TDMA is spread spectrum?
--
http://www.mindspring.com/~w6rca

2786. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1A0AA7.A63CFF9B@IEEE.org>
Source record: 175931

Bill Aycock wrote:
> "Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY.

The scalar magnitude of reflected power is constant given a continuous wave signal but the reflected power does not stay in the coax. Hang a stub on a TV receiver and observe the ghosting which proves that the reflected energy is continuously being refreshed. Reflected power is dynamic and cannot be stored forever.
--
http://www.mindspring.com/~w6rca

2787. Re: New Fangled Antenna Technology?!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: njradiodude@aol.com
Message-ID: <20001120035028.07611.00000608@ng-fy1.aol.com>
Source record: 176037

>>
>
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=497620443

Well, I bid and won the thing. It was an impulse buy, the kid in a candy store syndrome attack. If all goes well, I'll get at least $9.99 worth of sh*ts 'n' giggles when I get it. If anyone has further info on this "ball" antenna, please let me know. For those who are curious, I'll post something here to let you know what it is, and how/why it works (or doesn't). At least now, I have something to leave to my heirs.

Tom KB2FIK
NJRadioDude@aol.com
Bloomfield, New Jersey

2788. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001120045901.24633.00000706@ng-cd1.aol.com>
Source record: 176038

>
>Well, I was certainly optimistic for a short period of time, Chip was
>restraining himself, but some of them couldn't leave it alone.
>
>It's a shame this carries on like this, maybe you guys should look back
>through
>the threads and see exactly where this thing hit critical mass... it's pretty
>obvious!
>
>Maybe in the future we can try to control ourselves... it isn't always Chip's
>fault!
>
>To Everyone, a Blessed and Thankful Thanksgiving!
>
>
>Wayne
>
>
>email wgvideo at attglobal dot net

Well Wayne,

Here you go blaming the victim again.

Please stop this. Its only makes me look bad. I will never, ever, ever, accept a premise that I am the person portrayed here, for the simple reason that I am not that person.

I do not wish to convince you or anyone else of that: taking as an assumption that a person is worthless, evil, and so on, until proven otherwise is so foreign from the value system I grew up with that I cannot, and will not, entertain it.

JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations here. Any more than you, or your mother, or your son should.

KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?

With best Wishes,

Chip N1IR

2789. Re: 70cm turnstile

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001120061805.00962.00000554@ng-cb1.aol.com>
Source record: 176039

>Anyone got a design for a 70cm turnstile with reflector?
>
>Thanks

Check www.6mt.com and look under the 432 tech pages. There is some fantastic information on antenns and other stuff here. There is a turnstile antenna there for 432.
73 de KG4FET Sandor

2790. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Otto Schtierlitz <oschtierlitz@hotmail.com>
Message-ID: <8vb2ih$35q$1@nnrp1.deja.com>
Source record: 176040

Thanks to all who replied! I am not sure I understand everything you said, but thanks anyway. As I said, I had sent all the answers except this particular one before addressing this newsgroup, so most likely I won't get the price. Maybe, if no one of the rest of participants guesses the answer...

There is a possibility that the authors of the quiz did not formulate the question correctly. Meaning that all the efforts mine and yours are in vain.

I'll keep you informed.

Regards,
Otto.

Sent via Deja.com http://www.deja.com/
Before you buy.

2791. Re: yaesu atas-100 for base use?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001120062742.00962.00000555@ng-cb1.aol.com>
Source record: 176041

>i ahve a atas-100 antenna and would like to use it as a base station
>antenna. space is limited. i was told i need to spread out 8 32' radial
>wires as a ground plane or counterpoise. is this right?
>
>can anyone advise me on the proper install of this ant for stationary use?
>i'd hate to have to put a $100 shell of a vehicle in my back yard to mount
>it on just to have the proper ground.
>

There is a ground plane kit available from Yaesu for the ATAS 100 for fixed
station use. I have heard that it works pretty good for what it is.
73 de KG4FET Sandor Proud owner/operator of a Yaesu FT 100 Net control for the
WACKY WINGDING NET ON 28.390 @7:30 EST Please join us

2792. Re: newbie question (Peter)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <20067-3A190739-151@asg-storefull-1111.public.svc.webtv.net>
Source record: 176042

The set has (6) inputs PLUS Cable/Sat & Antenna inputs (antenna as in RG-6)

It should work... What do I do?

2793. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001120070600.24766.00000597@ng-cd1.aol.com>
Source record: 176043

>Short verticals CAN be efficient and useful provided that they are "done right!"<

I'm familiar with Jerry's work. The secret behind the performance of those verticals (besides careful design of the loading system) was that wonderful full-sized radial field underneath!

Rick K1BQT

2794. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001120070937.24766.00000598@ng-cd1.aol.com>
Source record: 176044

>On the back of the Force 12 literature, there is a 3-bulb phased array that has
worked DXCC (if I read it right).<

No coincidence.

Rick K1BQT

2795. Suspend disbelief

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1928A5.9040200@hiwaay.net>
Source record: 176045

I dont really believe this- someone must have told him to make BIG changes in his approach to communication.

Fractenna wrote:
S N I P

> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
>
> With best Wishes,
>
> Chip N1IR

Bill-W4BSG

2796. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22226-3A193499-39@storefull-118.iap.bryant.webtv.net>
Source record: 176046

I wrote:
"The immediate product is volts times amps."
This dummy, I, meant: The immediate product is meters times amperes.

Best regards, Richard Harrison, KB5WZI

2797. Re: newbie question (Peter)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <rTsZOigW5gYxC4DMDDSnzG4m7I+u@4ax.com>
Source record: 176047

JER67@webtv.net (~J~) wrote:

>The set has (6) inputs PLUS Cable/Sat & Antenna inputs (antenna as in
>RG-6)
>
>It should work... What do I do?

Uhh, read the instructions that came with the set :-)

Generally, there is a detailed section on how to connect the antenna
and set it up so you get the vhf & uhf channels.

Bob
k5qwg

2798. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a193f8e_1@news3.prserv.net>
Source record: 176048

Richard:

I have seen you and others make this claim about stainless. I have dozens and dozens of stainless fasteners and other parts in various antenna and support locations and have never experienced this problem, unless they were seriously abused. About 30 years ago when I first started using stainless, I quickly discovered the need for Loctite or self-locking nuts, but have never had a problem with stainless deforming . Of course, I stay within load limits, which are lower than grade 5 steel, but that goes (I hope) without saying. What alloy stainless have you had this problem with, and under what conditions? My friend Torque (who shall otherwise remain anonymous, since he climbs for me) twists off small mild steel bolts regularly and grade 5 occasionally, so I wouldn't trust him with stainless and a wrench anyway.

On the other hand, I have to grease the galvanized turnbuckles every 3 months or replace them every two years, either of which is a pain.

--
Crazy George
Richard Harrison <richardharrison@webtv.net> wrote in message news:14401-3A18A829-87@storefull-114.iap.bryant.webtv.net...
> Tim Taylor wrote:
> "I have access to both stainless steel and galvanized steel hardware
> such as shackles, bolts, and pins available for use in guying my tower."
>
> Use the galvanized hardware if you ever intend to loosen or tighten any
> threaded parts later on. Stainless deforms and binds. Galvanized does
> not.
>
> Best regards, Richard Harrison, KB5WZI
>

2799. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NubS5.8$FT.555@bgtnsc04-news.ops.worldnet.att.net>
Source record: 176049

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:8v7iq3$27v5$1@heap.juniper.net...
> VE9SRB <srbest@worldnet.att.net> wrote:
> >In the transmission line problem, the load impedance the amplifier "sees"
> >has everything to do with the waves traveling in the TL. The only
impedance
> >that the amplifier ever "sees" is the transmission line characteristic
> >impedance ZO. It never really ever "sees" any other physical impedance.
> >From the perspective of your discussion above, just like power, the
steady
> >state load or line impedance at the amplifier output is a derived
quantity
> >and it too is a function of the traveling voltages and currents.
>
> Steve,
>
> After Bill Sabin's response I am so keen to see the punch line for
> this that I want to ask with an example I can understand.
>

Dennis:

I sent a response to this example via e-mail and it bounced. If you don't
mind, could you forward me a valid e-mail address to srbest@att.net and I
will resend my response.

Thanks,
Steve

2800. Re: Base Insulator for Rohn 25G Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <OIbS5.721$9U1.43355@news.inreach.com>
Source record: 176050

Ready made insulators are going to be expensive. However, if you are willing to scrounge around salvage/surplus yards, you will find insulators you can adapt to your project for a few dollars. You can also go to plastics suppliers and check out their stock. You will probably find materials you can use.

I recently picked up (with great difficulty because of its weight) a piece of fiberglas epoxy measuring 4 feet by 4 feet by 2 inches. It weights over 100 pounds and cutting it will be a challenge, but it will make great insulators. It was at a salvage yard and was considered to be of no value because it could not be recycled easily. I got it in trade for some metal scrap I wanted to get rid of anyway.

Use your imagination and a little research and you will probably come up with something inexpensive that will work fine.

Good luck,

Roger K6XQ

2801. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vbhnh$q9m$1@iac5.navix.net>
Source record: 176051

I was trying to be comical Cecil, this was the start of the thread. Someone asked where did the reflected power go. In the future, I will preface all such messages with large letters stating "JOKE ALERT"

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A184A61.5CF8A5D8@IEEE.org...
> Fred Hambrecht wrote:
> > If it exists, where does it go?
>
> I don't understand the question. The reflected energy stored in the
> transmission line is dissipated/radiated *AFTER* the transmitter is
> disconnected. I've already shown that 300 joules is stored in a
> one second long transmission line when the SWR is 5.83:1 and the
> transmitter is putting out 100 joules/second. There is a transient
> condition when the transmitter is turned off. The reflected energy
> is dissipated and radiated during that transient time.
> --
> http://www.mindspring.com/~w6rca

2802. Re: Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <8vbi38$1ug$1@news.tribune.com>
Source record: 176052

Murch made a commercial version of Lew McCoys Ultimate transmatch. Also sold by Heathkit and probably several others. Tmatch with roller inductor.
KA9CAR

KG4GGX <kg4ggx@aol.com> wrote in message news:20001119124517.12514.00000508@ng-bg1.aol.com...
> Hi all
> I hope this is the correct news group to field this question.I have been made
> an offer to buy an antenna tuner that is an older unit.It is described to me as
> a 3 KW tuner. Name is Murch model UT 2000A.Does anyone know anything about this
> tuner.Any info or experiences with this tuner will be greatly appreciated.The
> asking price is very low so it will not be a big cost.I just would like to know
> a little about it.I know it is in working order, and have been invited to try
> it out to see it work.
> Thanks for any info.
> 73 de Rob KG4GGX

2803. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12569-3A19585A-29@storefull-111.iap.bryant.webtv.net>
Source record: 176053

Cecil, W6RCA wrote:
"The generated energy and the reflected energy indeed do see different conditions---"

For example:
1/4-wave line section (50 ohms =Zo).
Load = 25 ohms.
The line input will be = 100 ohms.
This is standard impedance inversion.

None of the reflected energy is returned to the source because the source has higher voltage at every point in the cycle when the volts are not zero.

We assume our source has an impedance of 100 ohms and is matched to the load we provide with our 1/4-wave matching section.

The source`s energy is not reflected at its terminals because the transformed load`s 100 ohms matches its input impedance.

It seems to me that the incident wave is delayed as it travels to the load by 90 degrees. At the load the voltage experiences another 180 degree phase shift, but no phase shift occurs on reflection in the current through the low load impedance. The reflected wave is delayed by another 90 degrees as it travels back to the source.

The returning voltage has gone through 360 degrees and has been reduced by the energy absorbed in the load. The reflected voltage fraction is: (Rload - Zo) / (Rload + Zo).
The line is lossless.

At the source`s terminals, as Cecil implied, there is a different condition from that at the load. It`s not just the impedance that`s different. There is also an energy source at the source.

We have a source voltage on one side of an internal impedance and a smaller reflected in-phase voltage at the output terminals. The current which flows out the internal impedance is motivated by the difference between the in-phase voltages on opposite sides of the internal resistance of the source. This causes us to see 100 ohms as a load, and not the Zo of the cable.

Best regards, Richard Harrison, KB5WZI

2804. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3UcS5.14391$en6.11944@newsfeed.slurp.net>
Source record: 176054

Oui, m'sieur.

BWAHAHAHAHAHAHAHAHAHAHAHAHAHAHA .. chortle .. chortle ..

I made *the* list .. BWAHAHAHAHAHAHAHAHAHAHAHAHAHAHA ...

soixante-treize, Dah-veed, K3BHJ

2805. - www.ab7sl.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <t1dS5.13781$n9.932085@newsread2.prod.itd.earthlink.net>
Source record: 176055
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Check it out!

1. Downloadable IOTA list current as of 11-07-2000
2. Online North American telnet DX clusters
3. Monthly online DX logbook
4. Photos of Prescott AZ, station and brand new Dell computer

Check it out !

--

Charles Johnston - AB7SL
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

2806. Re: Gilbert Mouget

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <jadS5.14401$en6.10077@newsfeed.slurp.net>
Source record: 176056

Some one's a sick puppy ...

http://www.quantonics.com/Review_of_WJS_The_Broken_Twig.html#Conclusion

K3BHJ

2807. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12569-3A195D75-32@storefull-111.iap.bryant.webtv.net>
Source record: 176057

Crazy George wrote:
"I have seen you and others make this claim about stainless."

Good! I have company. This was not hearsay nor speculation. I have climbed the towers for myself to investigate the reported problems. I`ve wrenched the galled hardware apart for myself and this is no myth.

Best regards, Richard Harrison, KB5WZI

2808. Re: Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A1969F6.8DD4049D@home.com>
Source record: 176058

KG4GGX wrote:

> Hi all
> I hope this is the correct news group to field this question.I have been made
> an offer to buy an antenna tuner that is an older unit.It is described to me as
> a 3 KW tuner. Name is Murch model UT 2000A.Does anyone know anything about this
> tuner.Any info or experiences with this tuner will be greatly appreciated.The
> asking price is very low so it will not be a big cost.I just would like to know
> a little about it.I know it is in working order, and have been invited to try
> it out to see it work.
> Thanks for any info.
> 73 de Rob KG4GGX

I repaired one once for a chum, and noticed that it did not have a facility for balanced line. I added a balun and terminals and it worked great. I don't know whether it was a UT2000 or a UT2000A.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2809. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: hkj@wer.com
Message-ID: <3A196BF9.1181DB58@wer.com>
Source record: 176059

Too many guys were catching their nuts in it during
foldover.

Peter Bertini wrote:

> Anyone have information on why Rohn discontinued the FK series?
>
> Was it a lack of sales, or safety related issues?
>
> I called Rohn the other day looking for info on my FK25 foldover section,
> and the person I spoke to didn't know they ever made a foldover kit for the
> 25G or 45G series!
>
> I need info on the hinge bolts used in the FK25, size, specs, etc. so I can
> replace
> the old ones in the used section I just picked up with proper new ones.
>
> Pete

2810. Re: - www.ab7sl.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Peter Lemken <plemken@gmx.de>
Message-ID: <8vbrlf$454nm$1@ID-31.news.dfncis.de>
Source record: 176060
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Charles Johnston wrote:
[the usual]

Will you ever realize that no one cares for your crappy webpages?

Stop your spam and go away.

Peter Lemken
DF5JT
Berlin

--
Aus aktuellem Grund: Sign the Linux-driver petition *now*

>>>>> http://www.libranet.com/petition.html <<<<<

2811. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <R8KrKDAP4VG6Ewx5@ifwtech.demon.co.uk>
Source record: 176061

Crazy George wrote:
>
>I have seen you and others make this claim about stainless. I have dozens
>and dozens of stainless fasteners and other parts in various antenna and
>support locations and have never experienced this problem, unless they were
>seriously abused. About 30 years ago when I first started using stainless,
>I quickly discovered the need for Loctite or self-locking nuts, but have
>never had a problem with stainless deforming .

The Loctite is probably why you've had no trouble. The technical term is "galling", which is when a very irregularity on one thread plows into the facing part, and rolls up material from both sides like a snowball which binds the thread. Stainless steel is apparently very prone to this.

As well as locking and sealing the threads, the Loctite acts as a lubricant which prevents galling when the threads are being tightened. With galvanized hardware, the zinc coating does the same because it's much softer than the steel underneath.

As someone else said recently, the best place for tower information is the TowerTalk reflector. (It's where I got that information about galling and Loctite, from someone who installs SS hardware on ocean racing yachts.)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2812. Re: Antenna Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A197D69.6F2B0659@bellatlantic.net>
Source record: 176062

I have the Murch UT-2000B - works great.
If the thing is in good shape and the price is right,
buy it. Mine will accept balanced line as well as
coax.

KG4GGX wrote:

> Hi all
> I hope this is the correct news group to field this question.I have been made
> an offer to buy an antenna tuner that is an older unit.It is described to me as
> a 3 KW tuner. Name is Murch model UT 2000A.Does anyone know anything about this
> tuner.Any info or experiences with this tuner will be greatly appreciated.The
> asking price is very low so it will not be a big cost.I just would like to know
> a little about it.I know it is in working order, and have been invited to try
> it out to see it work.
> Thanks for any info.
> 73 de Rob KG4GGX

2813. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A19855A.3E16@wt.net>
Source record: 176063

Fred Hambrecht wrote:
>
> Two items, one is a static wick, normally black in color with what appears
> to be loose string hanging out the ends. These are used to bleed off static
> charges. What you are referring to are Vortex Generators. On the Lear 23
> with the original wing they were mounted on both the top and bottom of the
> wing. Later models had them only on the top and they were removed entirely
> if a MK1 wing was installed. The are a NO GO item if more than 3 are missing
> as I recall.

Yep, thats right. I don't know how I got disturbers in my head. Been
quite a while. And yep, I think he mentioned the same thing. If a few
missing, you couldn't fly. They had both types of wings also. The newest
one they had the newer wing with no tabs. They had two or three of them
in the hangar when I was there. All were fairly old. The newest one I
think a 35a. Maybe older than that , I forgot...
>
> Many times while descending through a snow storm I have seen continuos balls
> of blue static emanating from the nose of the tip tank and along the
> windshield pillar.

Nothing like your own lightshow to fly with...g MK
--
http://web.wt.net/~nm5k

2814. Re: - www.ab7sl.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3a19884b.9105164@news.online.no>
Source record: 176064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Mon, 20 Nov 2000 19:50:16 +0100, Peter Lemken <plemken@gmx.de>
wrote:

>Charles Johnston wrote:
>[the usual]
>
>Will you ever realize that no one cares for your crappy webpages?
>
>Stop your spam and go away.
>
>

seems to work here, what is your problem, Fritz?
---
ide forum http://home.c2i.net/la2pj/ide/index.html

2815. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A198A91.5967@wt.net>
Source record: 176065

Roger Halstead wrote:
>
> BTW, even with static wicks, it's not uncommon to have to turn off every
> thing to get rid of the noise. Particularly on the nav radios. The ADF is
> the most susceptible and the VORs right behind it. I had to restart all the
> electronics twice within 20 minutes on one trip
>
> I've not experience any problems with GPS yet, but I've not gotten into any
> storms of the magnitude that shut down every radio in the plane prior to
> installing GPS so I can't speak about its effects on GPS.

Maybe less effect than the radios. But just guessing. I would think the
higher the freq of the device the less noise problems. ADF being real
low freq would get whacked bad. I don't think I would like to fly in
storms too much. I even try to avoid them flying commercial jets. I had
to take a 737 to Little Rock about a week ago . I waited until all the
t-storms cleared out before I would get on that thing. We had a big line
of them the night before that. Luckily, I timed my reservation just
right, and left Houston with clear wx. Hit rain up north, but no big
deal. Just light stuff. MK
--
http://web.wt.net/~nm5k

2816. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A198E95.4DB9@wt.net>
Source record: 176066

Fred Hambrecht wrote:

>
> I hold Commercial ASMEL with instrument. Type ratings include LearJet,
> Cessna Citation, and DC3 ratings. The old prop jobs use to get rings of
> static around the edge of the prop. At 8000 feet in the winter between
> Buffalo and Detroit it would be so bright on the old Beech BE8T's it would
> light up the cockpit.

Hummm, I was thinking of something. I could use your expertise on
something if you fly lear's. I've been working on a panel for FS2000
flight sim, for the Lear 31a. I hacked up a few pictures I managed to
get, and am wondering with all the patching if I got the perspective
right, or even close. There is still alot of work to do on the gauges,
so not all are correct. IE: engine gauges need the faces painted, etc,
etc. Still quite a ways to go. I'll post a pix of what I have so far.
It's a jpg with reduced quality to speed the d/l. Only about 78k. Does
the overall perspective look about right, or do I need to zoom in
farther? Also does the cowling look right. I had to hand draw the top of
the cowling to the left, so may not look quite right. Howz it look
overall? Ok, or do I need to start over? BTW, Sorry for this non antenna
subject, but I tried to snare a few lear pilots advice on the sim sites
with no replies. Not enough real pilots around for the lears I guess. MK
--
Click this link for the pix...

http://web.wt.net/~nm5k/31a.jpg

2817. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A199000.30A5@wt.net>
Source record: 176067

Mark Keith wrote:
>
> Fred Hambrecht wrote:

>
> http://web.wt.net/~nm5k/31a.jpg

BTW, When flying this thing, I sit a bit to the left, behind the AI-HSI
etc to get the perspective of sitting in the left seat. Kinda cramped on
a puter screen.. MK
--
http://web.wt.net/~nm5k

2818. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vc4ej$5k9$1@iac5.navix.net>
Source record: 176068

Was detailed enough that I wanted to put in a little left rudder trim. One could quibble about the location of some of the secondary instruments. But these are left up to the owner, so no problem I see. The perspective looks OK to me.

"Mark Keith" <nm5k@wt.net> wrote in message news:3A198E95.4DB9@wt.net...
> Fred Hambrecht wrote:
>
> >
> > I hold Commercial ASMEL with instrument. Type ratings include LearJet,
> > Cessna Citation, and DC3 ratings. The old prop jobs use to get rings of
> > static around the edge of the prop. At 8000 feet in the winter between
> > Buffalo and Detroit it would be so bright on the old Beech BE8T's it
would
> > light up the cockpit.
>
> Hummm, I was thinking of something. I could use your expertise on
> something if you fly lear's. I've been working on a panel for FS2000
> flight sim, for the Lear 31a. I hacked up a few pictures I managed to
> get, and am wondering with all the patching if I got the perspective
> right, or even close. There is still alot of work to do on the gauges,
> so not all are correct. IE: engine gauges need the faces painted, etc,
> etc. Still quite a ways to go. I'll post a pix of what I have so far.
> It's a jpg with reduced quality to speed the d/l. Only about 78k. Does
> the overall perspective look about right, or do I need to zoom in
> farther? Also does the cowling look right. I had to hand draw the top of
> the cowling to the left, so may not look quite right. Howz it look
> overall? Ok, or do I need to start over? BTW, Sorry for this non antenna
> subject, but I tried to snare a few lear pilots advice on the sim sites
> with no replies. Not enough real pilots around for the lears I guess. MK
> --
> Click this link for the pix...
>
> http://web.wt.net/~nm5k/31a.jpg

2819. Re: A dummy's question on antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:03:54 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <8v9pvt$2a9g$1@news.kabelfoon.nl>
Source record: 176023

Otto,

It's no use to measure the antenna height. Current(ampere) * meter says something about the magnetic field. Volt * meter says something about the electrical fieldstrength. The meters are measured as a distance from the point of radiation. The current is measured as the electrical current (ampere) within the RF energy at a certain distance (meters) from the point of radiation.

This is my humble meaning. Anybody have an other idea about this matter? Please let me know if you won the prize.

Good luck,
Adam

Otto Schtierlitz <oschtierlitz@hotmail.com> schreef in berichtnieuws 8v8g0n$7je$1@nnrp1.deja.com...
> I apologize for distracting you guys from serious discussions, but I
> have a question which all you radio and electronics gurus might help me
> to answer in a blink of eye. Thanks in advance!
>
> Here it is. I was solving a quiz in our local newspaper and there was a
> question I could not answer. The question is: "if you multiply the
> current passing through antenna (A) to the antenna's height
> (m), how is this production called". So I believe there should be
> some special name (a term) in radioelectronics or physics for this I�h
> production, meaning some antenna characteristic or whatever.
>
> I've looked through tons of reference materials I was able to get,
> including search in Internet, all to no avail. I am absolutely
> unfamiliar with this field of knowledge, so I believe it would be easier
> for me just to address this honorable forum for help.
>
> And, oh, one important notice: I've already sent the answers for this
> quiz, so this particular question remained unanswered, so I am not
> cheating by asking you. The paper will publish the answers only in two
> weeks and I am going to die if I don't get an answer for this damned
> antenna question right now!!!
>
> Thanks in advance!
> Otto
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2820. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:53:41 UTC
From: klocko@toad.net
Message-ID: <8v9smk$7n6$1@nnrp1.deja.com>
Source record: 176025

In article <3A175D45.24D280EF@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> The generated energy and the reflected energy indeed do see different
> conditions because part of what the generated energy sees is the
reflected
> energy and part of what the reflected energy sees is the generated
energy.

All a wave component sees are the components of the tuner. What you see when you perform a measurement is the sum of the generated and the reflected components. Are you saying an incident wave component behaves differently based on the conditions at the incidence point?

> A transformer treats reflected energy differently from generated
energy.
> It steps one up and the other down. Why can't an antenna tuner treat
> the two signals differently?

How does the tuner or the transformer "know" that a wave incident on it is either coming from the generator or coming from the load? How does it "know" to completely pass one and completely block the other?

BTW, the transformer is a reciprocal device. If Z12 = V1/I2 and Z21 = V2/I1, then for a step-up/step-down, Z12 = Z21, which makes it reciprocal.
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2821. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 00:57:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8v9st3$587$0@208.206.142.111>
Source record: 176024

Fractenna wrote:
>
> >Fractenna wrote:
> >>
> >> >I travel in a 35 foot motorhome with a rubber roof. I currently use a
> >> >verticle Outbacker Perth into an Icom 725.
> >> >
> >> >I would like to see a design that would allow me to built a horizontal
> >> >dipole by laying iton the roof. Maybe epoxyed down and fed from two
> >> >directions (end, side) to give some directionability.
> >> >
> >> >Obviously I would need multiband options 10/80 using tuning coils. I want
> >to
> >> >be able to do this with the least amount of intrusion into the motorhome.
> >> >
> >> >Any help would be appreciated. 73
> >> >
> >> >Chuck WB7VEG
> >> >
> >>
> >> Hi Chuck--
> >>
> >> I recommend against it. Even if you got the antenna to load properly and
> >not
> >> be too lossy, its just too low to be useful. Horizontal antennas are very
> >> sensitive to height. At a low height they point almost straight up. Thus
> >they
> >> very much favor fairly local propagation.
> >>
> >> If you can improve the ground plane by using the wires taped to the trailer
> >> roof, that strikes me as your best bet. On the other hand I don't know how
> >> practical it is for you to attach the vertical driven element you have.
> >>
> >> Perhaps there are more suggestions?
> >>
> >>
> >>
> > There sure are, and one is that your assertion is not wholly correct.
> >
> > As a Novice in 1957 I used a 40 meter dipole that was never above 10
> >feet in height at any point, and while I didn't make WAS on 40 CW I sure
> >came close in the three months that I was a Novice. More recently, I use
> >as my motorhome portable antenna, an autotuner-fed 60 ft wire that
> >attaches at the roof level of my motorhome and runs to whatever support

> >I find available 60 ft away, usually a collapsable 10 ft aluminum tent
> >pole that I carry for the purpose, lashed to a tree, shrub or whatever.
> >The counterpoise is 40 ft of enameled copper wire lying on the ground
> >under the motorhome, laid in a rough configuration to fit under it. I
> >works well, and I never have problems making contacts.
> > Sure, the major radiated component is something like NVIS. Its
> >inevitable, but there is still a useful component that takes off at
> >lower angle. And for ~200 - 500 miles it works very well as NVIS.
> > I also have a Hustler whip system on th back bumper (fiberglass tail on
> >the MH) to use when not set up in a campground.
> >
> > I'm not sure I'd want the antenna incorporated into my motor home
> >rubber roof for other ressons, though. One is the possiblity of high
> >voltages being developed at some frequencies that could cause arcing to
> >hidden metal and creating a fire hazard.
> > I once read of a ham who had an attic-mounted dipole fed by a 150 watt
> >AM transmitter that caught his house on fire with it. That's much more
> >likely with a full carrier tramsnitter such as an AM rig than with SSB,
> >or even CW, since when an AM carrier is on it just sits there and
> >'fries' until standby time. But one still usually transmits full carrier
> >at some time when tuning up. It's certainly not out of the question.
> >Attic dipoles and any roof antenna installation should be carefully done
> >with such hazards in mind keeping the antenna well insulated and
> >isolated.
> >
> >Dick W0EX
> >
>
> Excuse me;
>
> What statement that I made did you find incorrect? I can find nothing in yours
> that either addresses or contradicts it. Yet you begin with an assertion that I
> am incorrect...
>
> 73
> Chip n1IR

And I quote:

"Even if you got the antenna to load properly and not be too lossy, its
just too low to be useful. Horizontal antennas are very sensitive to
height. At a low height they point almost straight up."

Close quote

2822. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 03:05:31 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A1894F3.26C652BE@att.net>
Source record: 176026

Rick, dig out the articles in QST back in the 70's by Jerry Sevick,
W2FMI. He wrote up a 7 or 8 foot loadaed vertical he used on 40 with
ourstanding performance.

Short verticals CAN be efficient and useful provided that they are "done
right!" But, I take your point re the multi-band aspect. Jerry worked
only with monoband antennas.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Rick Littlefield wrote:

> Never the less, a short heavily loaded multiband vertical is just that, and
> even with very careful management of losses, you can only fool mother nature to
> a point!

2823. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 03:36:34 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <6%0S5.56$7d.5857@newshog.newsread.com>
Source record: 176027

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Fuller" <jefuller@netscape.net> wrote in message
news:3A183780.2AC3D4F0@netscape.net...
> Roger Halstead wrote:
> >
> ....
> > The system uses concentric masts and will eventually have a rotor for
each
> > once I get my machine shop set up.
>
> Could you elaborate a bit? It has occurred to me that concentric
> masts, with the big multi-band yagi on the outer mast and the vhf/uhf
> beams on the inner (taller) mast, would be nice,

That's the way I'm setting it up.

The innermost mast (1 1/2" steel pipe) sets into a conventional
rotor...Hy-gain 300.

The outer mast is driven via a heavy duty chain drive with the rotor mounted
external to the tower, or it will when I get that far.

There are several ways which this could be accomplished. Gears, or chains
being the easiest.

With gears, the thing to remember is to either use a third gear so the mast
turns the same direction as the rotor,*or*, reverse the direction unit
readout. (lots easier)

The outer mast (2" ID steel pipe) extends on up to the bottom VHF antenna
so it adds lots of support.

The machine work involves making the adapters for either the sprockets, or
gears. It also takes a bit of metal fabrication and a little welding to make
the offset rotor mount.

Right now the only thing on the tower is a quadature array of TV antennas,
which kinda, sorta work. They work better than a single antenna, but they
are extremely sharp and have three very strong side lobes (indicating to me)
that the spacing is not wide enough.

As far as I know, no one is currently manufacturing systems like this, but
there were similar systems a few years back.

BTW, extending more than a few feet above the tower top adds greatly to the
wind load as well as adding a bending moment.

Roger (K8RI)

> but I have not seen
> any commercial rotors that would work with the outer mast, allowing
> the inner to pass through. And everyone else that I mention it to
> seems to think that I'm daffy.
>
> --
> Jim Fuller

2824. Where'd the messages go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 03:45:52 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Q71S5.57$7d.5969@newshog.newsread.com>
Source record: 176028

In the last few days I've made a number of posts to RRAA. A number of them have disappeared.

I read one a few minutes ago (posted earlier today). Then went back to check some comments. I came up with the message that the post is no longer on the server. This has happened with over 4 posts today.

Any ideas?
Didn't think I'd pissed any one off, but those posts are going somewhere.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

2825. Re: Base Insulator for Rohn 25G Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 04:07:33 UTC
From: Tim Taylor <tim-taylor@home.com>
Message-ID: <9s1S5.96923$65.951141@news1.rdc1.fl.home.com>
Source record: 176029

Max-Gain Systems Inc provides insulators for doingexactly what you want.
They aren't exactly cheap at $375 for a set of three. Check them out
http://www.mgs4u.com/tower.htm

-Tim

"WR4T" <wr4t@fuse.net> wrote in message
news:t1h5pbfp990rbd@corp.supernews.com...
> I was wondering if any one has any ideas on how to fabricate a base
> insulator for a 160M vertical made from ROHN 25G. The factory base
> insulator requires a special tapered tapered 10ft base section and then an
> expensive insulator together they run over $1200. I was thinking about
> other ways to fabricate an insulator.
>
> One thought was to use a large sheet of HDPE under the standard BCP25
> concrete base plate. However the HDPE plate about 8" thick 22x22 was over
> $600 dollars.
>
> Any ideas thoughts on a less expensive alternatives (Not interested in
shunt
> feed need insulated base).
>
> Thanks,
>
> T.R. WR4T
>
>
>
>

2826. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 05:03:20 UTC
From: dinod@deltanet.com
Message-ID: <sg2S5.215834$g6.99706476@news2.rdc2.tx.home.com>
Source record: 176030

Its funnu you should mention a lightbulb! On the back of the
Force 12 literature, there is a 3-bulb phased array that has
worked DXCC (if I read it right). It would sure make a great
talk at a radio club meeting!

Dino

> Will a ZR-3 short dipole work better than a lightbulb? Of course!
> But, I'm not sure how the ZR-3 can possibly rise much above Tom's
> "Missing A Lot" catagory in performance--short of employing a
> combination of superconduction and black magic.
>
>Rick K1BQT

2827. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:42:30 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <qJ3S5.1845$Ur5.195071@monger.newsread.com>
Source record: 176031

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A18AECC.DCA8DADA@IEEE.org...
> klocko@toad.net wrote:
> > All a wave component sees are the components of the tuner. What you see
> > when you perform a measurement is the sum of the generated and the
> > reflected components. Are you saying an incident wave component behaves
> > differently based on the conditions at the incidence point?

Ahhh...Who are you (Klocko) answering?

Roger (K8RI)

>
> If a Z0-match exists, the reflections at the Z0-point will be exactly
> canceled by complimentary reflections arriving from the load. There
> will be no reflections on the coax to the transmitter. The reflected
> energy has nowhere to go except back toward the antenna.
> --
> http://www.mindspring.com/~w6rca

2828. Re: Where'd the messages go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:43:17 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <9K3S5.1846$Ur5.195125@monger.newsread.com>
Source record: 176032

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Unclaimed Mysteries" <k4doh@mindspring.com> wrote in message
news:8va849$rnr$1@slb1.atl.mindspring.net...
>
> Roger Halstead <rdhalste@tm.net> wrote in message
> news:Q71S5.57$7d.5969@newshog.newsread.com...
> > In the last few days I've made a number of posts to RRAA. A number of
> them
> > have disappeared.
> >
> > I read one a few minutes ago (posted earlier today). Then went back to
> > check some comments. I came up with the message that the post is no
> longer
> > on the server. This has happened with over 4 posts today.
> >
> > Any ideas?
> > Didn't think I'd pissed any one off, but those posts are going
somewhere.
> >
>
> They are converted into heat in the fiber optic cables.

Well, that's at least progress. It used to be the bit bucket.

Roger (K8RI)

>
> Yerpal, Corry
> --
> It Came From C. L. Smith's Unclaimed Mysteries.
> http://www.unclaimedmysteries.net/
> "Alabama - the jackhammer state!" -Dan Rather, 11/07/2000
>
>
```

2829. Re: Where'd the messages go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:44:24 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <cL3S5.1847$Ur5.195145@monger.newsread.com>
Source record: 176033

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3A18B5D6.8020109@hiwaay.net...
> Roger- I thought it was obvious- they went where the reflected power goes.
>
Yah, mean they are part of a standing wave on one of my coax lines?

Roger (K8RI)

> Bill
>
> Roger Halstead wrote:
>
> > In the last few days I've made a number of posts to RRAA. A number of
them
> > have disappeared.
> >
> > I read one a few minutes ago (posted earlier today). Then went back to
> > check some comments. I came up with the message that the post is no
longer
> > on the server. This has happened with over 4 posts today.
> >
> > Any ideas?
> > Didn't think I'd pissed any one off, but those posts are going
somewhere.
> >
> > --
> > Roger Halstead (K8RI) www.RogerHalstead.com
> > N833R World's Oldest Debonair? s# CD-2
>
>
>

2830. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:47:40 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <gO3S5.1848$Ur5.195172@monger.newsread.com>
Source record: 176034

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter Bertini" <commquart@erols.com> wrote in message
news:8va383mf1@bob.news.rcn.net...
>
> "Roger Halstead" <rdhalste@tm.net> wrote in message
> news:v8TR5.502$El3.48475@newshog.newsread.com...
> > Roger Halstead (K8RI) www.RogerHalstead.com
> > N833R World's Oldest Debonair? s# CD-2
> >
> > "Peter Bertini" <commquart@erols.com> wrote in message
> > news:8v4m8ljbn1@bob.news.rcn.net...
> > >
> > > "B Nehl" <k0emt@dbbear.com> wrote in message
> > > news:5ncb1tomtk7lm517pda7pb2arlqgunln4v@4ax.com...

<bunch snipped>

> The following is quoted in part from the Rohn Engineering Data and
> Specifications Handbook;
> copyright 1970 by Rohn Mfg. Co.
>
> From the page titled INSTALLATION INSTRUCTIONS FOR #25 FOLD-OVER TOWER
> dated Sept. 15, 1969...
>
> "..... Before pouring the concrete, coat the base section in an area about
> 3" above and 3" below
> the space where the top of the concrete base will be, using a waterproof
> asphalt type material..."

I haven't been able to find it in my copy, but it certainly makes sense as
that is the area where moisture can penetrate. The expansion and
contraction of the metal differes from that of the concrete and the
moisture as well as the air can penetrate about that far.

Roger (K8RI)

I'd not expect rust/corrosion any lower than that.

>
> Regards
>
> Pete, K1ZJH
>
>

2831. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:54:01 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <dU3S5.1849$Ur5.195194@monger.newsread.com>
Source record: 176035

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mark Keith" <nm5k@wt.net> wrote in message news:3A183BA0.E0D@wt.net...
> Brian Kelly wrote:
>
> > >
> > Check out any serious aircraft and you'll find what look like little
> > "probes" with sharp points aimed aft, usually somewhere on the vertical
or
> > horizontal stabilzers or both and occasionally on the ailerons.

Static wicks (they don't normally have sharp points) are just stranded wire
pieces about 4 inches long that trail from the airlerons and elevator. They
are sometimes attached to the rudder and vertical stabilizer as well.

>
> Actually, thinking about it, if the ones you describe point aft, they
> are probably different from the disturbers. The vortex disturbers point
> straight up nearly. MK

The vortex "generators", generally fit along the most curved portion on the
top surface of the wing. These actually keep the air attached to the top of
the wing at speeds below where the air will normally stay attached. This
gives reduced stall speed which may allow for increased gross weight.

Roger (K8RI)

> --
> http://web.wt.net/~nm5k

2832. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-20 06:57:42 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <GX3S5.1850$Ur5.195300@monger.newsread.com>
Source record: 176036

BTW, even with static wicks, it's not uncommon to have to turn off every thing to get rid of the noise. Particularly on the nav radios. The ADF is the most susceptible and the VORs right behind it. I had to restart all the electronics twice within 20 minutes on one trip

I've not experience any problems with GPS yet, but I've not gotten into any storms of the magnitude that shut down every radio in the plane prior to installing GPS so I can't speak about its effects on GPS.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mark Keith" <nm5k@wt.net> wrote in message news:3A183BA0.E0D@wt.net...
> Brian Kelly wrote:
>
> > >
> > Check out any serious aircraft and you'll find what look like little
> > "probes" with sharp points aimed aft, usually somewhere on the vertical
or
> > horizontal stabilzers or both and occasionally on the ailerons.
>
> Actually, thinking about it, if the ones you describe point aft, they
> are probably different from the disturbers. The vortex disturbers point
> straight up nearly. MK
> --
> http://web.wt.net/~nm5k

2833. Re: - www.k7on.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: k7on@earthlink.net
Message-ID: <MPG.1483e2b3815474c29896d1@news.earthlink.net>
Source record: 175942
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
In article <t1dS5.13781$n9.932085@newsread2.prod.itd.earthlink.net>,
ctj92@earthlink.net says...
>
> Check it out !
>
> --
>
> http://www.k7on.com
>

--
http://www.k7on.com/
--
```

2834. Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com>
Message-ID: <3a1a327f@grissom>
Source record: 175943
Cross-posted to: alabama.birmingham.radio.amateur,att.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Hi and thanks for reading this post

I recently acquired a General Electric 40ch CB radio Model A3-5825B (twin board model) with the view of putting it on 10m.

Has anyone got the schematic diagram for this radio as I don't have one and the rig has been tampered with by someone. Currently the lights come on but there is no-one at home (no RX/TX). It appears that components have been added and subtracted but I don't know what the correct ones should be.

Any help would be appreciated. Scanned schematics are OK but please email me direct and don't forget to remove the SPAMJAM

Thanks in advance

--
73
Adam VK4LAJ
E-mail: - SPAMJAMvk4laj@loaded-dog.com
WWW: - http://www.loaded-dog.com
Brisbane Australia
CQ Zone 29/ 30
Point your beam at: -27.39S Lat. - 153.03E long
Maiden Head: - QG62mo
Height ASL: - 52m

My wife says I never listen to her...
at least that's what I thin she said?

2835. Proximity of verticals (Was Re: how close can I stack my 70cm beam above my 2m and my 2m above my 6m?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Janne Himanka <shem@eiroskaa.fo>
Message-ID: <m366lhk9po.fsf_-_@kyklos.poh.tele.fi>
Source record: 175944

"Ed Juge/NM" <ed_juge@zianet.com> writes:

> A good rule of thumb is 1/2 the length of the longest boom.
>

How about a VHF/UHF vertical (say, 2.5 metres long) and a Butternut
HF6V (7.9 metres)? How close can these be on a tin rooftop (on separate
short masts) without interfering with each other?

Janne
--
Most of the girls, as they walked along, seemed % shem@oyt.erasethis.oulu.fi
to be absorbed in silent prayer; but he supposed, % Learning & Res. Services
on second thoughts, it was only gum they were % Oulu University
thus incessantly ruminating. Gum, not God.

2836. Re: call to arms

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: "W.Dixon" <willie@blues.net>
Message-ID: <8vdgeo$pe9$1@news.kolumbus.fi>
Source record: 175945

Pse see what Fred wites in his friends' ng, rec.radio.cb - I don't think you'll be surprised about his message here, looking at his postings there.
Willie

2837. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1A5D55.6438@wt.net>
Source record: 175946

Fred Hambrecht wrote:
>
> Was detailed enough that I wanted to put in a little left rudder trim. One
> could quibble about the location of some of the secondary instruments. But
> these are left up to the owner, so no problem I see. The perspective looks
> OK to me.

Ok, Thanks for the look. Yep, many of the gauges still need alot of work. The autopilot is wrong and is just pasted in from another panel for now to be able to fly. The AOA is giving me a problem , as the only properly working one I have is the round kind you see on a few models. I want to proper rectagular one but will need to program a new gauge. The round one just doesn't look right in the 31a. To me anyway..The secondary A/S, altimeter,AI gauges are in the exact place as the picture the panel is made from, but I have a slight cutoff up near the top. Need to redo that I think. You can see the placard is cut off. A problem was the detailed pix didn't extend up into the A/P and cowling etc. So had to butcher in those areas from other pictures. The panel picture was taken from a corporate 31a and was pretty sharp in the original true color pix, but lost a bit in all the chopping and reduction to 256 color. I may make a 24 bit version, but will take a bit more memory to run and puts a bigger overhead on the video. Anyway still a ways to go...I don't know if you mess with the sims, but if you want a copy of it, let me know. I also have made a pretty detailed kingair 350, and a couple of panels for C-130. One a glass version, and one the old analog gauges. I have a few pix of the kingair panel on my server. It's fairly complete. Thanks again, I don't want to spend half a zillion hours working on something if it doesn't look right. Also open to any suggestions on it. :(MK
--
http://web.wt.net/~nm5k/ka350.jpg

fer the big picture

http://web.wt.net/~nm5k/kaquad.jpg

to show the different radio/gps panel pages.

2838. Re: Balun advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vdo4p$d82$1@neptunium.btinternet.com>
Source record: 175947

If it doesn't interfere with the neighbours TV - don't fix
it.

If you DO fix it might interfere with the neighbour's TV.

Regards from Reg, G4FGQ
==========

Ian White wrote
> Reg Edwards wrote:
> >Ian, it doesn't make sense to fit a choke if the very
next
> >thing to do is to take it out again to see if it is
needed.
> >;o)
> >
> "If it works, don't fix it" or "prevention is better than
cure" -
> choose your proverb.
>
> >When an authorised station, complying with regulations,
is
> >surrounded by nearby TV receivers a choke is just as
likely
> >to make TVI worse as to improve it. Particularly on the
160m
> >to 30m bands.
> >
> Why "just as likely to make TVI worse"?
>
> >Since most of the trouble is due to TV installations
being
> >too sensitive to frequencies for which they are not
intended
> >(or authorised) to receive it is often more effective to
> >cure the problem at the receiving end.
>
> The point you're not addressing is the social one, about
causing
> problems to other people. If you can take precautions to
avoid causing
> problems, that's far better than letting the problems
happen and then
> fixing them.
>

> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for
RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2839. Re: Alias another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001121074511.22479.00000858@ng-ff1.aol.com>
Source record: 175948

>
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20001120045901.24633.00000706@ng-cd1.aol.com...
>[snip]
>
>> >Maybe in the future we can try to control ourselves... it isn't always
>Chip's
>> >fault!
>> >
>> >To Everyone, a Blessed and Thankful Thanksgiving!
>> >
>> >
>> >Wayne
>> >
>> >
>> >email wgvideo at attglobal dot net
>>
>>
>> Well Wayne,
>>
>> Here you go blaming the victim again.
>>
>> Please stop this. Its only makes me look bad. I will never, ever, ever,
>accept
>> a premise that I am the person portrayed here, for the simple reason that I
>am
>> not that person.
>>
>> I do not wish to convince you or anyone else of that: taking as an
>assumption
>> that a person is worthless, evil, and so on, until proven otherwise is so
>> foreign from the value system I grew up with that I cannot, and will not,
>> entertain it.
>>
>> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
>here.
>> Any more than you, or your mother, or your son should.
>>
>> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
>>
>> With best Wishes,
>>
>> Chip N1IR

>
>Chip,
>
>Methinks you suffer from SNAR syndrome (see-name-and-react). I saw no
>personal
>attack, just a comment alluding that it wasn't all your fault... Perhaps you
>need a rest!
>
>A.

2840. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: "J. Duffy Beischel" <duffyb01@fuse.net>
Message-ID: <t1ksv6gedb7q9b@corp.supernews.com>
Source record: 175949
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

My 2 cents on Butternut. Excellent antenna and great service from the manufacturer. Based, on what I read, I won't be buying any Cushcraft products. No support and no parts? Sounds like they did not learn from the Japanese very well.

Regards,

Duffy - WB8NUT

David Ackrill <Nospam@thanks.com> wrote in message news:3a12ce7c_1@news1.vip.uk.com...
>
> Gord Beaman wrote in message <3a12be86.6439333@news1.pei.sympatico.ca>...
> >"Fred" <Fredmp@megsinet.net> wrote:
> >
> >In my opinion it's not too brilliant of them to ruffle the feathers of a
> group
> >like us...we can truly do them damage due to the nature of our
> hobby/service.
>
>
> Possibly OT, but here's a couple of thoughts.
>
> I'm taking note of the opinions mentioned here, as I was intending to
invest
> in a vertical. Both companies being mentioned in various posts, and
> especially the 'note' on the Butternut (Bencher), site has made me think
> again about business ethics and dealing with various companies. In fact,
> the knock on is that I've been looking to replace a Bencher key, which I
had
> to claim for on insurance when it was stolen. I will probably not buy a
> Bencher, but then I was tending towards a different make anyway, so they
> probably would not count me as a 'lost sale'.
>
> However, as to whether all this will really hurt Cushcraft and/or Bencher,
I
> doubt it. There are more Amateurs who don't read this NG than do, and
most
> of these companies have bigger business interests away from Amateur Radio
> than in. The numbers of Radio Amateurs, at least in the UK, is in
decline.
> We're starting to become even more of a minority interest than we were a
few
> years ago, and AR, despite what 'we' may like to think, doesn't carry much

> weight in the business world.
>
> So, companies like Cushcraft and Bencher could well look at the postings
> here and think, perhaps privately, 'so what?'
>
> Let's not over inflate our opinion of ourselves and our influence, eh?
>
> de Dave (G0DJA)
>
>

2841. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29945-3A1A7435-2@storefull-118.iap.bryant.webtv.net>
Source record: 175950

Bill Aycock wrote:
"Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY."

Warren is about as infallible as I am. Reflected power loses the same percentage to the load on each successive pass as on the first. So most of the power is radiated. It simply can`t stay in the coax because there is no place for it there.

EMF does no work until current flows. When current flows, volts times amps is power in watts. Watts measures the rate of doing work.

In a transmission line, power is delivered to a load. The load for a radio transmitter is its antenna`s radiation resistance.

Work is done by the energy supplied which is power times time.

One measure of energy is the watt second. Most coax accepts input at a speed of about 120,000 miles per second, so a piece of coax about 120,000 miles long is needed to contain one second of energy at however many watts are being supplied. The energy is multiplied by the number of watts. Shorter lines contain proportionately less energy. But, the coax can hold energy traveling in the reverse direction, in addition to energy traveling in the forward direction. Total energy contained in the line is the sum of forward and reverse energies.

So, where does the power go? It enters the coax and travels to the load and is radiated except for some reflected power which circulates before being radiated. Losses in the system take a small percentage toll on each trip through the coax.

Richard Harrison, KB5WZI

2842. Re: Where does..ATTN: Cecil, Reg, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: scottmcclements@my-deja.com
Message-ID: <8vdvdefgl1@nnrp1.deja.com>
Source record: 175951

Hello,

Man, I would like to reply to everybody with this response.
After a bunch of reading here and the "Reflections" series, I
feel a little bit better. Still, lots of uncertainty. After reading
through the reflection series and consulting the ARRL Antenna book,
I couldn't find "conjugate match" in the index of the book. I don't
understand how those articles can talk about it like its so common,
but I can't find it in the index.

First off, It obvious its hard to explain things when there are so
many variables. So, people must be clear about what the exact context
is when they're explaining things. And before you jump on somebody,
ask them to clarify.

Now, from what I understand....

Taking the solid-state rig, into 50 Ohm coax into a simple dipole
(no common mode currents ;) and no tuner example. The transmitter
transmits (on 80 meters), the signal goes out to the antenna. Part
is reflected back towards the transmitter.

Now, since there isn't a Z0 Match, does this mean *some* of the
reflected
power is absorbed by the final PA and some is re-reflected back towards
the load?

Its my understanding if there is a Z0 Match, the reflected wave sees the
reciprocal mismatch and is *completely* reflected back towards the
load.

First uncertainty, incident wave makes it back to the load...isn't
part of the signal old, and possibly out of phase (the wavelength of
the line) with the originally (already) transmitted signal? Wouldn't
this cause an echo or some cancellation/re-enforcement of the signal
overall?

The "Reflection" series seems to stress that if there is a Z0 match and
line loss is low, power eventually gets radiated so there isn't a
good reason to get SWR super low (from what I understood), especially if
the SWR is normally not supposed to be 1.1 (ground mounted 1/4 wave
vertical).

Next question, "conjugate match"..is this the same as "Z0" match?
What are some ways to "conjugate match"? (1/4 wave transformers?)

Next scenario, what if we take the above scenario and add a solid-state
amplifier in-line...still no tuner. Should there be a "Z0 match"
between
the radio and amp under all circumstances, or does a mismatch at the
load
in turn effect the Z0 match between the radio and amp?

I won't get email sent to the deja.com email address.

Thanks,

Scott McClements

In article <19645-3A142545-75@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Scott McClements wrote:
> "where does reflected SWR actually go?"
>
> Ideally, to a ratio of one.
>
> SWR is an interference pattern created by forward and reflected
> traveling waves on a transmission line. Voltage and current create
their
> own similar patterns, but it is easy to measure and plot the VSWR
using
> a slotted (trough) line.
>
> In a lossless system, all reflected power is finally radiated. None is
> absorbed back in the transmitter or spent in transmission line or
> matching networks. SWR indicates temporary storage of circulating
energy
> in the transmission line. Some energy is wasted in all the actual
> equipment used.
>
> Typically, losses are small and often less than many people think when
> they see the SWR number.
>
> Next, an antenna tuner should let you transform whatever load
impedance
> appears to your desired load impedance. This is often the impedance of
> the coax you are using. The impedance desired is frequently 50 ohms
> which is the impedance many transmitters are specified for as a load
at
> which the transmitter will perform as expected. Other impedances are
> sometimes specified.
>
> The tuner eliminates a point of reflection between itself and the coax
> by providing a match. The coax then has an SWR of one.
>
> Best regards, Richard Harrison, KB5WZI
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2843. Re: Where does..ATTN: Cecil, Reg, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1A8674.4AB83008@IEEE.org>
Source record: 175952

scottmcclements@my-deja.com wrote:
> After reading
> through the reflection series and consulting the ARRL Antenna book,
> I couldn't find "conjugate match" in the index of the book. I don't
> understand how those articles can talk about it like its so common,
> but I can't find it in the index.

There's a little history involved there. Go back and read an ARRL Antenna Book from the mid-1980s and you will find 'conjugate match' mentioned quite often. A few years ago, the ARRL purged 'conjugate match' from their publications allegedly because they believe a conjugate match rarely exists in reality.

> Now, since there isn't a Z0 Match, does this mean *some* of the reflected
> power is absorbed by the final PA and some is re-reflected back towards
> the load?

That's probably what happens. Depending on the phase of the reflections, over-current or over-voltage may result. In any case, the final PA is not seeing its designed-for impedance. It's possible for the reflected energy to make it all the way back to the DC power supply or battery.

However, conventional "wisdom" will tell you that reflected power absorbed by the transmitter wasn't ever generated in the first place.

> Its my understanding if there is a Z0 Match, the reflected wave sees the
> reciprocal mismatch and is *completely* reflected back towards the
> load.

Reflected waves are technically not re-reflected at a Z0-match. What actually happens is two complimentary sets of reflections perfectly cancel each other through an interference pattern. The "re-reflection" is a *scalar* process involving the conservation of energy. The canceled reflected energy simply has no other place to go except back towards the antenna (assuming a Z0-match).

> First uncertainty, incident wave makes it back to the load...isn't
> part of the signal old, and possibly out of phase (the wavelength of
> the line) with the originally (already) transmitted signal? Wouldn't
> this cause an echo or some cancellation/re-enforcement of the signal
> overall?

At a perfect Z0-match, everything is perfectly in phase or perfectly 180 degrees out of phase. And yes, an echo (ghosting) can and does occur where modulation is involved.

> The "Reflection" series seems to stress that if there is a Z0 match and
> line loss is low, power eventually gets radiated so there isn't a
> good reason to get SWR super low (from what I understood), especially if
> the SWR is normally not supposed to be 1.1 (ground mounted 1/4 wave
> vertical).

The reason for getting the SWR low is feedline loss. Ordinary coax is
much more lossy than open-wire line.

> Next question, "conjugate match"..is this the same as "Z0" match?

Nope, each is possible without the other. IMO, a Z0-match is all the
average ham needs to worry about since he rarely knows the internal
impedance of his transmitter.
--
http://www.mindspring.com/~w6rca

2844. Re: Where does..ATTN: Cecil, Reg, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1A902B.9090302@hiwaay.net>
Source record: 175953

Scott- very good set of questions- Cecil- excellent set of answers.
These help, especially put in a one-to-one context, as you did.

Comment about the indexing system used in ARRL publications- "they do
not understand the concept"- for example- try to find the word "Coax" as
an entry in any ARRL handbook before about four years ago- and "Coax" is
MUCH more commonly used than "Conjugate match".

Bill

Cecil wrote:

> scottmcclements@my-deja.com wrote:
>
>> After reading
>> through the reflection series and consulting the ARRL Antenna book,
>> I couldn't find "conjugate match" in the index of the book. I don't
>> understand how those articles can talk about it like its so common,
>> but I can't find it in the index.
>
>
> There's a little history involved there. Go back and read an ARRL
> Antenna Book from the mid-1980s and you will find 'conjugate match'
> mentioned quite often. A few years ago, the ARRL purged 'conjugate
> match' from their publications allegedly because they believe a
> conjugate match rarely exists in reality.
>
>
>> Now, since there isn't a Z0 Match, does this mean *some* of the reflected
>> power is absorbed by the final PA and some is re-reflected back towards
>> the load?
>
>
> That's probably what happens. Depending on the phase of the reflections,
> over-current or over-voltage may result. In any case, the final PA is not
> seeing its designed-for impedance. It's possible for the reflected energy
> to make it all the way back to the DC power supply or battery.
>
> However, conventional "wisdom" will tell you that reflected power absorbed
> by the transmitter wasn't ever generated in the first place.
>
>
>> Its my understanding if there is a Z0 Match, the reflected wave sees the
>> reciprocal mismatch and is *completely* reflected back towards the
>> load.

>
>
> Reflected waves are technically not re-reflected at a Z0-match. What
> actually happens is two complimentary sets of reflections perfectly
> cancel each other through an interference pattern. The "re-reflection"
> is a *scalar* process involving the conservation of energy. The canceled
> reflected energy simply has no other place to go except back towards the
> antenna (assuming a Z0-match).
>
>
>> First uncertainty, incident wave makes it back to the load...isn't
>> part of the signal old, and possibly out of phase (the wavelength of
>> the line) with the originally (already) transmitted signal? Wouldn't
>> this cause an echo or some cancellation/re-enforcement of the signal
>> overall?
>
>
> At a perfect Z0-match, everything is perfectly in phase or perfectly
> 180 degrees out of phase. And yes, an echo (ghosting) can and does
> occur where modulation is involved.
>
>
>> The "Reflection" series seems to stress that if there is a Z0 match and
>> line loss is low, power eventually gets radiated so there isn't a
>> good reason to get SWR super low (from what I understood), especially if
>> the SWR is normally not supposed to be 1.1 (ground mounted 1/4 wave
>> vertical).
>
>
> The reason for getting the SWR low is feedline loss. Ordinary coax is
> much more lossy than open-wire line.
>
>
>> Next question, "conjugate match"..is this the same as "Z0" match?
>
>
> Nope, each is possible without the other. IMO, a Z0-match is all the
> average ham needs to worry about since he rarely knows the internal
> impedance of his transmitter.

2845. Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8ve5dg$2ku$1@iac5.navix.net>
Source record: 175954

OK, I want to run a test to see if the reflected power gets out or not. Here is my plan, please comment as to the validity of my testing methods.

1. A gamma matched dipole (2 meters) is adjusted for a 50 Ohm match. It is fed with a length of coax that is an electrical multiple of 1/2 lambda. Field strength readings are taken in the near and far field.

2. The Gamma is adjusted to obtain either a 25 or 100 Ohm match. A tuner is inserted, tuned for 1:1, between the transmitter and the feedline and a second set of readings taken.

3. The tuner is moved to the antenna end
again tuned for 1:1 at the antenna end. Readings are taken.

4. I suspect that none of the above mentioned tests will produce any difference in the field strength.

5. If that is the case, is the argument the total power of a given time will be less because of the reflections stored in the coax? If so, how can I measure it? I know how to mathematically analyze voltage and currents at any point on a line caused by reflections. However if I cannot see a difference in field strength are we, for practical purposes, jousting at windmills?

2846. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <g9xS5.205$7d.22568@newshog.newsread.com>
Source record: 175955

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Fuller" <jefuller@netscape.net> wrote in message
news:3A19DA11.E046C00A@netscape.net...
> Roger Halstead wrote:
> >
> ....
> > The innermost mast (1 1/2" steel pipe) sets into a conventional
> > rotor...Hy-gain 300.
> >
> > The outer mast is driven via a heavy duty chain drive with the rotor
mounted
> > external to the tower, or it will when I get that far.
> >
> > There are several ways which this could be accomplished. Gears, or
chains
> > being the easiest.
>
> That's sort of what I had concluded.-- that there is no off-the-shelf
> equipment available to do it, so it would have to be custom. There
> is also the matter of the thrust bearing(s) to take the weight of the
> outer mast, and how to lock the rotor and boom(s) to the mast. Both
> items seem to suggest welding plates onto the mast, since
> throughbolts are not possible.

Rohn makes some really heavy duty thrust bearings which I'm using to support both the inner and outer masts. They feel a bit rough when unloaded, but with load from the masts they are as smooth as silk.

The outer mast is supported at the top of the tower and again about 11 feet down for alignment. The inner mast is supported about 3 feet below the bottom of the outer mast and again at the rotor (alignment only). The bottom rotor does not support any weight.

I have a ways to go to get this finished and probably won't be driving the masts seperately until some time later this winter, or even next spring.

As for connecting the adapters to the masts, the easierst way I've found, is to use a "keyed" setscrew arrangement.

My adapters are long enough that I can use either a 3 or 4 screw arrangement on top and bottome of the adapter.. The mast is drilled just deep enough to allow the end of the set screw to fit into it This makes for an arragement where none of the screws have to be super tight. That makes 8 of them Just good and snug.

>
> > As far as I know, no one is currently manufacturing systems like this,
but
> > there were similar systems a few years back.
>
> I just got relicensed after a 20-year hiatus, and I am finding that
> lots of things have changed. Lots of things haven't....
>
> > BTW, extending more than a few feet above the tower top adds greatly to
the
> > wind load as well as adding a bending moment.
>
> Few people consider that bending moment of a beam on a tall mast
> until it's too late. Removing and lowering a hairpin-shaped mast and
> the antenna(s) on it can be interesting.
>

It takes two things: Good insurrance and a hacksaw<:-))

There are two pictures of the old installation and one of the partially
completed new at http://www.rogerhalstead.com/kim.htm There are a couple of
the old Debonair on that page as well.

They are pretty high resolution so if you don't have a fast connection ....
It takes a while.

I hope to have a history up on a page "tower.htm" shortly. Those will be
thumbnails linked to high resolution JPGs which will make the page much
faster to load.

Roger (K8RI)

> Thanks, and good luck on the installation. Put pictures of it
> somewehre for us to see....
>
>
> --
> Jim Fuller

2847. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1a9ff0.22385590@news.akorn.net>
Source record: 175956

On Sun, 19 Nov 2000 16:52:51 -0600 (CST), w4th@webtv.net (Tom Hix W4TH) wrote:

>Can someone please email me the instructions on building the 160 20ft
>receive loop. I had them bookmarked, but I have lost them.
>Thanks and 73
>Tom
>W4TH

If you have local ground wave noise from one direction you can reduce it with a small loop by nulling the noise.

If you have skywave noise, a small loop will make no difference at all in ratio of signal-to-noise.

If you have noise generated very near the antenna, a small loop may be either better or worse than any other antenna.

Often the improvements with small loops are caused by the reduced signal level, whick prevents sharp noise pulses from"squaring off" in the receiver and being lengthened. An attenuator pad will often accomplish the same thing.

73 Tom

2848. Re: Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a1aa20c_2@news1.vip.uk.com>
Source record: 175957

Fred Hambrecht wrote in message <8ve5dg$2ku$1@iac5.navix.net>...
>OK, I want to run a test to see if the reflected power gets out or not. Here
>is my plan, please comment as to the validity of my testing methods.

I'll be interested to see what you find and, here's some thoughts.

>1. A gamma matched dipole (2 meters) is adjusted for a 50 Ohm match. It is
>fed with a length of coax that is an electrical multiple of 1/2 lambda.
>Field strength readings are taken in the near and far field.

<snip>

>3. The tuner is moved to the antenna end
>again tuned for 1:1 at the antenna end. Readings are taken.

Will the gamma be left at the 50 ohm setting, or changed to something else and, if so, what's the difference electrically?

In my opinion, the gamma is a form of antenna matching system anyway. Just like the 'tuner' that you propose to use at the other end. Except that the 'tuner', when used at the rig end, is an 'antenna system tuner unit' acting on the impedance presented at the rig end.

One likely difference in the reading that you will take are the losses in the tuner unit..... I presume that you will be giving some thought to measuring the losses in the tuner unit before you begin? Will the tuner unit will be in circuit when the dipole is matched to the feeder by the gamma match?

Also, how accurate is your field strength measuring device? Will it be permanently mounted in place during the tests, and will it be kept at a constant temperature as well?

How accurately will the transmitter power be kept at the same level during the test? How accurately will you measure the power output? Even if the field strength measurement is 'relative', the effect of variations in output power of the transmitter may make a difference.

Just some 'off the cuff' thoughts. Others may disagree (probably violently. HI!)

de Dave (G0DJA)

2849. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1aa157.22745276@news.akorn.net>
Source record: 175958

On Mon, 20 Nov 2000 05:03:20 GMT, dinod@deltanet.com (Dino) wrote:

>Its funnu you should mention a lightbulb! On the back of the
>Force 12 literature, there is a 3-bulb phased array that has
>worked DXCC (if I read it right). It would sure make a great
>talk at a radio club meeting!
>
>Dino

Dino,

That "article" was nothing but pure marketing bullcrap. It was designed to plug a product, and in the process gave some very very poor advice and theories on antennas.

Someone was dreaming.

1.) If the bulbs themselves were radiating the RF, it would be virtually impossible to phase them.

2.) The ionosphere does not have non-linear properties at normal power densities. That was all BS.

3.) Virtually all tribanders do not have less gain than dipoles, or the same gain as verticals.

Someone must have had a "buddy" at QST to have gotten that nonsense printed.

73 Tom

2850. Re: Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: "Alan P. Biddle" <APBIDDLE@ATEEANDTEA.NOT>
Message-ID: <st8l1tccekcdp901musb5tvfd1l0lnspk8@4ax.com>
Source record: 175959

Fred,

Will be interested in your results.

This may have appeared here, but there is an old test which may be of interest. The late Lew McCoy talked about it in an article. Sorry I don't have an exact reference, or the details of the tubes involved. Too many years ago.

After WW 2 coax became very cheap and popular. People started getting worried about SWR losses, which was never a concern, rightly or wrongly, with ladder lead. Someone (Lew?) built up a very simple HF transmitter which used a tube in which the red glow of the plate was very apparent at high levels of plate dissipation. Small changes were readily visible. He used 75 ohm cable, and 2 non-inductive 150 ohm resistors. They could be seriesed or paralleled to give 300 or 75 ohms for the load. The matching network was designed to cover this range.

First the rig was set up with the load as 75 ohms. The power was adjusted so that the plate glow was very apparent, and changes in dissipation were easily visible. Plate current and voltage were noted. I think they also looked at rf voltage across the load.

Next, the load was changed to 300 ohms, or a 4:1 SWR. The rig was retuned, and the plate current and voltage reset as before. The plate glow was exactly as before. Certainly nothing like the reflected power we talk about was being dilapidated in the plate. Again, I believe they checked the rf across the load as well.

Conclusion: with correct matching, which of course modern rigs lack without external help, the only loss will be in the coax due to the large currents. Or in other words, a lossless coax would deliver all the power to the load no matter what the SWR, as long as proper, and lossles, matching is used.

--
Alan
WA4SCA

For E-mail reply, please reply to:
Napbiddle@att.net, removing the "N"
from the front, since the other address
is reserved for spam only.

2851. Re: Where does..ATTN: Cecil, Reg, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a6fa46c.2317511405@news.seanet.com>
Source record: 175960

On Tue, 21 Nov 2000 14:04:34 GMT, scottmcclements@my-deja.com wrote:

>Hello,
>
>Man, I would like to reply to everybody with this response.
>After a bunch of reading here and the "Reflections" series, I
>feel a little bit better. Still, lots of uncertainty. After reading
> through the reflection series and consulting the ARRL Antenna book,
>I couldn't find "conjugate match" in the index of the book. I don't
>understand how those articles can talk about it like its so common,
>but I can't find it in the index.
>
See my re-post below for complete and authoritative definitions.
>
>First off, It obvious its hard to explain things when there are so
>many variables. So, people must be clear about what the exact context
>is when they're explaining things. And before you jump on somebody,
>ask them to clarify.
>
>Now, from what I understand....
>
>Taking the solid-state rig, into 50 Ohm coax into a simple dipole
>(no common mode currents ;) and no tuner example. The transmitter
>transmits (on 80 meters), the signal goes out to the antenna. Part
>is reflected back towards the transmitter.
>
>Now, since there isn't a Z0 Match, does this mean *some* of the
>reflected
>power is absorbed by the final PA and some is re-reflected back towards
>the load?
>
By and large, yes, unless you are running at the power specified by
the manufacturer where the output Z is specified (50 Ohms). If you
have any doubt as of this specification, simple refer to the
characteristics listed in your tech manual for your rig.

Even here, there can be some variation from 50 Ohms. My own rigs are
specified as 50 Ohms, but under less than full power they exhibit Z's
that are not 50 Ohms and yet do not fall below 35 Ohms nor rise above
70 Ohms.

You probably can assume fairly similar characteristics given that
finals design for transistor rigs has not changed much in the last 20
years.
>

>Its my understanding if there is a Z0 Match, the reflected wave sees the
>reciprocal mismatch and is *completely* reflected back towards the
>load.
>
>First uncertainty, incident wave makes it back to the load...isn't
>part of the signal old, and possibly out of phase (the wavelength of
> the line) with the originally (already) transmitted signal? Wouldn't
>this cause an echo or some cancellation/re-enforcement of the signal
>overall?
>
Yes, but do not dwell on this greatly as SWR does not contain phase
information and trying to pursue this thought without all the
information will only frustrate.
>
>The "Reflection" series seems to stress that if there is a Z0 match and
>line loss is low, power eventually gets radiated so there isn't a
>good reason to get SWR super low (from what I understood), especially if
>the SWR is normally not supposed to be 1.1 (ground mounted 1/4 wave
>vertical).
>
You learned that lesson well.
>
>Next question, "conjugate match"..is this the same as "Z0" match?
>What are some ways to "conjugate match"? (1/4 wave transformers?)
>
Simply put NO, but with the proviso - sometimes. Both have specific
meanings - see my repost of this topic that follows.
>
>Next scenario, what if we take the above scenario and add a solid-state
>amplifier in-line...still no tuner. Should there be a "Z0 match"
>between
>the radio and amp under all circumstances, or does a mismatch at the
>load
>in turn effect the Z0 match between the radio and amp?
>
>I won't get email sent to the deja.com email address.
>
>Thanks,
>
>Scott McClements
>
Hi All,

During my tenure in Metrology, the standard text on the subjects
Conjugate Match and Z0 Match were formalized. Insofar as your access
to the NBS standard methods, these definitions may be found in
"Microwave Theory and Applications," Stephen F. Adam; or they
may be found in Hewlett-Packard's Application Note 56, or they may be
found in the original works by R. W. Beatty published in IEEE
Transactions in the early 60's.

The following terms are those understood by Metrologists at NBS and Primary/Secondary Standards Labs:

Substitution Loss:
A general term referring to the change in power absorbed by a load when first one waveguide junction (these words are used in the broadest sense) and then another (such as an attenuator) is used to connect a source to the load.

Transducer Loss:
What the substitution loss becomes when the first waveguide junction is a perfect transducer and initially the maximum available power is delivered to the load.

Insertion Loss:
What the substitution loss becomes when the first waveguide junction is a perfect (lossless and phase-shift-less) connector, so that in general there is some initial mismatch loss.

Attenuation:
What any of the above losses become when the source and load both have Z0 impedance. Under these conditions, what is measured on an attenuator is a property of the attenuator alone, so that this is the ideal system in which to make measurements.

Residual Attenuation:
The minimum attenuations of a variable attenuator. What is measured when a variable attenuator is set to it minimum position and inserted into an ideal system.

Incremental Attenuation:
The change in attenuation between minimum setting and any other setting on a variable attenuator. Residual Attenuation and Incremental Attenuation together make up Attenuation.

Conjugate Match:
The condition for maximum power absorption by a load, in which the impedance seen looking toward the load at a point in a transmission line is the complex conjugate of that seen looking toward the source.

Conjugate Mismatch:
The condition in the situation above in which the load impedance is not the conjugate of the source impedance.

Conjugate Mismatch Loss:
The loss resulting from conjugate mismatch.

Z0 Match:
The condition in which the impedance seen looking into a transmission line is equal to the characteristic impedance of the line.

Z0 Mismatch:
The condition in which the impedance seen looking into a transmission line is not equal to the transmission line characteristic impedance Z0. In general, conjugate match is a case of Z0 mismatch.

Z0 Mismatch Loss:
The loss resulting from a Z0 mismatch.

Conjugate Available Power:
Maximum available power.

Z0 Available Power:
The power a source will deliver to a Z0 load.

73's
Richard Clark, KB7QHC

2852. WTB: H5PNF Heliax connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <DczS5.4024$925.169864@news.direcpc.com>
Source record: 175961
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swa

I need 8-10 H5PNF ANDREWS air dielectric 7/8" connectors with female "n" connectors. Please email price and lot.

Thanks

2853. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011211859510.14898-100000@unics>
Source record: 175962

On Tue, 21 Nov 2000, Tom W8JI wrote:

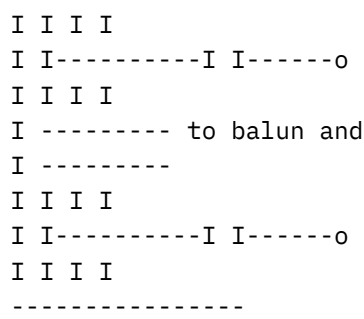
> On Sun, 19 Nov 2000 16:52:51 -0600 (CST), w4th@webtv.net (Tom Hix
> W4TH) wrote:
>
> >Can someone please email me the instructions on building the 160 20ft
> >receive loop. I had them bookmarked, but I have lost them.
> >Thanks and 73
> >Tom
> >W4TH
>
> If you have local ground wave noise from one direction you can reduce
> it with a small loop by nulling the noise.
>
> If you have skywave noise, a small loop will make no difference at all
> in ratio of signal-to-noise.
>
> If you have noise generated very near the antenna, a small loop may be
> either better or worse than any other antenna.
>
> Often the improvements with small loops are caused by the reduced
> signal level, whick prevents sharp noise pulses from"squaring off" in
> the receiver and being lengthened. An attenuator pad will often
> accomplish the same thing.
>
> 73 Tom
>
>

Hi Tom,

if the local noise is produced closed to the antenna, a loop should help.
A loop mainly reacts to the magnetic field component of the EM wave. If
your noise source is so far away that you 'see' only its far field (more
than maybe a wavelength or so), than this makes no difference. If you have
a noise source close to the antenna so that you are in its near field than
a loop should help a little because the magnetic near field goes like
1/distance^3 whereas the electric near field goes like 1/distance^2, so
that you see mainly the electric near field.
I think it is this why people say you have less noise on a loop. Propably
you will also have less statics produced by corona discharge on a loop.
High selectivity will perhaps help against front end overload from a
nearby broadcast station.

I think using 4 to 5 windings in a 1 by 1 meter square resoanted with
a 500 pf capacitor should be a good starting point. There are formulas for

the inductivity in the ARRL antenna book, I have an older edition (14 or 15), but as far as I know they didn't take them out. For coupling to the receiver there are many ways, when I was playing with a 40 to 80 meter rx loop I used 1 turn 2 by 2 squared, a 250 pF capacitor connected to the ends of the wire, a low value ceramic capacitor connected to each of the joints and a balun. The ceramics were around 20 pF (less than I calculated before).



Other people use a additional single turn loop for magnetic coupling, most transmitting loop are such that the area of the main loop and the coupling loop are related at about 50:1, maybe one should try to realize the coupling such that this will hold for the product of # of windings times side length^2, but the ratio depends on the Q of the loop anyway and is not too critical in receiving. Best is perhaps a high impedance (does it need to be balanced ?) FET amplifier to match to your receiver but didn't try this.

Hope could give you a starting point.

Vy 73

Ralf

DL 6 OAP

==========
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Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

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2854. Re: Through-the-glass 2M antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1AC191.4740F019@bellatlantic.net>
Source record: 175963

You will be VERY pleased - if the antenna does what you want.
I built one, and was able to work all the repeaters I wanted to.
Happy as a pig in slop. A clean, neat, "stealth" installation -
the antenna looked like a cell phone setup. BUT when I needed
to work through a new repeater a few years later, I went for a 5/8
on the roof, which gave me better performance for the greater
distance - and more importantly, worse topography - I had to cover.

A thru-glass antenna is simply an LC circuit. Tuned properly, the
RF path through the glass is essentially lossless. The performance
difference between that antenna and say a 5/8 has two main
factors: The difference in freespace radiation patterns of a 5/6 wave
vs a 1/2 wave is one, and the impact of positioning on the vehicle is
the other. And the positioning affects the pattern in the "non-freespace"
installation. Now that may be interesting for discussion - but it has
nothing to do with whether or not you are pleased with the antenna.
If the thing does everything you want it to do, who cares if a different
antenna can do more? So you have to try it to decide.

Richard Smith wrote:

> Can anybody give me a rough idea of how well/bad these antennas perform. I
> am not looking for the best in DX, just something fairly discreet that will
> allow me to get on the local repeater while driving.
>
> Also, my radio receives airband. Will it receive okay enough through one of
> these antennas ?
>
> Thanks in advance,
>
> Richard.
>
> --
> Please remove the "NOSPAM" from my address if replying via email.

2855. Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: WolfgangS <schliess@gmx.de>
Message-ID: <t1lgcq6os4e76@corp.supernews.com>
Source record: 175964
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

Hi !
I want to calculate the L component of a Magnetic loop.
Is this right ???

r=radius
w=width of the loop lipe

L=12.57*r*log(2*r/w)+0.08

(Magnetic) Loop
N=1, r=50cm , w=1 cm
L= 2.8944 uH

(Magnetic) Loop
N=1, r=50cm , w=4 cm
L= 2.031 uH ?!?!?!!!??!

Can is be when the w increases then L component decreases ?!?!?

Tnx for help
Wolfgang

2856. Re: - www.k7on.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <kozS5.1210$5E1.226275@news.uswest.net>
Source record: 175965
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Brian Short <k7on@earthlink.net> wrote in message
news:MPG.1483e2b3815474c29896d1@news.earthlink.net...
> In article <t1dS5.13781$n9.932085@newsread2.prod.itd.earthlink.net>,
> ctj92@earthlink.net says...
> >
> > Check it out !
> >
> > --
> >
> > http://www.k7on.com
> >

Ummm Brian,

My Webwasher proggie has angelfire.com blocked as being insecure re. personal privacy. It's one of the 'info miner' sites... perhaps ya didn't know this.

A.

2857. Re: Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1AC0F0.F6D16E7@IEEE.org>
Source record: 175966

Fred Hambrecht wrote:
> 5. If that is the case, is the argument the total power of a given time will
> be less because of the reflections stored in the coax? If so, how can I
> measure it? I know how to mathematically analyze voltage and currents at any
> point on a line caused by reflections. However if I cannot see a difference
> in field strength are we, for practical purposes, jousting at windmills?

The easiest way to prove that reflected energy gets radiated seems to be using a modulated TV signal. You don't even have to run the actual experiment as a mental experiment will suffice. The actual physical experiment is like setting up a photocell to prove that the sun comes up.

Set up an amateur TV system with reflections on the feedline. Ghosts will appear on the TV receiver. The multiple ghosts will be equally spaced and decreasing in magnitude. One could even make it a closed cable system so that actual RF radiation is not required. One can estimate the length of the feedline and the SWR at the transmitter by looking at the received TV signal.

Let's say the characteristic impedance of a lossless feedline is 51.5 ohms and the load is 300 ohms. Let's assume a Z0-match at the transmitter end. Half the power incident to the load will be reflected. 50% of the power incident to the load is the most recently generated power. The other 50% of the power incident to the load is an infinite series of reflected powers of the form: 1/2RP1 + 1/4RP2 + 1/8RP3 + 1/16RP4 + ...

So the total radiated power would be 1/2GP + 1/4RP1 + 1/8RP2 + ...
where GP is generated power and RP is reflected power.
--
http://www.mindspring.com/~w6rca

2858. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <pyzS5.214$7d.24006@newshog.newsread.com>
Source record: 175967

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mark Keith" <nm5k@wt.net> wrote in message news:3A198A91.5967@wt.net...
> Roger Halstead wrote:
> >
> > BTW, even with static wicks, it's not uncommon to have to turn off every
> > thing to get rid of the noise. Particularly on the nav radios. The ADF
is
> > the most susceptible and the VORs right behind it. I had to restart all
the
> > electronics twice within 20 minutes on one trip
> >
> > I've not experience any problems with GPS yet, but I've not gotten into
any
> > storms of the magnitude that shut down every radio in the plane prior to
> > installing GPS so I can't speak about its effects on GPS.
>
> Maybe less effect than the radios. But just guessing. I would think the
> higher the freq of the device the less noise problems. ADF being real
> low freq would get whacked bad.

I don't think I would like to fly in
> storms too much. I even try to avoid them flying commercial jets. I had
> to take a 737 to Little Rock about a week ago . I waited until all the
> t-storms cleared out before I would get on that thing. We had a big line
> of them the night before that. Luckily, I timed my reservation just
> right, and left Houston with clear wx. Hit rain up north, but no big
> deal. Just light stuff. MK

I stay well away from thunderstorms, but heavy rain will at times create
lost of statice, but nothing like snow. Really cold "dry" snow creates an
unbelieveable amount of static.

Last Summer I flew the approach into 3BS. We were at 7,000 and had to start
down about 40 miles out. As soon as we entered the clouds (just under
7,000) we were in torrential rain. It was a nice smooth ride and no static
at all. We broke out about 3 miles from the airport. About a mile to
either side of us the ceiling dropped well below minimums. It was like
flying in an inverted canyon.

I had an ungrounded 1/4 wave 40 meter vertical.
We had a strong wind and heavy snow. The end of the RG-8 was disconected
and there was a bright, fat, blue arc that was coming out nearly an inch
before coming back to the shield. It was creating a pop like a small
firecracker. "Quite loud". It would "pop" about every 10 seconds.

I've never seen an ignition system, including the mags on the plane, put out that hot a spark.

Having gotten nailed on many an ignition system, I left that litter sucker lay their until the storm was over. After that I grounded both the shield and center conductor.

Roger (K8RI)

> --
> http://web.wt.net/~nm5k

2859. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1AC544.A6D1135F@bellatlantic.net>
Source record: 175968

Bill Aycock wrote:

> Funny thing happened when I was looking for a reference to an Amp I saw-
> I picked up the January 1995 issue of CQ, which is the 'Collectors
> Edition' covering 50 years of Amateur Radio. Gues what the lead article was?
>
> "Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY.

So THAT'S why my coax keeps getting heavier and heavier!

2860. Re: Joseph Willson another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <LBzS5.215$7d.23918@newshog.newsread.com>
Source record: 175969

Petting Zoo?

Admittedly there are some animals in here, but rather than petting there
should be a "Do not feed (troll) the animals" Some of these denizens bite!

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001120204541.24651.00000764@ng-cd1.aol.com...
> Welcome to the pettining zoo.
>
> Rick K1BQT

2861. Re: Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1AC4A2.58449D15@IEEE.org>
Source record: 175970

Cecil wrote:
> So the total radiated power would be 1/2GP + 1/4RP1 + 1/8RP2 + ...
> where GP is generated power and RP is reflected power.

I forgot to point out that the power magnitude of the above infinite
series is the same as the power magnitude of the generated power so
there will be no difference in steady-state average signal strength
with and without reflections.
--
http://www.mindspring.com/~w6rca

2862. Re: Alias another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8vehgk$s2m$1@slb1.atl.mindspring.net>
Source record: 175971

ROFLMAO!!! I hope you weren't too hard on "alias" and make him fell bad
that his "name" is now the subject of a thread...
LOL!!!!!~ What a putz.

2863. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1ac74d.32464522@news.akorn.net>
Source record: 175972

Hi Ralf,

On Tue, 21 Nov 2000 19:33:06 +0100, "R.Wilhelm"
<nhbiwilh@rrzn-user.uni-hannover.de> wrote:
>
>if the local noise is produced closed to the antenna, a loop should help.
>A loop mainly reacts to the magnetic field component of the EM wave. If
>your noise source is so far away that you 'see' only its far field (more
>than maybe a wavelength or so), than this makes no difference. If you have
>a noise source close to the antenna so that you are in its near field than
>a loop should help a little because the magnetic near field goes like
>1/distance^3 whereas the electric near field goes like 1/distance^2, so
>that you see mainly the electric near field.=20

At a distance greater than about 1/10th of a wavelength from a small
closed loop, the field response is mainly electrical....not magnetic.

The field response of a small vertical is mainly magnetic at the same
distance.

Very close to the antenna, that changes and the loop mainly responds
to magnetic components.

At any distance, it is pure blind luck if the loop is quieter than any
other antenna due to near-field coupling.

>I think it is this why people say you have less noise on a loop. Propably
>you will also have less statics produced by corona discharge on a loop.
>High selectivity will perhaps help against front end overload from a
>nearby broadcast station.

If the weather is so bad the antenna near earth has corona, you have
no business on 160 meters. The static from the surrounding area will
be so bad the corona will be meaningless. The exception might be if
the loop is on the top of a tall tower or building.

My verticals are just as quiet as any loop would be, because there is
no noise source within 50-100 feet of the antennas. If there was a
noise source close by, it would be pure random luck if a loop produced
better S/N, because it would depend on the field impedance of the
near-field of the noise source. Most noise sources are likely a
modest field impedance, since the conductors that radiate the noise
are often long and connected to many low impedance paths to ground.

So it is a matter of luck. At my QTH, I use only arrays of verticals
and Beverages for receiving...and the verticals are generally best.

73 Tom

2864. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8veif4caq0@208.206.142.104>
Source record: 175973

Richard Harrison wrote:
>
> Bill Aycock wrote:
> "Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY."
>
> Warren is about as infallible as I am. Reflected power loses the same
> percentage to the load on each successive pass as on the first. So most
> of the power is radiated. It simply can`t stay in the coax because there
> is no place for it there.
> \

I can't imagine *anyone* believing that. The powre is going to get out
of that coax one way or the other, if it's by only heat loss resulting
from the natural losses present. If it's to high a level for that, it'll
excape as light-when the coax burns. If the coax is lossless, it has no
REASON to stay within. Nuts.

2865. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Richard Arnold <k8rja@flashcom.net>
Message-ID: <t1ll4sbvktqp29@corp.supernews.com>
Source record: 175974
Cross-posted to: alabama.birmingham.radio.amateur,att.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Try this page: http--www.geocities: http://www.geocities.com/justradios/

--
Dick
k8rja@flashcom.net
"VK4LAJ" <vk4laj.SPAM.JAM@loaded-dog.com> wrote in message
news:3a1a327f@grissom...
> Hi and thanks for reading this post
>
> I recently acquired a General Electric 40ch CB radio Model A3-5825B (twin
> board model) with the view of putting it on 10m.
>
> Has anyone got the schematic diagram for this radio as I don't have one
and
> the rig has been tampered with by someone. Currently the lights come on
but
> there is no-one at home (no RX/TX). It appears that components have been
> added and subtracted but I don't know what the correct ones should be.
>
> Any help would be appreciated. Scanned schematics are OK but please email
me
> direct and don't forget to remove the SPAMJAM
>
> Thanks in advance
>
> --
> 73
> Adam VK4LAJ
> E-mail: - SPAMJAMvk4laj@loaded-dog.com
> WWW: - http://www.loaded-dog.com
> Brisbane Australia
> CQ Zone 29/ 30
> Point your beam at: -27.39S Lat. - 153.03E long
> Maiden Head: - QG62mo
> Height ASL: - 52m
>
> My wife says I never listen to her...
> at least that's what I thin she said?
>
>

2866. Re: Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8velpc$36a$1@uranium.btinternet.com>
Source record: 175975
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

The important thing to calculate is the capacitance which resonates the loop to the wanted frequency. Which is NOT the capacitance which resonates the DC or LF loop inductance to the wanted frequency.

This is because the loop is a transmission line having a length which is an appreciable fraction of a wavelength. For example, when the loop perimeter is nearly 1/2-wavelength at the required frequency, the tuning capacitance is zero pF.

But if you use the ordinary formula for calculating the capacitance necessary to tune the loop inductance to resonance, obviously you will obtain the wrong answer when the loop is already a half-wave resonant length all the way round.

For a sufficiently exact analysis of any regular-shaped magloop antenna download program MAGLOOP4 from my website. For a slightly less but sufficiently accurate analysis of rectangular loops download RJELOOP2.

I havn't checked your formula but it is probably the DC loop inductance.

Yes, when the diameter of the loop conductor increases, the inductance of a loop of the same circumference decreases.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
WolfgangS <schliess@gmx.de> wrote in message
news:t1lgcq6os4e76@corp.supernews.com...
> Hi !
> I want to calculate the L component of a Magnetic loop.
> Is this right ???
>
> r=radius
> w=width of the loop lipe
>
> L=12.57*r*log(2*r/w)+0.08
>
> (Magnetic) Loop

> N=1, r=50cm , w=1 cm
> L= 2.8944 uH
>
> (Magnetic) Loop
> N=1, r=50cm , w=4 cm
> L= 2.031 uH ?!?!?!!!??!
>
> Can is be when the w increases then L component decreases
?!?!?
>
> Tnx for help
> Wolfgang
>
>
>

2867. Re: Reflected power test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001121155910.09805.00000891@ng-cu1.aol.com>
Source record: 175976

By my understanding....
When you have the Tuner at the Antenna end, you get better efficiency.
I think that it could be understood & measured better at a higher SWR.
2:1 is just a drop in the bucket...

Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

2868. R-7000 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: n4jzh@knology.net
Message-ID: <3a1aea14.294650007@news.knology.net>
Source record: 175977

Any users of the R-7000 antenna out there?
pro's con's e.t.c. private email welcome.
n4jzh@knology.net 73 Donnie

2869. Re: newbie question (Bob)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <16725-3A1AE78A-229@asg-storefull-1112.public.svc.webtv.net>
Source record: 175978

I did read it, it was basic... just attatch the RG-6 Antenna...

Still no UHF

2870. Re: newbie question (help ALL)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <16725-3A1AE826-231@asg-storefull-1112.public.svc.webtv.net>
Source record: 175979

I recently bought a winegard ghost killer antenna Model CA-7210...
Hooked it up and VHF & FM come in.... (VHF is okay I guess) But no
UHF....

Any assiatance would be appreciated!

~J~
NO SPAM PLEASE

2871. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1AEC15.4F0688E1@IEEE.org>
Source record: 175980

Dick Carroll wrote:
>
> Richard Harrison wrote:
> >
> > Bill Aycock wrote:
> > "Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY."
> >
> > Warren is about as infallible as I am. Reflected power loses the same
> > percentage to the load on each successive pass as on the first. So most
> > of the power is radiated. It simply can`t stay in the coax because there
> > is no place for it there.
>
> I can't imagine *anyone* believing that.

Well, to be fair, we should say that during steady-state conditions
with continuous wave signals, the magnitude of the reflected power
in the coax is constant. Perhaps that is what Bruene meant. For instance,
200 watts stays in the coax until the transmitter is shut off. It's not
the same energy but is the same *amount* of power.
--
http://www.mindspring.com/~w6rca

2872. Re: R-7000 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20001121172803.20918.00000974@ng-fc1.aol.com>
Source record: 175981

Cushcraft withdrew the R-7000 from production after about a year. Do you get the hint?

It was pretty good when it was performing but couldn't handle power, had much narrower bandwidth than advertised and the traps fell apart. I know this from sad personal experience.

Cushcraft should have offered everyone their money back or at least a discount on a new antenna but they didn't.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2873. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: "Andrew J. O'Brien" <obrienaj@netsync.net>
Message-ID: <t1lurdsugp9513@corp.supernews.com>
Source record: 175982

Thanks to all that replied. I changed the wire for the antenna and double checked the jumper issue and it know receivers well. The jumper connection was not quite being made, that made a difference as did new wire and new connections. Now all I have to do is get more comfortable in tuning it up so that I can get a low SWR. Too many years being used to an automatic tuner on my TS440. To bad the auto-tuner on my TS440 will not accept ladder line.

Andy KB2EOQ.

"Dean L" <dean@iowaone.net> wrote in message
news:19fd1tkje8e5hg2dulpmi28lagdmnnvr4a@4ax.com...
> If you find that it is a bad Balun I have one that I have removed from my
> MFJ 989 and I am not using..
> I don't think it was ever used too much..
> One thing I did find on that Balun was that the nut that connected the two
> wires of the coil to ground was missing... That makes for an intermittent
> confection..
> 73 Dean W5GXL
>
>
> On Fri, 17 Nov 2000 16:51:35 -0500, "Andrew J. O'Brien"
<obrienaj@netsync.net>
> wrote:
>
> >Let me see if people with a better brain than I can figure this out....
> >
> >I thought I would stick up a quick and dirty 40M dipole fed with 450 Ohm
> >ladderline to an MFJ941C tuner. I bought the tuner used six months ago
but
> >had never got around to using it. The ladder line is brand new.
> >
> >I have made many dipoles before over the years with no major problems.
So I
> >was quite surprised , when I got the thing up in the air (only 20 feet at
> >this point) , that the receive was VERY bad. I have not even tried to
xmit
> >on the antenna yet. I checked the ladder line connection to the antenna
and
> >all appears to be okay. Receiving WWV on 10 and 15 MHz my existing G5RV
> >gets an S9 usually, this new dipole gets an S1 to S2 regardless of
settings
> >on the 941C. I double checked the short coax cable between the rig and
941C
> >and it too appears okay. Just for the fun of it, I took the ladderline

our
> >of the 941C , stuck one end of the ladder line into my coax connector
on
> >my rig, when I do that the receive on WWV increases to S7. Also when I
> >connected my existing G5RV via the 941C it works fine.
> >
> >So, I am baffled as to why when I connect both side of the ladder line
with
> >an antenna connected to it via the 941C that I get S1 to S2.
> >
> >Any thoughts?????
> >
> >Andy KB2EOQ
> >
> >
>

2874. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Eddie Bryant N4UMJ <N4UMJ@carolina.rr.com>
Message-ID: <gcDS5.4565$L26.1091458@typhoon.southeast.rr.com>
Source record: 175983
Cross-posted to: alabama.birmingham.radio.amateur,att.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Try the below link......

An excellent source for schematics.

Thanks to Popular Communication for
showing me this one.

http://www.w7fg.com/

> > Any help would be appreciated. Scanned schematics are OK but please
email
> me

2875. resonant frequency and patch antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Dimitris Anagnostou <danagn@avdira.cc.duth.gr>
Message-ID: <Pine.BSO.4.21.0011211708440.6691-100000@avdira.cc.duth.gr>
Source record: 175984

Hello all,
I'm new to this group, so sorry if this posting is out of subject.
Does anyone know what is the 'resonant frequency' in a microstrip
antenna? I have heard a lot of things, like 'the frequency where Mag(S11)
becomes minimum', 'the frequency where 'Re(Zin) becomes maximum' and
'the frequency where Im(Zin) becomes zero'. None of these is the same with
each other, especially with coaxial cable feed.
Also, is there any specific design procedure to find the 50+j0 Ohms point
in a patch antenna?

Please reply at: danagn@avdira.cc.duth.gr

Thank you very much,
Dimitris

2876. FS AEA model SWR-121 HF Analyst

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <ItFS5.10463$rs4.759374@nntp2.onemain.com>
Source record: 175985

I have a AEA swr-121 hf analyst for sale. excellent condition, works great, rarely used. Comes with case, manual, etc..
asking $275 shipped..

de Jerry -w7wpx-
jlockett@onemain.com

2877. Re: - www.k7on.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Richard Crowley <rcrowley7@xprt.net>
Message-ID: <vgGS5.2184$9X6.43646@e420r-atl1.usenetserver.com>
Source record: 175986
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mr. Short,
You are either kidding (in which case you forgot the emoticons)
or clueless (in which case you earn a place in our killfiles).

"Brian Short" <k7on@earthlink.net> wrote ...
> Ummm, what are you trying to hide?
> alias@microsoft.com says...
> > > > Check it out !
> > > > http://www.k7on.com
> > Ummm Brian,
> > My Webwasher proggie has angelfire.com blocked as
> > being insecure re. personal privacy. It's one of the 'info
> > miner' sites... perhaps ya didn't know this.

2878. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1B3AE1.1050800@hiwaay.net>
Source record: 175987

Group- I really thought SOME of you would read the article, rather than just the title. In the article, his point is that the reflected power stays in the coax on the way back toward the source, but when re-reflected, is the same as applied power, and is dissipated over a few cycles, in the load. the energy stored in these 'bounces' in the coax, is small at any time.
His illustrations are in terms of voltage and current, rather than power, and he makes the point that the re-reflection is caused by the input voltage, not the hardware. This causes the phase of the outward reflection to be controlled by the source.

I wish a person with more qualifications that I have would read the article, and comment.

Bill-W4BSG

Cecil wrote:

> Bill Aycock wrote:
>
>> "Reflected Power Stays in the Coax", by Warren B. Bruene, W5OLY.
>

2879. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1B3D6A.4EF05EF6@IEEE.org>
Source record: 175988

"Andrew J. O'Brien" wrote:
> Now all I have to do is get more comfortable in tuning it up
> so that I can get a low SWR.

Lest anyone misunderstand, a tuner does not change the SWR
between the tuner and the antenna. All your "low SWR" is
indicating is a match to the transmitter's designed-for
load.
--
http://www.mindspring.com/~w6rca

2880. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A1B4011.558F9E12@dvol.com>
Source record: 175989

Cecil wrote:

> "Richard A. Miles" wrote:
> > CDMA (Code Division Multiple Access) as well as TDMA (Time Domain
> > Multipe Access) are spread spectrum modulation schemes and have nothing
> > to do with the frequencies used.
>
> TDMA is spread spectrum?

>
Spread rectum, RRAP.

>
> --
> http://www.mindspring.com/~w6rca

2881. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A1B484C.B0B258BE@dvol.com>
Source record: 175990

Mark Keith wrote:

> Brian Kelly wrote:
>
> > >
> > Check out any serious aircraft and you'll find what look like little
> > "probes" with sharp points aimed aft, usually somewhere on the vertical or
> > horizontal stabilzers or both and occasionally on the ailerons.
>
> Hummm, sure those aren't vortex disturbers? Many smaller jets etc use
> those. I haven't really noticed the sharp points on too many, but guess
> I didn't look too hard. A vortex disturber looks like a short metal
> strip sticking up off the wings etc. You will see a whole row of them on
> many planes like learjets etc. They would probably look kinda like
> little probes from a distance. But, these may be totally different items
> from what you describe. I'll have to look into that sometime. The vortex
> disturbers do as their name describes. The reason I'm familiar with
> these is a friend of mine works on learjets. I went over there one time,
> and noticed all those short strips all over the wing, and asked him what
> they heck they were. Weird looking little things. But you can tell those
> as they just look like a strip of metal like they were cut out with
> scissors. MK

>
Trust me, I know the difference between "vortex disturber" strips and static charge dumpers. Done some fly stuff myself. V-22 Osprey build #3 is parked abt 75ft. from the cube I've been occupying of late and the whole butt end of the thing is loaded with 3/8" diameter pointy rods aimed aft which toss charges back where they came from . The last thing Bell or Boeing could give a rat's patooie about is dressing a V-22 up with vortex disturbers. The damned squirrely abomination wouldn't get off the ground, which it certainly does, without the monstrous vortxes it's Allisons generate.
>
w3rv

2882. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1B4FA7.3774@wt.net>
Source record: 175991

Roger Halstead wrote:

>
> I had an ungrounded 1/4 wave 40 meter vertical.
> We had a strong wind and heavy snow. The end of the RG-8 was disconected
> and there was a bright, fat, blue arc that was coming out nearly an inch
> before coming back to the shield. It was creating a pop like a small
> firecracker. "Quite loud". It would "pop" about every 10 seconds.

I had a ten meter 5/8 GP that would do that. But not quite so loud. But it would arc from center pin to shield about every ten seconds or so when I had charged clouds going over. No rain or anything. A grounded coil could have cured that, but I prefered ungrounded as I used that antenna on 30m also as a 1/4 wave. It's funny, I had the 32 ft 40m antenna at 36 ft which was longer and higher then the 10m ant and also ungrounded, but it never arced in any wx. Go figure...:/ MK

--
http://web.wt.net/~nm5k

2883. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 00:51:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vcgoh$184$1@uranium.btinternet.com>
Source record: 175932

Dear All Friends,

Why don't yawl put some numbers in the classical transmission line formulae and discover, before its too late, what really happens.

Or, if you have no faith in formulae, just set up a signal generator + line + attenuator + load + voltmeter and discover the same things.

It's really very simple. Please don't drive yourselves into nut-houses by haggling and quibbling about imaginary quantities such as reflected watts and the time taken to transfer from A to B. I cannot promise to pay visits to your solitary confinement cells because of travelling expenses. But I wish you all well.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Richard Harrison <richardharrison@webtv.net> wrote in message
news:12569-3A19585A-29@storefull-111.iap.bryant.webtv.net...
> Cecil, W6RCA wrote:
> "The generated energy and the reflected energy indeed do see different
> conditions---"
>
> For example:
> 1/4-wave line section (50 ohms =Zo).
> Load = 25 ohms.
> The line input will be = 100 ohms.
> This is standard impedance inversion.
>
> None of the reflected energy is returned to the source because the
> source has higher voltage at every point in the cycle when the volts are
> not zero.
>
> We assume our source has an impedance of 100 ohms and is matched to the

> load we provide with our 1/4-wave matching section.
>
> The source`s energy is not reflected at its terminals
because the
> transformed load`s 100 ohms matches its input impedance.
>
> It seems to me that the incident wave is delayed as it
travels to the
> load by 90 degrees. At the load the voltage experiences
another 180
> degree phase shift, but no phase shift occurs on
reflection in the
> current through the low load impedance. The reflected wave
is delayed by
> another 90 degrees as it travels back to the source.
>
> The returning voltage has gone through 360 degrees and has
been reduced
> by the energy absorbed in the load. The reflected voltage
fraction is:
> (Rload - Zo) / (Rload + Zo).
> The line is lossless.
>
> At the source`s terminals, as Cecil implied, there is a
different
> condition from that at the load. It`s not just the
impedance that`s
> different. There is also an energy source at the source.
>
> We have a source voltage on one side of an internal
impedance and a
> smaller reflected in-phase voltage at the output
terminals. The current
> which flows out the internal impedance is motivated by the
difference
> between the in-phase voltages on opposite sides of the
internal
> resistance of the source. This causes us to see 100 ohms
as a load, and
> not the Zo of the cable.
>
> Best regards, Richard Harrison, KB5WZI
>

2884. Re: Joseph Willson another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 01:39:00 UTC
From: fractenna@aol.com
Message-ID: <20001120203900.07539.00001565@ng-cs1.aol.com>
Source record: 175933

```
>Subject: Re: Nathan Cohen another thread gone wrong
>From: "KB9WFK" KB9WFK@mindspring.com
>Date: 11/20/00 6:03 PM Eastern Standard Time
>Message-id: <8vcasn$nph$1@slb6.atl.mindspring.net>
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001120045901.24633.00000706@ng-cd1.aol.com...
>> >
>> >Well, I was certainly optimistic for a short period of time, Chip was
>> >restraining himself, but some of them couldn't leave it alone.
>> >
>> >It's a shame this carries on like this, maybe you guys should look back
>> >through
>> >the threads and see exactly where this thing hit critical mass... it's
>pretty
>> >obvious!
>> >
>> >Maybe in the future we can try to control ourselves... it isn't always
>Chip's
>> >fault!
>> >
>> >To Everyone, a Blessed and Thankful Thanksgiving!
>> >
>> >
>> >Wayne
>> >
>> >
>> >email wgvideo at attglobal dot net
>>
>>
>> Well Wayne,
>>
>> Here you go blaming the victim again.
>>
>> Please stop this. Its only makes me look bad. I will never, ever, ever,
>accept
>> a premise that I am the person portrayed here, for the simple reason that
>I am
>> not that person.
>>
>> I do not wish to convince you or anyone else of that: taking as an
>assumption
>> that a person is worthless, evil, and so on, until proven otherwise is so
```

>> foreign from the value system I grew up with that I cannot, and will not,
>> entertain it.
>>
>> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
>here.
>> Any more than you, or your mother, or your son should.
>>
>> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
>>
>> With best Wishes,
>>
>> Chip N1IR
>
>About the only thing that makes sense now is that you have shown yourself to
>be a moron. May I ask WHY in the heck you are attacking someone that posted
>a message siding with you and condemning others for their posts about you?
>
>> Here you go blaming the victim again.
>
>What? He SPECIFICALLY says, "Chip was
>restraining himself, but some of them couldn't leave it alone." and, "it
>isn't always Chip's
>fault!" Sounds more like you crying about being a victim again.
>
>> Please stop this. Its only makes me look bad. I will never, ever, ever,
>accept
>> a premise that I am the person portrayed here, for the simple reason that
>I am
>> not that person.
>>
>> I do not wish to convince you or anyone else of that: taking as an
>assumption
>> that a person is worthless, evil, and so on, until proven otherwise is so
>> foreign from the value system I grew up with that I cannot, and will not,
>> entertain it.
>
>What the hell are you going on about here? He didn't portray you as
>anything. Yet again it is you that is making you look bad. Are you feeling
>a little guilty about something? It seems thou doth protest far, far too
>much.
>
>> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations
>here.
>> Any more than you, or your mother, or your son should.
>
>I, my mother and my not yet conceived son have never declared ourselves to
>be experts in any NG. We have not made 2600 posts to this NG since dejanews
>last started recording. We have never given "public notice" of anything in
>this or any other forum. We have never threatened to sue half a dozen or
>more people in any NG. We have never made it painfully clear what our

>profession was in an attempt to give our opinion more weight in any NG. We
>don't have a persecution complex.
>
>Hope this helps,
>kb9wfk
>

2885. Re: Joseph Willson another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 01:45:41 UTC
From: k1bqt@aol.com
Message-ID: <20001120204541.24651.00000764@ng-cd1.aol.com>
Source record: 175934

Welcome to the pettining zoo.

Rick K1BQT

2886. Re: Base Insulator for Rohn 25G Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 02:26:54 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A19DD3A.CD9685EC@cmcorp.com>
Source record: 175935

Roger Leone wrote:

> Ready made insulators are going to be expensive. However, if you are
> willing to scrounge around salvage/surplus yards, you will find insulators
> you can adapt to your project for a few dollars. You can also go to
> plastics suppliers and check out their stock. You will probably find
> materials you can use.
>
> I recently picked up (with great difficulty because of its weight) a piece
> of fiberglas epoxy measuring 4 feet by 4 feet by 2 inches. It weights over
> 100 pounds and cutting it will be a challenge, but it will make great
> insulators.

Be careful not to breath the glass fiber dust while cutting it!
It's not as bad as asbestos, but it can really mess you up.

> It was at a salvage yard and was considered to be of no value
> because it could not be recycled easily. I got it in trade for some metal
> scrap I wanted to get rid of anyway.
>
> Use your imagination and a little research and you will probably come up
> with something inexpensive that will work fine.
>
> Good luck,
>
> Roger K6XQ

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2887. Re: Through-the-glass 2M antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 03:10:59 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A19E7ED.1C308ED6@worldnet.att.net>
Source record: 175936

I have the Larson 2/70 Dual band thru the glass antenna installed on my Nissan Altima.
It works well however not as good as if it were solidly roof mounted. A Problem with the antenna which I don't care for is that excess coax calbe is used for matching which suggests that there may be RF on the outside of the shield. While this has not caused me any problems it is conceivable that some cars may hiccup if the RF gets into their computers. Also many cars used metallized winshield tinting which will adversely affect the antennas performance.
Out of band performance drops off significantly out of band. The 162.55 MHz weather station which is only six miles away on a mountain top comes in marginally with this antenna.

Good luck...Dick K7RNZ

Richard Smith wrote:

> Can anybody give me a rough idea of how well/bad these antennas perform. I
> am not looking for the best in DX, just something fairly discreet that will
> allow me to get on the local repeater while driving.
>
> Also, my radio receives airband. Will it receive okay enough through one of
> these antennas ?
>
> Thanks in advance,
>
> Richard.
>
> --
> Please remove the "NOSPAM" from my address if replying via email.

2888. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 03:52:26 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A19F1A4.E0FF80FA@worldnet.att.net>
Source record: 175937

Keep in mind that Sprint uses the PCS system which operates at 1.9GHz
and will not be compatible with the amplifiers illustrated in the link.
CDMA (Code Domain Multiple Access) as sell ast TDMA (Time Domain
Multipe Access) are spread spectrum modulation schemes and have nothing
to do with the frequencies used. I would suggest changing cell phone
service providers before adding amplifers and taking other costly and
possible illegal means to solve your problem.

Richard A Miles K7RNZ

"

2889. Re: where should I post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 04:13:44 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A19F6A1.4B8F820@worldnet.att.net>
Source record: 175938

Keep in mind that Sprint uses the PCS system which operates at 1.9GHz
and will not be compatible with the amplifiers illustrated in the link.
CDMA (Code Division Multiple Access) as well as TDMA (Time Domain
Multipe Access) are spread spectrum modulation schemes and have nothing
to do with the frequencies used. I would suggest changing cell phone
service providers before adding amplifers and taking other costly and
possible illegal means to solve your problem.

Richard A Miles K7RNZ

"

2890. 10m Swiss Quad

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 04:59:47 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <7jnS5.6961$f8.146343@news1.rdc1.sdca.home.com>
Source record: 175939

It may not model great but it looks so groovy I'm building it anyway.

any experience? tips? ideas?

2891. Re: Any antenna idea???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 05:52:25 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <m8dj1t074uelln0dilg8vfiv1r478k8hcm@4ax.com>
Source record: 175940

On 20 Nov 2000 00:57:07 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>
>
>And I quote:
>
>"Even if you got the antenna to load properly and not be too lossy, its
>just too low to be useful. Horizontal antennas are very sensitive to
>height. At a low height they point almost straight up."
>
>Close quote

Did he mean "radiate almost straight up"?

2892. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-21 07:18:30 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <NkpS5.3199$d6.490805@news.uswest.net>
Source record: 175941

Fractenna <fractenna@aol.com> wrote in message
news:20001120045901.24633.00000706@ng-cd1.aol.com...
[snip]

> >Maybe in the future we can try to control ourselves... it isn't always Chip's
> >fault!
> >
> >To Everyone, a Blessed and Thankful Thanksgiving!
> >
> >
> >Wayne
> >
> >
> >email wgvideo at attglobal dot net
>
>
> Well Wayne,
>
> Here you go blaming the victim again.
>
> Please stop this. Its only makes me look bad. I will never, ever, ever, accept
> a premise that I am the person portrayed here, for the simple reason that I am
> not that person.
>
> I do not wish to convince you or anyone else of that: taking as an assumption
> that a person is worthless, evil, and so on, until proven otherwise is so
> foreign from the value system I grew up with that I cannot, and will not,
> entertain it.
>
> JUST BE QUIET! I should not be part--PERSONALLY-- of ANY conversations here.
> Any more than you, or your mother, or your son should.
>
> KEEP PERSONAl ATTACKS OFF this ng. Doesn't that make sense?
>
> With best Wishes,
>
> Chip N1IR

Chip,

Methinks you suffer from SNAR syndrome (see-name-and-react). I saw no personal
attack, just a comment alluding that it wasn't all your fault... Perhaps you
need a rest!

A.

2893. Re: Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vh2o1$45$1@neptunium.btinternet.com>
Source record: 175869
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

Loop inductance =

0.2 * P * (Ln(4 * P / d) - K) microhenrys.

where P = loop Perimeter or circumference.
d = conductor diameter.
Ln = logs to base e.

For Circle K = 2.451
For Octogon K = 2.561
For Hexagon K = 2.636
For Square K = 2.853

A circular loop is harder to make and fix than a square but
its performance is only about 1 dB better.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

2894. generic radio interface for the ATAS 100?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Dan Hayman <DanHayman@Accomplishments.com>
Message-ID: <kdUS5.18903$xd3.1381348@newsread1.prod.itd.earthlink.net>
Source record: 175870

I understand that there is a group which produces a box which will interface the ATAS 100 to any radio (not just the FT100). If anybody knows about this, I would like to get the contact information, etc.

Thanks,

Dan, KD0DAN

2895. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1C1534.A2FAA97@IEEE.org>
Source record: 175871

Reg Edwards wrote:
>
> Cecil said -
> > Lest anyone misunderstand, a tuner does not change the SWR
> > between the tuner and the antenna.
> ================================
> What about the change in the SWR with respect to (your)
> watts which have been reflected back towards the transmitter
> from a mismatch at the antenna end ?

There may be a change in the magnitude of reflected power AND
forward power but the reflection coefficient and SWR stays the
same. The load impedance and Z0 dictate the SWR no matter what
the generated power level (except zero of course).
--
http://www.mindspring.com/~w6rca

2896. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1C16D9.1C4BC882@IEEE.org>
Source record: 175872

AO KD5FXT wrote:
>
> Ok, here is the scoop. I am putting up my first ladder line fed antenna. I am
> blding a 160 meter dipole and want to feed with ladder line. Items of
> consideration please:
>
> 1) I have 100 ft of ladder line.. Don't need that much. Should I cut to
> needed length?

With a resonant 160m dipole, the shorter the ladder-line, the better. Every foot of feedline up to about 115ft takes you farther away from resonance. For instance, with 100 ft. of ladder-line, the impedance at the transmitter will be very high.
--
http://www.mindspring.com/~w6rca

2897. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a1c1ab2_1@news.cybertours.com>
Source record: 175873

"AO KD5FXT" <aokd5fxt@cs.com> wrote in message
news:20001122114521.24651.00001081@ng-cd1.news.cs.com...
> Ok, here is the scoop. I am putting up my first ladder line fed antenna.
I am
> bldng a 160 meter dipole and want to feed with ladder line. Items of
> consideration please:
>
> 1) I have 100 ft of ladder line.. Don't need that much. Should I cut to
> needed length? (try to avoid a 1/2 wavelength on any frequency you plain
to use.)
> 2) My shack is covered in sheet iron. I have windows. Is this a problem
? (Keep the Feedline at least 2.5 times it's width away from the Metal)
> If so, how do i deal with it?
> 3) I am somewhat of a coward so antenna will be at abt 30 feet since I am
a
> coward and won't climb any higher. Think this is ok? (Should Work fine)
> 4) I am using 12 gauge insulated wire because of an abundance of trees.
Will
> run thru a couple of them. Problem with insulation, gauge of wire?
(If you have a Tuner that will handle the load should be no problem)
Can I load the amp up with this?
> Tnx and pls email with thoughts
>
> Bill

2898. news in the home page

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: andrea <mezand@libero.it>
Message-ID: <zoVS5.19855$FV2.555058@news.infostrada.it>
Source record: 175874

news link vhf uhf end more

www.qsl.net/iw4cb/

2899. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8059E0C39@www.indianarep.com>
Source record: 175875

If you mean "climb" regarding the trees, invest in a cheap slingshot. I did that, with some fishing line, then kevlar rope, and never got a foot off the ground. Works great. Just wish I had more trees!

AO KD5FXT <aokd5fxt@cs.com> wrote in message news:20001122114521.24651.00001081@ng-cd1.news.cs.com...
> Ok, here is the scoop. I am putting up my first ladder line fed antenna. I am
> blding a 160 meter dipole and want to feed with ladder line. Items of
> consideration please:
>
> 1) I have 100 ft of ladder line.. Don't need that much. Should I cut to
> needed length?
> 2) My shack is covered in sheet iron. I have windows. Is this a problem
?
> If so, how do i deal with it?
> 3) I am somewhat of a coward so antenna will be at abt 30 feet since I am
a
> coward and won't climb any higher. Think this is ok?
> 4) I am using 12 gauge insulated wire because of an abundance of trees.
Will
> run thru a couple of them. Problem with insulation, gauge of wire? Can I
load
> the amp up with this?
> Tnx and pls email with thoughts
>
> Bill

2900. Hamstick and coupler--again!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3a1c256e$0$30003$44a10c7e@news.net-link.net>
Source record: 175876

Will an 80 meter Ham stick antenna work (I know the couplers will match it) with an end-fed wire coupler such as SGC 230 or Icom AH-4 better than just a 102" stainless steel whip? I have tried both couplers with a Hustler coil antenna and both seem to match,
however, results from earlier posts were telling me that on the higher freqs the full antenna was not being used and the loading coil was acting like a trap? Theroretically, wouldn't an 80 meter Hamstick antenna act like 60-65 feet of wire (to the coupler and rig), although it is shortened, lossier and not as effective? How would it behave on the higher freqs? Wierd lobes?
What difference (besides cosmetices) would there be if I just took 60 feet of wire and wrapped it around a stiff fishing pole?
Should I just stick with a SS whip?
The SGC-303 whip works very well considering what it is, but it is very pricey and I don't want to buy another if I don't need to.

2901. Ham stick and coupler?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3a1c256d$0$30003$44a10c7e@news.net-link.net>
Source record: 175877

Will an 80 meter Ham stick antenna work with an end-fed wire coupler such as SGC 230 or Icom AH-4 better than just a 102" stainless steel whip? I have tried both couplers with a Hustler coil antenna and both seem to match, however, results from earlier posts were telling me that on the higher freqs the full antenna was not being used. Theroretically, wouldn't an 80 meter Hamstick antenna act like 6

2902. Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Al <ABurzynski@swri.edu>
Message-ID: <t1ob0kkn5eep67@corp.supernews.com>
Source record: 175878

Where/how do I connect the outer shield of double shielded coax if I use this coax as the feed line from my receiver to antenna? Should the two shields be shorted at both ends of the run or just at the receiver? I plan on using BNC connectors at both ends of the cable. My main reason for using double shielded is that it is supposed to reduce RFI pickup, and I'm fighting quite a bit of it.

I guess I'm going to break down and get the ARRL Antenna Book. $30 is quite a bite but I hope it will answer some of these questions.

Thanks for any info.

Al
KA5JGV

2903. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A1C2B13.4CDE8EA5@eznec.com>
Source record: 175879

I've used a slingshot for many years for Field Day and other portable operation, but not for a fixed home antenna. The problem is that the line very quickly digs into the tree and seizes, so it's impossible to get the antenna down after a few days. But I've only used nylon twine or rope, and with Douglas fir or other pitchy trees. One person some time back reported using very heavy nylon monofilament fishing line and was able to get the antenna back down -- apparently the line is slippery enough so it can be pulled even after cutting into the tree. I don't recall what kind of trees he was putting the antennas up in.

What's your experience with the kevlar rope? Can you get the antenna back down after a month or two? What kind of trees?

Roy Lewallen, W7EL

jimmy john wrote:
>
> If you mean "climb" regarding the trees, invest in a cheap slingshot. I did
> that, with some fishing line, then kevlar rope, and never got a foot off the
> ground. Works great. Just wish I had more trees!

2904. Re: Static noise from rain or snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1C3A92.42C1@wt.net>
Source record: 175880

Brian Kelly wrote:

> Trust me, I know the difference between "vortex disturber" strips and static
> charge dumpers. Done some fly stuff myself. V-22 Osprey build #3 is parked abt
> 75ft. from the cube I've been occupying of late and the whole butt end of the
> thing is loaded with 3/8" diameter pointy rods aimed aft which toss charges back
> where they came from . The last thing Bell or Boeing could give a rat's patooie
> about is dressing a V-22 up with vortex disturbers. The damned squirrely
> abomination wouldn't get off the ground, which it certainly does, without the
> monstrous vortxes it's Allisons generate.
> >
> w3rv

Yep, I guess you missed my 2nd post.. I came to the same conclusion being as they point backwards instead of straight up. Also I was calling them the wrong name anyway. Should be vortex generators. Yep, the v-22 a strange animal. I had a model of one of those I tried to rig up for the sim. It sorta worked ok, not the greatest though. It flew, and you could change the pitch of the rotors, but it still wasn't too accurate I don't think. Maybe could do a better one now the the air file technology has improved a bit. MK
--
http://web.wt.net/~nm5k

2905. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A1C2C0B.E824EC03@eznec.com>
Source record: 175881

I'd be surprised if you'll see any difference in RF pickup by using the double shielded cable. I've seen a noticeable difference, but only when looking at very small signals using extremely well shielded test equipment. You should connect both shields at both ends of the cable just as you would a single shield.

I doubt you'll find that information in the ARRL Antenna Book, but in my opinion it's a terrific bargain at $30.

Roy Lewallen, W7EL

Al wrote:
>
> Where/how do I connect the outer shield of double shielded coax if I use
> this coax as the feed line from my receiver to antenna? Should the two
> shields be shorted at both ends of the run or just at the receiver? I plan
> on using BNC connectors at both ends of the cable. My main reason for using
> double shielded is that it is supposed to reduce RFI pickup, and I'm
> fighting quite a bit of it.
>
> I guess I'm going to break down and get the ARRL Antenna Book. $30 is quite
> a bite but I hope it will answer some of these questions.
>
> Thanks for any info.
>
> Al
> KA5JGV

2906. Motorola pagewriter 2000 2 way pager for auction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: booujie <booujie@hotmail.com>
Message-ID: <USWS5.2708$FT.142701@bgtnsc04-news.ops.worldnet.att.net>
Source record: 175882
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.scanner,rec.radio.swap

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=507016713

2907. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1C3CB8.C8331B44@oio.net>
Source record: 175883

Al,
You would need to connect the shields at both ends
of the coax run. And worse than that, I'm afraid that
really isn't going to do anything to help with your
RFI problem. I seriously doubt if your getting the
noise because of the coax shielding...
'Doc

2908. Re: Hamstick and coupler--again!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1C3DE1.4F18B26E@oio.net>
Source record: 175884

Rudolph,
The HamStick ought to work with your tuner very
well on 80 meters. It should work as well as a 102"
whip on the higher bands, and probably better, maybe.
'Doc

2909. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vhffrchb1@plutonium.btinternet.com>
Source record: 175885

```
Cecil wrote ...
> Reg Edwards wrote:
> >
> > Cecil said -
> > > Lest anyone misunderstand, a tuner does not change the
SWR
> > > between the tuner and the antenna.
> > ================================
> > What about the change in the SWR with respect to (your)
> > watts which have been reflected back towards the
transmitter
> > from a mismatch at the antenna end ?
>
> There may be a change in the magnitude of reflected power
AND
> forward power but the reflection coefficient and SWR stays
the
> same. The load impedance and Z0 dictate the SWR no matter
what
> the generated power level (except zero of course).
============================

Cecil, I am referring to the reflection coefficient and
mismatch presented to the line by the internal impedance of
the transmitter as modified by the tuner. Obviously, for
energy reflected back from the antenna towards the
transmitter, this will result in standing waves on the
line - and the magnitude of such waves will depend on the
tuner setting.
---
Reg
```

2910. Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Tweak <mazhar@nmt.edu>
Message-ID: <8vhfii$jk6$1@newshost.nmt.edu>
Source record: 175886

Can anyone recommend books to study for the Amateur Extra exam. I'm a complete newbie, and I want to start with this certification. I did see a book from ARRL that preps for the extra exam but I don't know if it requires knowledge from previous certifications.

Thanks.

2911. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: wayne_N3TNS
Message-ID: <3A1C47AB.C64271FE@attglobal.net>
Source record: 175887

Fractenna wrote:

> >
> >Well, I was certainly optimistic for a short period of time, Chip was
> >restraining himself, but some of them couldn't leave it alone.
> >
> >It's a shame this carries on like this, maybe you guys should look back
> >through
> >the threads and see exactly where this thing hit critical mass... it's pretty
> >obvious!
> >
> >Maybe in the future we can try to control ourselves... it isn't always Chip's
> >fault!
> >
> >To Everyone, a Blessed and Thankful Thanksgiving!
> >
> >
> >Wayne
> >
> >
> >email wgvideo at attglobal dot net
>
> Well Wayne,
>
> Here you go blaming the victim again.
>
> Please stop this. Its only makes me look bad. I will never, ever, ever, accept
> a premise that I am the person portrayed here, for the simple reason that I am
> not that person.

Hey Chip.... why don't you try reading...or better yet, comprehending my post
before you defensively foam at the mouth ...

Wayne

email wgvideo at attglobal dot net

2912. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A1C51DE.CF2F75C7@dialpoint.net>
Source record: 175888

I missed the origional message. If the antenna is used for receive only
and unless there is a transmitter nearby such as in a repeater I doubt
the double shielding will help. Most of the RFI will be from the
antenna unless a transmitter coax is close to the receiver coax.

The shield should be connected at both ends. What kind of coax is being
used ?
If BNC connectors are being used it sounds like rg-58 type. For the
rg-8 size I usually get the 9913 type where there is a foil shield. NOt
somuch for the sheilding but it usually has a lower loss and the price
is about the same as a good grade of rg-8 type.

Roy Lewallen wrote:
>
> I'd be surprised if you'll see any difference in RF pickup by using the
> double shielded cable. I've seen a noticeable difference, but only when
> looking at very small signals using extremely well shielded test
> equipment. You should connect both shields at both ends of the cable
> just as you would a single shield.
>
> I doubt you'll find that information in the ARRL Antenna Book, but in my
> opinion it's a terrific bargain at $30.
>
> Roy Lewallen, W7EL
>
> Al wrote:
> >
> > Where/how do I connect the outer shield of double shielded coax if I use
> > this coax as the feed line from my receiver to antenna? Should the two
> > shields be shorted at both ends of the run or just at the receiver? I plan
> > on using BNC connectors at both ends of the cable. My main reason for using
> > double shielded is that it is supposed to reduce RFI pickup, and I'm
> > fighting quite a bit of it.
> >
> > I guess I'm going to break down and get the ARRL Antenna Book. $30 is quite
> > a bite but I hope it will answer some of these questions.
> >
> > Thanks for any info.
> >
> > Al
> > KA5JGV

2913. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Web <WebFx27@hotmail.com>
Message-ID: <IXYS5.303522$4d.38040792@news02.optonline.net>
Source record: 175889

Are you a ham now??
If not you'll need to pass the Technicians exam, a 5 word per minute Morse code exam, a General exam and finally the Extra exam. The ARRL does have a Web site with information on getting licensed and finding a test location near you http://www.arrl.net/hamradio.html

The W5YI group also has study materials http://www.w5yi.org/TheWorks.htm

"Tweak" <mazhar@nmt.edu> wrote in message
news:8vhfii$jk6$1@newshost.nmt.edu...
> Can anyone recommend books to study for the Amateur Extra exam. I'm a
> complete newbie, and I want to start with this certification. I did see a
> book from ARRL that preps for the extra exam but I don't know if it
requires
> knowledge from previous certifications.
>
> Thanks.
>
>

2914. Re: HyGain V2R vhf gp?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <VMZS5.330$JN1.19197@news1.mts.net>
Source record: 175890

Hello Pete:

Can't help with the manual. I have lost mine too. Please inform me if someone offers a scanned version, as I would like to see the information again.

You might like to see how I modified mine for operation on the FM broadcast band here in Canada. After a few years of great service on 2 metres, I frequency scaled it for 106.3 Mhz and it is now located at 450 feet above the centre of the city of Winnipeg.

Here is a link to the station's site. Go into the pictures section, and you'll see the V2R and the transmitter site.
http://www.ckvn.com

Enjoy the antenna...it has survived some very strong winds while carrying a great deal of ice and still is in fine mechanical condition after 4 years of service.

Regards,
Lee Smith
VE4ANC
CKVN Radio

2915. The Perfect Christmas Gift 5601

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: lezggh@hotmail.com
Message-ID: <naUS5.80700$1Z3.211867@e420r-sjo3.usenetserver.com>
Source record: 175891

Two days ago I ordered 10 pieces of paper money from 10 different countries from a company called Perth Numismatics. Lo and behold they arrived today and they are very nice and colourful. They even have a bill from Antarctica. I didn't even know they existed. These are perfect for stocking stuffers or people who are hard to buy for. The website address is www.perthmoney.com
Good luck and Merry Christmas

Cynthia Reeves

xzoyjpctevvjzneiqrxrbiwoflquzqpwihdeksehnczyxu

2916. Re: generic radio interface for the ATAS 100?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: "John (VE7JDB)" <johndb@dbtechnet.com>
Message-ID: <974947843.369425@news.islandnet.com>
Source record: 175892

"Dan Hayman" <DanHayman@Accomplishments.com> wrote in message
news:kdUS5.18903$xd3.1381348@newsread1.prod.itd.earthlink.net...
> I understand that there is a group which produces a box which will
interface
> the ATAS 100 to any radio (not just the FT100). If anybody knows about
this,
> I would like to get the contact information, etc.
>
> Thanks,
>
> Dan, KD0DAN
>
>

You may get some of the information that you are requesting at the following
address:

http://members.aol.com/wa8lmf/ham/index.htm#ataspics

Cheers,

John (VE7JDB)

2917. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Tim <tthomps@nospam.erols.com>
Message-ID: <8vi1gtirh1@bob.news.rcn.net>
Source record: 175893

Tweak wrote in message <8vhfii$jk6$1@newshost.nmt.edu>...
>Can anyone recommend books to study for the Amateur Extra exam. I'm a
>complete newbie, and I want to start with this certification. I did see a
>book from ARRL that preps for the extra exam but I don't know if it
requires
>knowledge from previous certifications.
>
>Thanks.
>

To get the Extra class license, you'll have to pass the Technician, General, and Extra class written tests, as well as a 5 word per minute code test. The ARRL Extra Class License Manual prepares you for the Extra written test, but makes the (reasonable) assumption that you already know the material for the other license classes.

I'd recommend the ARRL study manuals for the other license classes. They cover all of the material that's on the test, plus they have all of the questions in the exam pool. Even if you have a very strong background in electronics, you'll still need to know the FCC rules, amateur operating procedures, and other details.

I used Morse Academy to learn the code. It's available as freeware from several web sites, such as

http://www.ac6v.com/pagez.html

Finally, you may want to find a club in your area that offers classes. That's the route I took, and it was very helpful. Not only did I get my license, but I met some fine people who taught me things that aren't in the books. I have a degree in Physics, and some college level courses in electronics, and a long term interest in amateur radio, but I never got licensed until I finally decided to take a class and join a club.

Good luck,

Tim
KB3EKG

2918. Suggestions for (indoor) small space HF antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Don Faulkner <dfaulkner@pobox.com>
Message-ID: <3a1c9874@inout.beachnet.com>
Source record: 175894

Hello, all.

I've recently moved to the big city (LA) from Arkansas, and I'm trying to get my HF station back on the air. My most immediate problem is finding a good antenna solution.

I live on the 2nd floor of a 3 floor building. As you can imagine, getting any antenna up is going to be a challenge. I do have a balcony that I could use, but the railing is wood, so I expect I'll have to find a good ground. Of course, I'll have to do that indoors as well.

I'm considering a 1/4-wave end-fed wire (for 40M) with a balancing 1/4-wave ground. My initial thought was to run the driven element in a loop around the ceiling of my spare bedroom, and treat the ground element similarly around the baseboard. With this setup, though, I'm concerned about the amount of RF exposure in the bedroom, let alone the rest of the unit. I know I'm going to have to keep the power down, and that of course limits my abilities.

I'm sure there are other folks in similar situations. Can anyone offer me some other options that are perhaps a little safer?

What about RFI and neighbors? Is there anything I can do to minimize the effects of my operating (primarily 40M, 10M, 6M, 2M, .70M)?

--
Don Faulkner, KB5WPM |
| "All that is gold does not glitter."
(This space unintentionally | "not all those who wander are lost."
left blank) | --J.R.R. Tolkien

2919. Equipment for sale or trade!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: David <kb9lpk@telocity.com>
Message-ID: <3A1CA018.345F98EA@telocity.com>
Source record: 175895

Thanks for reading message please visit

http://kb9lpk-2.ampr.org/sale.html
--

73 de David--kb9lpk <><

The Box said "Win95,Win98,NT40 Win2000 or better" So I installed Linux

email- kb9lpk@telocity.com
Ham email- kb9lpk@kb9lpk.ampr.org
Homepage- http://members.telocity.com/kb9lpk
TNOS BBS- http://kb9lpk.ampr.org

My Equipment Sale page is http://kb9lpk-2.ampr.org/sale.html

Shop at our wonderful gift shop on the web! http://www.giftsheavensent.com

2920. Re: Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011221150100.26118-100000@unics>
Source record: 176003
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

On Tue, 21 Nov 2000, WolfgangS wrote:

> Hi !
> I want to calculate the L component of a Magnetic loop.
> Is this right ???
>
> r=radius
> w=width of the loop lipe
>
> L=12.57*r*log(2*r/w)+0.08
>
> (Magnetic) Loop
> N=1, r=50cm , w=1 cm
> L= 2.8944 uH
>
> (Magnetic) Loop
> N=1, r=50cm , w=4 cm
> L= 2.031 uH ?!?!?!!!??!
>
> Can is be when the w increases then L component decreases ?!?!?
>
> Tnx for help
> Wolfgang
>
>
>
>
>
>

Hi Wolfgang,

I don't know from where the formula is, there are severeal around with slight modifications of the numerical constants.
I think the observed behaviour is normal. If you take the formula for long cylindrical coil (something like L proportional n^2 A^2/length), you see that keeping the number of windings constant and making the coil longer decreases the L.

As a very rough argument I would say that the observed decrease in your formula can be understood by saying theat the coil is longer. Maybe another reason is that the area inside the wire is slightly less ?

Hope somebody can show a more quantitativeexplanation since the presented arguments are very rough. Anyway all formulas I know show this behaviour

Vy 73

Ralf

DL 6 OAP

==========
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Tel: +49 511 762 2232
==========
World Exposition "EXPO 2000"
June 1st til October 31st
Hanover
Germany
==========

2921. Re: newbie question (Bob)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1B8A4E.2376@wt.net>
Source record: 176004

~J~ wrote:
>
> I did read it, it was basic... just attatch the RG-6 Antenna...
>
> Still no UHF

You may have to go into the TV menu and setup the tuner to "air". Or at least see what mode it's in. "norm/catv" etc. You want normal if you want to watch UHF from that TV tuner. This would apply to the VCR if the VCR is the tuner being used. Sounds like a TV setup problem rather than hardware. MK
--
http://web.wt.net/~nm5k

2922. Re: Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001122072639.24706.00000934@ng-cd1.aol.com>
Source record: 176005

>
>
>Well, just what I'd expect from a disturbed child...
>WA...WA....crybaby, tit for tat tactics...
>about an IQ of 70 - 80....at best...
>
>
>
>
>
>
>
>

2923. A New In-Line HF Return Loss (SWR) & Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Paul Kiciak <pkiciak@att.net>
Message-ID: <3A1BBD45.63302AF1@att.net>
Source record: 176006

I've just put a new website together that describes a design for a return loss and power meter. Using this meter, you can measure up to 30 dB of return loss, which is equivalent to a 1.07:1 SWR, with as little as 1 milliwatt of forward power or as much as 300 watts. And it will also display forward power from 10 milliwatts to 300 watts.

If you're interested, go to:

http://home.att.net/~n2pk/

All comments or questions, sent to this ID or n2pk@att.net, would be appreciated.

73,
Paul, N2PK

2924. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a1bc0b0_2@news3.prserv.net>
Source record: 176007

OK, I capitulate. I see what's going on here.

First question on the installation sheet:
Do you use a 16 lb. hammer or a 24" Crescent wrench to drive the bolts
through misaligned holes?

Second question:
How much do you deform the hardware before deciding it is tight enough?

I understand now. Thanks for making me consider the caliber of the average
users. Alignment tool??? What's an alignment tool???? Torque wrench????
Yeah, I like the loooong handle, it gives me lots of leverage. Don't know
why the little gauge bent and the needle popped off, though.

Correct response: If you have to ask, don't use stainless. Use grade 8
hardware and spray with cold galvanizing compound. Or not.

--
Crazy George
Richard Harrison <richardharrison@webtv.net> wrote in message
news:12569-3A195D75-32@storefull-111.iap.bryant.webtv.net...
> Crazy George wrote:
> "I have seen you and others make this claim about stainless."
>
> Good! I have company. This was not hearsay nor speculation. I have
> climbed the towers for myself to investigate the reported problems. I`ve
> wrenched the galled hardware apart for myself and this is no myth.
>
> Best regards, Richard Harrison, KB5WZI
>

2925. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A1BCCA9.FF47F425@dvol.com>
Source record: 176008

Roger Halstead wrote:

> > >
> > Climbing "issues" are one of the big reasons I'll be putting up some small
> crankup next time
>
> I'm past 60 and still do all my own climbing. (97 foot ROHN 45G and a 90
> foot American Standard) My wife put her foot down though and I had to quit
> climbing towers for the young guys.<:-))

>
I gave up the wife crap and climbing stupid towers, climbing broads is bunches
more fun.

>
>
> The past few weeks I've been climbing that 45G up to 6 times a day. I seem
> to be getting in pretty good shape <G>Antenna installation and working on
> the multiple rotor system.

>
Not here, knee got bashed in an auto accident ten years ago, my climbing daze is
over and good riddance. Worked one summer for a painting contractor, did the
stripes on one of the 1,300 foot TV transmitter ants. It's nice and cool up
there.
>

> The system uses concentric masts and will eventually have a rotor for each
> once I get my machine shop set up.

>
I have a machine shop but fuhgeddit, sounds like a major violation of the KISS
theory.
>
w3rv

2926. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A1BD020.45C78F37@netscape.net>
Source record: 176009

Roger Halstead wrote:
>
....
> There are two pictures of the old installation and one of the partially
> completed new at http://www.rogerhalstead.com/kim.htm

Thanks for the ideas and explanations. Good pictures. Thanks.

> There are a couple of
> the old Debonair on that page as well.

Nice plane. I don't remember seeing very many with tip tanks.

--
Jim Fuller

2927. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011221444580.26118-100000@unics>
Source record: 176010

On Tue, 21 Nov 2000, Tom W8JI wrote:

>
> At a distance greater than about 1/10th of a wavelength from a small
> closed loop, the field response is mainly electrical....not magnetic.
>
> The field response of a small vertical is mainly magnetic at the same
> distance.
>
> Very close to the antenna, that changes and the loop mainly responds
> to magnetic components.
>
>
> If the weather is so bad the antenna near earth has corona, you have
> no business on 160 meters. The static from the surrounding area will
> be so bad the corona will be meaningless. The exception might be if
> the loop is on the top of a tall tower or building.
>
> My verticals are just as quiet as any loop would be, because there is
> no noise source within 50-100 feet of the antennas. If there was a
> noise source close by, it would be pure random luck if a loop produced
> better S/N, because it would depend on the field impedance of the
> near-field of the noise source. Most noise sources are likely a
> modest field impedance, since the conductors that radiate the noise
> are often long and connected to many low impedance paths to ground.
>
> So it is a matter of luck. At my QTH, I use only arrays of verticals
> and Beverages for receiving...and the verticals are generally best.
>
> 73 Tom
>
>
Hi Tom,

thanks for your reply.

You write that a loop mainly reacts to the electric field component at
some distance. Is there an easy explanation for this ?
I always thought that a small loop is reacting to the time derivative of
the magnetic flux passing through its area. Seems I'm wrong. I know there
is a thing called 'antenna effect' responsible for the coupling of the
loop to the electric field component.
The german equivalent to the FCC demanded that you measure both the
magentic and electric near field to ensure that you are withing the limits
of the allowed near field strenghs. There is a study saying that the limit

for the magnetic field strength is the main problem when you use magnetic transmission loops while in all other cases I know it's the electric field. It is mainly this observation that brought me to the idea that the reverse is also true and that the loop mainly responds to the magnetic field component. Is there any literature about the effect you mentioned ?

When I had up my RX loop for 80 and 40 metres, I could only compare it to a piece of wire in the attic (20 m long). The loop was in my bedroom close to the wall (I put nails into the wall to hold the wire). The loop was inefficient on 80 (low S meter readings) but I could copy 9M, JA, VK, ZL etc. with this antenna, while I didn't hear them on the wire and my impression was that noise from nearby TV sets was suppressed (although still loud). I think there is no good or bad antenna (only a better or worse one), it's just what you compare it to.

Is your beverage better than a single vertical ? I don't know what the directivity of your vertical array is and how long your beverages are, but if the directivity is comparable then your judgement is no surprise, at least if you ascribe the 'noise suppression' of the beverage to its directivity.

Vy 73

Ralf

DL 6 OAP

==========
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Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

==========

2928. Re: Tower Guying question (Stainless steel or galvanized?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <12967-3A1BD7ED-3@storefull-117.iap.bryant.webtv.net>
Source record: 176011

Crazy George wrote:
"Thanks for making me consider the caliber of the average users."

At some point reliance must be placed in a tower crew. You can insist on torque wrenches, but hardware which withstands abuse is a better solution.

I recall a batch of galvanized bolts from Venezuela that litterly lost their heads when the tower crew overtightened them. That didn`t happen with U.S. made bolts.

Different bolts worked better than torque wrenches in avoiding the popping bolt head problem. After 30 years, there is still one tower in Minnesota standing with torqued Venezuelan bolts holding it together. I wouldn`t want to do any more that way. We had to witness every bolt assembly to ensure the torquing was proper.

Best regards, Richard Harrison, KB5WZI

2929. HyGain V2R vhf gp?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: oh3mep <pkeskinen@yahoo.com>
Message-ID: <3A1BE397.B699AB65@yahoo.com>
Source record: 176012

Hello,
does anyone own the gp mentioned in subject? I've lost the
manual and need some help with it. I'd like to tune it for abt.
165 MHz so could someone please tell me the total lenght
and distance from feed to the upper "ground set".

Tnx in advance,

pete
oh0mep, oh3mep
pkeskinen@yahoo.com

2930. Re: Self Supporting Rohn 25G/Attn Doc!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1BF005.B78A0BA3@oio.net>
Source record: 176013

Jerry,
I'm sure you know that any/all manufacturers build-in a
safety factor. By exceeding those specifications, you are
'eating away' at that safety factor. That decision is yours
to make, and without going through a site survey, I or you
have no way of knowing for 'sure' if you have a safety problem
or not. The thing is, it never hurts to be safe, but the
opposite can cause problems.
Everyone 'fudges' to some extent. What I would consider a
reasonable risk, may not fit your way of thinking, and the
same the other way around. I can't tell you if your safe, or
not...
'Doc

2931. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1be02f.14794936@news.akorn.net>
Source record: 176014

Hi Ralf,

>You write that a loop mainly reacts to the electric field component at
>some distance. Is there an easy explanation for this ?

As we all know, electric fields and magnetic fields both must occur in
EM radition. If one is zero, the other is also zero.

Any antenna, even the small loop antenna, has all fields. It's just
that very close to the antenna the magnetic induction field dominates
(unless you move up near the capacitor, where the two ends have a
large potential difference and the electric induction field will be
quite large in a small area) the radiation and the electric induction
field.

But as you get back just a small distance, things rapidly change.

I believe the variation in field impedance is cause by phase shift and
attenuation of the combined fields radiated and induced by the
antenna. It is a very real effect.

Without that transition (which looks like a standing wave) the antenna
would never reach the limbo all antennas reach in the far field, where
you can't tell one from the other except for the strength differences
between them.

>I always thought that a small loop is reacting to the time derivative of
>the magnetic flux passing through its area. Seems I'm wrong. I know there
>is a thing called 'antenna effect' responsible for the coupling of the
>loop to the electric field component.

While the loop has a low impedance, remember with every time-varying
magnetic field there is a time varying electric field. At any
distance, they are essentially equal.

That's why small loops can be calibrated to read electrical field
strength. They read it accurately as long as the loop is some distance
from the source.

Right against something, where the induction field dominates, the
small loop will couple quite heavily to magnetic fields. Move it back
a bit and that all changes.

The shield on a small loop isn't a shield at all, it simply is the
actual antenna. All the shield does at the operating frequency of the
loop is allow us to improve the balance of the loop if we ground the
shield properly, at the electrical ceneter of the shield.

Ground the shield off center, or at one end, and you can actually INCREASE the antenna effect of the loop! Some articles show the shield grounded at one end, and the user would probably be better off with no shield at all than the improperly configured shield.

>The german equivalent to the FCC demanded that you measure both the >magentic and electric near field to ensure that you are withing the limits >of the allowed near field strenghs. There is a study saying that the limit >for the magnetic field strength is the main problem when you use magnetic >transmission loops while in all other cases I know it's the electric >field. It is mainly this observation that brought me to the idea that the >reverse is also true and that the loop mainly responds to the magnetic >field component. Is there any literature about the effect you mentioned ?

I think Roy Lewallen might have some stuff, but I don't want to put him on a spot. I have some stuff Roy sent me.

What the DOC does in your country makes sense, because they are talking about right next to the antenna. It also could be a physically large antenna.

>When I had up my RX loop for 80 and 40 metres, I could only compare it to >a piece of wire in the attic (20 m long). The loop was in my bedroom close >to the wall (I put nails into the wall to hold the wire). The loop was >inefficient on 80 (low S meter readings) but I could copy 9M, JA, VK, ZL >etc. with this antenna, while I didn't hear them on the wire and my >impression was that noise from nearby TV sets was suppressed (although >still loud). I think there is no good or bad antenna (only a better or >worse one), it's just what you compare it to.

It does not surprise me one antenna hears less junk than another when the noise and antennas are close together. But you can be sure the TV sets are using a longwire antenna (the power line and the antenna leads) as an antenna. It is the characteristic of those WIRES and the distance to those wires that sets the field impedance of the noise close to the wires.

The only thing that surprises me is why people think noise or unwanted signals are somehow always "electric" and good signals are always "magnetic". Perhaps it is because we call the noise "electrical interference".

In any event, you can bet all those long low wires with multiple grounds mainly radiate with a low or modest field impedance, and that field impedance varies all along the wire. So why would or should anyone expect one antenna to be any better than another for discriminating against those signals except for the effects of placement around those wires and near-field directional differences in the antennas?

I can hear Europeans quite nicely on a one foot clip lead sitting in my room on 160 meters and 80 meters. If I use a small loop in the room, my computer wipes out the signals. I'd bet in the next room, the effect is entirely different.

>Is your beverage better than a single vertical ?

Of course when I'm receiving a signal in the favored direction of whatever Beverage I'm using! It is directional and hears less noise from unwanted directions. But the same Beverage has LESS S/N when receiving in directions other than its favored direction compared to a simple vertical.

>I don't know what the
>directivity of your vertical array is and how long your beverages are, but
>if the directivity is comparable then your judgement is no surprise, at
>least if you ascribe the 'noise suppression' of the beverage to its
>directivity.=20

My vertical arrays essentially use four primary verticals spaced about 5/8th wavelength broadside and 1/4 wl endfire (some arrays use 1/8 wl endfire spacing) . If you look at the patterns of such an array, with proper phase delay, it is very clean and much narrower than a Beverage even multiple wavelengths long.

The verticals, because they are more directive, are often several dB better than the Beverages for S/N ratio. As a matter of fact, four verticals in a 5/8th by 1/8th wave area (330 feet by 70 feet) normally exceed the performance of three Beverages 500 feet long and spaced 300 feet apart broadside. Those Beverages occupy a 500 foot by 600 foot area, and are virtually never better.

The advantage is especially apparent when conditions are unstable, because even at distances of 1000 feet (two wavelengths) the arriving signals are almost never in a stable phase or level relationship. The fact phase and level vary constantly prevents using an array occupying an area larger than 1000 feet to receive, because the ends of the antenna can be out-of-phase with each other and cancel! This happens randomly, and the effect is the fading of the signal greatly increases.

Only under the conditions of the most stable ionosphere can the antennas all be combined into one large array.

That's why my original 3 wavelength Beverages are now cut down to 1 wl, and multiple antennas are used.

What I did to solve this problem is use multiple phase-locked receivers on small arrays (maybe 500 feet by 300 feet area) separated by thousands of feet. Each receiver feeds an audio channel that I pick with a switch. I constantly rotate the switch to pick the best two channels to feed my stereo headphones when a signal is marginal.

73 Tom

2932. Re: Self Supporting Rohn 25G

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <OkSS5.2286$Ur5.243944@monger.newsread.com>
Source record: 176015

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Fuller" <jefuller@netscape.net> wrote in message
news:3A1BD020.45C78F37@netscape.net...
> Roger Halstead wrote:
> >
> ....
> > There are two pictures of the old installation and one of the partially
> > completed new at http://www.rogerhalstead.com/kim.htm
>
> Thanks for the ideas and explanations. Good pictures. Thanks.
>
I started the story on tower.htm which is linked from the top of my home
page.
It has a log way to go, but there are a number of pics. A couple have to be
replaced with thumbnails and the large versions linked to are unformatted.
Meaning that on a smaller screen, or with anything less than 1200 X whatever
they are huge. Get to se a bit of detail though <:-))

If the weather turns crappy, which it is in general this time of year, I may
get the thing finished up in about a week. I really have had to dig for
some of the pictures.

I currently have over 12,000 digitized and cateloged (kinda, sorta). My
filing system needs a bit of work. I currently run the negative strips
through a scanner and do them at 300, 600, 1200, and 2400 dpi. (No, I don't
put the 2400 ones on the web <G>)

Roger (K8RI)
> > There are a couple of
> > the old Debonair on that page as well.
>
> Nice plane. I don't remember seeing very many with tip tanks.
>
> --
> Jim Fuller

2933. Re: Guess what happened and HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <qvSS5.2288$Ur5.244136@monger.newsread.com>
Source record: 176016

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:8vflfc$5h3$0@208.206.142.96...
> George, W5YR wrote:
> >
> > I would expect that bending it back would probably break or
> > significantly weaken the metal due to cold-working.
> >
> > Wonder what the bird looks like? Boy, did he have a story for Mama
> > Bird! <:}
>
>
> Reminds me of the time years ago when I was steaming along 'bout 75
> MPH early one morning on a deserted rural highway in my 400 cu in Grand
> Prix and came upon a couple of crows on the shoulder of the road.

Reminds me of when I had a pet crow.
He was known for sitting at the base of the back window and hooking his
claws around the trim and going for a ride.

One of the locals got his car up above 80 and there was that crow sittin'
back there looking in with claws hooked and tail braced.

Man, but I wish I had a picture of that!

Then there was the time he used the broad back of my dad's dog for a landing
field. My dad said the last he saw of them, the dog was running flat out
across the bean filed with the crow riding. Nuther Kodak moment missed.

Course this was a *few* years back. OK, quite a few.

Roger (K8RI)

<snip>

2934. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vgt5k$c8s$1@plutonium.btinternet.com>
Source record: 176017

Cecil said -
> Lest anyone misunderstand, a tuner does not change the SWR
> between the tuner and the antenna.
==========
What about the change in the SWR with respect to (your)
watts which have been reflected back towards the transmitter
from a mismatch at the antenna end ?

Reg

2935. ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:00:00 UTC
From: aokd5fxt@cs.com
Message-ID: <20001122114521.24651.00001081@ng-cd1.news.cs.com>
Source record: 176018

Ok, here is the scoop. I am putting up my first ladder line fed antenna. I am blding a 160 meter dipole and want to feed with ladder line. Items of consideration please:

1) I have 100 ft of ladder line.. Don't need that much. Should I cut to needed length?
2) My shack is covered in sheet iron. I have windows. Is this a problem ? If so, how do i deal with it?
3) I am somewhat of a coward so antenna will be at abt 30 feet since I am a coward and won't climb any higher. Think this is ok?
4) I am using 12 gauge insulated wire because of an abundance of trees. Will run thru a couple of them. Problem with insulation, gauge of wire? Can I load the amp up with this?
Tnx and pls email with thoughts

Bill

2936. Re: Nathan Cohen another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:18:35 UTC
From: w1rfi@aol.com
Message-ID: <20001121191835.22175.00000999@ng-da1.aol.com>
Source record: 175992

>From: fractenna@aol.com (Fractenna)

>I should not be part--PERSONALLY-- of ANY conversations here.

Perhaps it would convince people if you never used the word "I" in your posts.
:-)

73,
Ed Hare, W1RFI

2937. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:35:32 UTC
From: fractenna@aol.com
Message-ID: <20001121193532.06808.00000812@ng-mj1.aol.com>
Source record: 175993

>From: fractenna@aol.com (Fractenna)
>
>>I should not be part--PERSONALLY-- of ANY conversations here.
>
>Perhaps it would convince people if you never used the word "I" in your
>posts.
>:-)
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>

2938. Re: resonant frequency and patch antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 00:38:16 UTC
From: fractenna@aol.com
Message-ID: <20001121193816.06808.00000816@ng-mj1.aol.com>
Source record: 175994

>
>
>Hello all,
>I'm new to this group, so sorry if this posting is out of subject.
>Does anyone know what is the 'resonant frequency' in a microstrip
>antenna? I have heard a lot of things, like 'the frequency where Mag(S11)
>becomes minimum', 'the frequency where 'Re(Zin) becomes maximum' and
>'the frequency where Im(Zin) becomes zero'. None of these is the same with
>each other, especially with coaxial cable feed.
>Also, is there any specific design procedure to find the 50+j0 Ohms point
>in a patch antenna?
>
>Please reply at: danagn@avdira.cc.duth.gr
>
>Thank you very much,
>Dimitris
>

Resonance is the freq where IM (z) is zero. This seldom corresponds to the frequency of best S11 for a 1/4 wave patch. It is off, roughly, by 2-5% if a generalization must be made.

The true issue is the frequency of maximum gain; getting that to be the freq of best S11 is usually the desired result.

73
Chip N1IR

2939. Re: - www.k7on.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 01:13:44 UTC
From: k7on@earthlink.net
Message-ID: <MPG.14852e68ab105b5e9896d2@news.earthlink.net>
Source record: 175995
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ummm, what are you trying to hide?

In article <kozS5.1210$5E1.226275@news.uswest.net>, alias@microsoft.com
says...
> > >
> > > Check it out !
> > >
> > > --
> > >
> > > http://www.k7on.com
> > >
>
> Ummm Brian,
>
> My Webwasher proggie has angelfire.com blocked as being insecure re. personal
> privacy. It's one of the 'info miner' sites... perhaps ya didn't know this.
>
> A.
>

--
http://www.k7on.com/
--

2940. Re: Guess what happened and HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 03:34:57 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A1B3EDA.688A9644@att.net>
Source record: 175996

I would expect that bending it back would probably break or
significantly weaken the metal due to cold-working.

Wonder what the bird looks like? Boy, did he have a story for Mama
Bird! <:}

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

David Edwards wrote:
>
> I woke up this morning to see my Diamond CP22E 2 meter antenna looking like
> this. It is at about the 70 foot level, 15-20 feet above the top of the
> tower. The CP22E is a 9 foot antenna. The top section is probably 4-5 feet
> of half inch or so aluminum tubing. The only thing I can think of is that a
> fast flying duck, goose, or seagull hit it.
> Question is... since I cannot reach it without removing a lot of antennas
> under it, I was thinking of rigging up a long piece of 1X3" with some hooks
> or whatever and try to bend it back somewhat.
> Should I try that, or will I guaranteed snap the aluminum??
> Sorry for posting a pic here, but I could sure use the help from you guys!!

2941. Re: Guess what happened and HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 03:36:11 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A1B3F24.450809CA@att.net>
Source record: 175997

Dave, in addition to the previous email - I had a Senior Moment and
forgot to mention it - why not try the antenna and see how it works.
Might not be as bad a performer as the appearance would suggest.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
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Amateur Radio W5YR, in the 55th year and it just keeps getting better!
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> fast flying duck, goose, or seagull hit it.
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> or whatever and try to bend it back somewhat.
> Should I try that, or will I guaranteed snap the aluminum??
> Sorry for posting a pic here, but I could sure use the help from you guys!!

2942. Re: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 05:01:16 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vfjus$m8o$5@bashir.peak.org>
Source record: 175998

VE9SRB <srbest@worldnet.att.net> wrote:
: In the transmission line problem, the load impedance the amplifier "sees"
: has everything to do with the waves traveling in the TL. The only
: impedance
: that the amplifier ever "sees" is the transmission line characteristic
: impedance ZO. It never really ever "sees" any other physical impedance.

I would disagree with this, or at least with your terminology.

The transmission line impedance, either actual or what the amplifier sees, has nothing to do with the waves that travel in the transmission line. What it will effect, is how much power is loaded from the amplifier into that line.

By the same token, the impedance that the amplifer sees will only be Z0 if there is a perfect impedance match between the line and the load.

You may have meant/said that above - but it is unclear to me based on what you wrote.

--
Bill Nelson (billn@peak.org)

2943. Re: Guess what happened and HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 05:27:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8vflfc$5h3$0@208.206.142.96>
Source record: 175999

George, W5YR wrote:
>
> I would expect that bending it back would probably break or
> significantly weaken the metal due to cold-working.
>
> Wonder what the bird looks like? Boy, did he have a story for Mama
> Bird! <:}

Reminds me of the time years ago when I was steaming along 'bout 75 MPH early one morning on a deserted rural highway in my 400 cu in Grand Prix and came upon a couple of crows on the shoulder of the road. Of course they flew up when I approached, as they always do, but one unfortunate fowl chose to fly right down the middle of the road, directly in front of my fastmoving machine, at just enough altitude for the car to pass underneath him. But his airspeed was way to low to outrun the old Pontiac.
Unfortunately for him, I had a 5/8 wave two meter whip on a stout magnet mount base sitting right in the middle of the roof of the the old boat. The whip smacked him hard where his tailfeathers met his posterior, and the antenna flew from the roof, and the 'winged' bird sailed out of sight, off into a deep ditch. I got the rig shut down, and stopped to retrieve what was left of the antenna-but there wasn't much left except the magnet attached to the coax, dangling behind the car. The whip and the bird were long gone. Melded?

Dick

2944. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 05:48:36 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8vfmn9nbo1@bob.news.rcn.net>
Source record: 176000

Well, just what I'd expect from a disturbed child...
WA...WA....crybaby, tit for tat tactics...
about an IQ of 70 - 80....at best...

2945. Re: Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 06:14:24 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vfo88$r1g$1@iac5.navix.net>
Source record: 176001

Come on Chuck, I can be included in the group that likes to tweak his ass,
however he has been quietly rehabilitating himself. Please leave him alone.

"Chuck O'Neal" <coneal@ultranet.com> wrote in message
news:8vfmn9nbo1@bob.news.rcn.net...
>
> Well, just what I'd expect from a disturbed child...
> WA...WA....crybaby, tit for tat tactics...
> about an IQ of 70 - 80....at best...
>
>

2946. Re: - www.k7on.com - now on FASTER server

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-22 07:11:22 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <5kKS5.3799$PF.454333@news.uswest.net>
Source record: 176002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Brian Short <k7on@earthlink.net> wrote in message
news:MPG.14852e68ab105b5e9896d2@news.earthlink.net...
>
> Ummm, what are you trying to hide?
>
Ummm, my real identity... was that your ping BTW?

I've been a ham for a looooong time, if that makes you feel any better.

I dislike webspy companies, spyware and spam dot com's... especially spam that
is "tailored to my interests and buying habits"... what a crock!

A.

2947. Re: Suggestions for (indoor) small space HF antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011231624320.23621-100000@unics>
Source record: 175819

Hi Don,

there are people saying that magnetic antennas are more efficient in
situation like yours. They argue that the magnetic near field is less
attentuated by the material of the house. I don't know if this is true
but how about giving a magnetic loop a try?

Vy 73

Ralf

DL 6 OAP

==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

==========

2948. Re: R-7000 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <7qbT5.11519$L26.2565900@typhoon.southeast.rr.com>
Source record: 175820

I acquired a used R-7000 recently. I have it sitting on a 10 foot mast at the edge of some trees in the backyard. It is set up with a "hinge" a bolt through the support mast, so that I can tilt it over for adjustment. After three adjustment cycles, I've got it under 2:1 on all bands. It has now become my preferred antenna, as it doesn't need any tuner assistance to match any band. The exception is 40m, where you will need to decide if your are phone or cw, adjustment is narrow but to be expected with a multiband vertical. 10m is very broad and well below 1.5 to 1 across the band.

The manuals are on the manufacturer's website.

It is a great dx antenna, the farther away the station, the better it works. I've also done some qrp work with it. Nice to have a dx station come back to a 5 watt signal! I don't have a beam and tower here, so verticals are my most satisfactory solution so far.

Good Luck,

Bill, W4WNT

Donnie <n4jzh@knology.net> wrote in message
news:3a1aea14.294650007@news.knology.net...
> Any users of the R-7000 antenna out there?
> pro's con's e.t.c. private email welcome.
> n4jzh@knology.net 73 Donnie
>
>

2949. Re: dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A1D45AB.BA305D5E@GTE.net>
Source record: 175821

Kirby Cave wrote:

> recently built a 40 meter dipole from 12 gauge "flex" and 50 feet of rg8
> with w2au balun at center.
> center hung at approx. 30 feet and ends at approx. 20 feet. don't remember
> what the final pruned
> length was but appears to be resonant at approx. 7060 khz where swr is
> 1.4:1. assume this represents
> difference in impedence between 50 ohm coax and whatever feedpoint impedence
> happens to be.
> works fb. no tuner.
> my intention was to use this antenna on 40 and 15, so expected to see some
> reasonable match around
> 21180 (7060 x 3rd harmonic). unfortunately, swr is no better than approx.
> 4 or 5 to 1 across entire
> 15 meter band. had i discovered a match somewhere, i planned on adding
> capacitance hats about
> a third of the way out from center to bring it back down to the cw portion
> of 15.
> will the capacitance hats still correct this? suggestions? thanks in
> advance..
>
> wb3bbc

A quick model placing it over an average height of 25' shows a resonant feed resistance of 55 Ohms at 7.060 and 96 -j154 at 21180. The antenna is resonant at 21.95 on 15M with a feed r of 113 Ohms (2.25:1). Try the vertical wires at the 11' points and see what you get- this should have a minor if any effect on 40M performance. You might also try getting rid of the balun and replacing it with a choke balun. Voltage type baluns will almost certainly have an effect on the feed Z as they are obviously not perfect 1:1 transformers except perhaps over a small frequency range.

Dale W4OP

Dale W4OP

2950. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a1d463f_2@news.cybertours.com>
Source record: 175822

<ehsjr@bellatlantic.net> wrote in message
news:3A1D333E.2AC6D43D@bellatlantic.net...
> Dave,
>
> You mention that you've had nylon and Dacron seize, but
> that the polypropaline never seized. I wonder if that is a
> function of the size of the material (3/4) or the type. Did
> you try 3/4 nylon or Dacron, or were they of smaller
> diameter? You also mentioned the need to replace the
> poly from time to time - can you give an estimate of
> how long it lasts, and what is the main cause of deterioration?
>
> Abrasion is my main problem. Someone recommended
> kernmantle rope - but it runs about $130.00 for 50 meters.
> It is mountain climbers rope and a lot stronger than needed.
> So my intent is to haul new rope up periodically, replacing the
> old stuff. Once it seizes, I'm sunk - but as long as it "rides" on
> the smaller ends of the branches, it doesn't seize. "Fat" poly
> might be a great way for me to go.
>
Hi,
your corret the nylon (I find that a little too stretchy) was only 1/2" and
the Darcron was only 3/8" so it may be that the size is the factor here..
the reason for the need to replace the ploy is that it will break down in
sunlight after awhile.. here in western Maine I have one peace that's been
up for about 8 years with little sign of deterioration. but it is pretty
much sheilded from sunlight.. I'd say 4 to 5 years would be a good guess as
to how often 3/4" should be replaced if in direct sun.

Hope that's of help..

73 Dave

2951. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <8vjii6$97b$0@216.39.171.5>
Source record: 175823

Quite true, and as one goes higher in frequency, the effect of the
second shield becomes much more important. I doubt that many hams use
RG-214 at 10 GHz, but it is quite common in a test lab. Once where I
was working someone mistakenly used a length of RG-213 instead and
the leakage was sufficient to cause a noticeable increase in insertion
loss.

Bob N7XY

On Thu, 23 Nov 2000 09:14:32 -0600, Crazy George wrote:
>Roy:
>In the average Ham/SWL application, you are probably correct. However, in
>locations where the runs are long, and all kinds of other types of cables
>are in the same cable trays, it really makes a difference. Some
>measurements were performed on 100 foot runs of RG-58/U vs. RG-223/U several
>years ago, and if my filing system were organized, I could quote you the
>numbers, but there was a easily measurable difference. Today, the problem
>tends to be something like CAT-5 signal cables running along receive coax
>runs, and it doesn't take many feet of that to start showing up in the
>receiver input. A few feet of RG-58 running in the vicinity of some of the
>poorer computers will also produce measurable (and hearable) signals in a HF
>receiver.
>--
>Crazy George
>Roy Lewallen <w7el@eznec.com> wrote in message
>news:3A1C2C0B.E824EC03@eznec.com...
>> I'd be surprised if you'll see any difference in RF pickup by using the
>> double shielded cable. I've seen a noticeable difference, but only when
>> looking at very small signals using extremely well shielded test
>> equipment. You should connect both shields at both ends of the cable
>> just as you would a single shield.
>>
><snip>
>>
>> Roy Lewallen, W7EL
>>
>
>

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen

2952. power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: ron biggerstaff <rbigg@pcola.gulf.net>
Message-ID: <t1qkd6mfeuv4d8@corp.supernews.com>
Source record: 175824

I noted the recent discussion over whether or not reflected power is real or not, and was reminded of a similar discussion I was involved in awhile back. As a result of it, I gained some useful information that others might be able to use.

I had noticed that while settting my antenna tuner controls for minimum swr, there was oftentimes a split between minimum swr settings and max forward indicated power. In those situations, I could have one or the other, but not both. Probably, a number of you have also observed this effect, at one time or another, in one situation or another. So, I asked the question as to which way I should tune. Should I opt for max indicated forward power, or go for minimum swr? Which setting would give me more soup out the antenna?

The answer I got back was very interesting, and was something I had not known: forward indicated power on most swr meters consists of actual forward power plus reflected power; i.e., we're really reading the summation of actual forward and reflected power on the meter scale. I thought about this a bit, and then realized that, if this was true, then it means that by tuning for minimum reflected power, we always maximize actual forward power, regardless of the indicated forward power reading. I then asked this question, and was told that was correct. The final conclusion was that for practical purposes, although the indicated forward power side of our swr meters really isn't very useful in many situations, it can be a useful indicator in others.

It got me to a point where I had what sounded like a satisfactory explanation as to why I was seeing what I did, and how to deal with it. The practical side was what I cared about. That's something we can use to get the most soup heading out toward the antenna. Today, I rarely switch over to the forward power side of my tuner.

73 de Ron, K5BDJ

2953. Re: Base Insulator for Rohn 25G Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A1D5257.A850FBC0@dvol.com>
Source record: 175825

WR4T wrote:

> I was wondering if any one has any ideas on how to fabricate a base
> insulator for a 160M vertical made from ROHN 25G. The factory base
> insulator requires a special tapered tapered 10ft base section and then an
> expensive insulator together they run over $1200. I was thinking about
> other ways to fabricate an insulator.
>
> One thought was to use a large sheet of HDPE under the standard BCP25
> concrete base plate. However the HDPE plate about 8" thick 22x22 was over
> $600 dollars.
>
> Any ideas thoughts on a less expensive alternatives (Not interested in shunt
> feed need insulated base).
>
> Thanks,
>
> T.R. WR4T

>
I don't know how tall your 25G tower might be but whatever it is considering that it's for 160 it's gonna be big and guyed. Which is to say the weight of all those 25G sections plus the vertical reaction forces imposed by the guys from wind loading are absolutely going to put a very large compressive load on whatever insulators you come up with. Without being able to deal with it quantitively my strong suspicion is that there ain't a plastic out there which can handle the kinds of loads you'll have, including any of the flavors of fiberglass. Unless the insulators are outlandishly huge and properly designed. Ceramics on the other hand have enormous compressive stress limits, are better insulators and perhaps more importantly do not suffer long-term creep deformations like the plastics do. If Rohn thought plastic insulators were a good idea they would be using them. They don't and I agree with them.
>
w3rv

2954. Writeup for Icom IC/AG1 masthead preamp 430mHz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Stefan Viljoen <Stefan_Viljoen@excite.com>
Message-ID: <8vjkrg$n5o$1@ctb-nnrp2.saix.net>
Source record: 175826

Hi!

I am looking for a writeup / tech guide for the above Icom masthead
preamp... can anybody help?

Thanks!

Stefan Viljoen
http://home.intekom.com/rylan/
Stefan_Viljoen@excite.com

2955. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a1d59a4_3@news1.vip.uk.com>
Source record: 175827

ron biggerstaff wrote in message ...
>I noted the recent discussion over whether or not reflected power is real
or
>not, and was reminded of a similar discussion I was involved in awhile
back.
>As a result of it, I gained some useful information that others might be
>able to use.

<Snip>

Another interesting thing to realise, is that minimum indicated VSWR doesn't always occur at a purely resistive 50 ohm setting.

As those who can use the Smith Chart (which I've never really got the hang of) can show, a combination of inductive and/or capacitive reactance can be present along with the resistive component. Most VSWR meters wont show you this.

I've also been quite entertained (maybe I'm easily pleased?), when using an antenna analyser and a VSWR meter, to see how many 'false' matches I can make if I relied on just the VSWR meter. There seems to be an almost blind faith in what's been shown on the meter by some people. It's also a 'good game' to put two VSWR meters in series, and see what difference there is. One Amateur, who I knew, called his VSWR meter a "guessing stick".

Mind you, as someone else has said before, in the 'good old days' people didn't worry about such things, they just got on and worked other Radio Amateurs. HI! If they can hear you, and you can hear them, what difference does it make? In my hotel room this week, I can get a wonderful indicated VSWR reading, by twiddling the knobs on an ASTU, but I can't hear many people, so I'm not working anyone this week. That's because, the antenna is inside a building, and very little RF is getting in or out!

Cheers de Dave (G0DJA)

2956. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vjtqm$8ho$1@neptunium.btinternet.com>
Source record: 175828

Cecil, why are you dragging the special and worn-out cases
of Zo and conjugate matches into the discussion ?

Are you saying no standing waves are produced on the line
when power reflected back from the antenna towards the
transmitter meets a mismatch at the junction of the line and
tuner (it always does), and (the crux of the matter) that
varying the tuner setting has no effect on those particular
waves ?

Reg.

2957. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D7D8B.1C7FFDB9@IEEE.org>
Source record: 175829

Reg Edwards wrote:
> Are you saying no standing waves are produced on the line
> when power reflected back from the antenna towards the
> transmitter meets a mismatch at the junction of the line and
> tuner (it always does), and (the crux of the matter) that
> varying the tuner setting has no effect on those particular
> waves ?

I'm saying that the purpose of a Z0-match is to create two sets
of complimentary reflections the sum of which is zero. Therefore,
there is no reflected energy on the coax between the transmitter
and the tuner. The purpose of the Z0-match is to keep reflected
energy from reaching the transmitter.

The goal of life is to keep living. Committing suicide destroys life.
The goal of tuning is to establish a Z0-match. Varying the tuner setting
away from a Z0-match destroys the Z0-match. Of course, it has an effect
but it is not the desired effect. The desired effect is to completely
cancel the reflections at the Z0-match point thus causing the scalar
reflected power to be routed to the antenna.
--
http://www.mindspring.com/~w6rca

2958. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vk23p$if4$2@plutonium.btinternet.com>
Source record: 175830

Cecil said -
> Varying the tuner setting
> away from a Z0-match destroys the Z0-match. Of course, it
has an effect
> but it is not the desired effect.

==========
Cecil, so you agree the tuner affects reflections on the
line between tuner and antenna. ;o)

Reg

2959. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vk23o$if4$1@plutonium.btinternet.com>
Source record: 175831

David Ackrill said -

> minimum indicated VSWR doesn't
> always occur at a purely resistive 50 ohm setting.

==========

Dave, you can say that again - minimum SWR vs frequency
hardly EVER occurs at a resistive 50-ohm setting.
Furthermore, the indicated SWR usually refers to a
transmission line which doesn't exist - so who cares about
SWR ?

Reg

PS. What the meter really tells us is the reflection
coefficient of the load presented to the transmitter
relative to 50 ohms. Now that IS useful to know.

2960. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D8F8A.AD613B38@IEEE.org>
Source record: 175832

Reg Edwards wrote:
> Cecil, so you agree the tuner affects reflections on the
> line between tuner and antenna. ;o)

Yep, I agree the tuner can be mistuned. But when it is tuned
properly, it *effects an absence of reflections* between the
tuner and the antenna. That's the Z0-match point.
--
http://www.mindspring.com/~w6rca

2961. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D90C3.609AE0A2@IEEE.org>
Source record: 175833

ron biggerstaff wrote:
> Should I opt for max indicated forward power,
> or go for minimum swr? Which setting would give me more soup out the
> antenna?

You should tune for the maximum difference between forward power and
reflected power. The difference between forward power and reflected
power is what is going into the antenna. On my IC-706, the maximum
difference between forward power and reflected power seems to be
when reflected power is zero.
--
http://www.mindspring.com/~w6rca

2962. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D9138.2E0FE02D@IEEE.org>
Source record: 175834

Reg Edwards wrote:
> Dave, you can say that again - minimum SWR vs frequency
> hardly EVER occurs at a resistive 50-ohm setting.
> Furthermore, the indicated SWR usually refers to a
> transmission line which doesn't exist - so who cares about
> SWR ?

If the SWR meter reads forward power and reflected power then
the difference in those two readings is what makes it into the
antenna (neglecting feedline losses).
--
http://www.mindspring.com/~w6rca

2963. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Tweak <mazhar@nmt.edu>
Message-ID: <8vk5tm$1sqb$1@newshost.nmt.edu>
Source record: 175835

Thanks to everyone who replied to this post. I found your replies quite useful. I've decided on a set of books to study for the tech, general and extra exam. After, I get the extra certification I would like to start designing and building RF circuits. I've found two books (one which is quite old) on rf design. Could anyone recommend these or other books taht talks about RF design for a person with an extra cert?

1. Introduction to Radio Frequency Design (Radio Amateur's Library, Publication No. 191.) by W. H. Hayward
Paperback Bk&disk edition (March 1995)
Amer Radio Relay League; ISBN: 0872594920

2. Practical Radio-Frequency Handbook
by Ian Hickman
Paperback - 320 pages 2nd edition (October 1997)
Butterworth-Heinemann (Trd); ISBN: 0750634472 ; Dimensions (in inches): 0.81 x 9.22 x 6.26

2964. Re: Base Insulators for Rohn 25 Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A1DDC5B.249932E4@dvol.com>
Source record: 175836

WR4T wrote:

> I was wondering if any one has any ideas on how to fabricate a base
> insulator for a 160M vertical made from ROHN 25G. The factory base
> insulator requires a special tapered tapered 10ft base section and
then an
> expensive insulator together they run over $1200. I was thinking
about
> other ways to fabricate an insulator.
>
> One thought was to use a large sheet of HDPE under the standard BCP25
> concrete base plate. However the HDPE plate about 8" thick 22x22 was
over
> $600 dollars.
>
> Any ideas thoughts on a less expensive alternatives (Not interested in
shunt
> feed need insulated base).
>
> Thanks,
>
> T.R. WR4T

>
I don't know how tall your 25G tower might be but whatever it is
considering that it's for 160 it's gonna be big and guyed. Which is to
say the weight of all
those 25G sections plus the vertical reaction forces imposed by the guys
from wind loading are absolutely going to put a very large compressive
load on
whatever insulators you come up with. Without being able to deal with it
quantitively at this point my strong suspicion is that there ain't a
plastic out there which can handle the kinds of loads you'll have,
including any of the flavors of fiberglass and don'r even think about
any of the thermoplastics and/or teflons. Unlesss the insulators are
outlandishly huge and properly designed. Ceramics on the other hand have
enormous compressive stress limits, are better insulators and perhaps
more importantly do not suffer long-term creep deformations like the
plastics do. If Rohn thought plastic insulators were a good idea they
would be using them. They don't and I agree with them. I also agree that
$1,200 is a real bite out of your wallet but in the final analysis I'd
go with the Rohn hardware grousing the whole time. And watch how you put
the tower up if you do go with the Rohn insulator section, the
insulators are real fussy about how much abuse they will tolerate during
tower erection.

>
w3rv

2965. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1DF04B.2241D846@oio.net>
Source record: 175837

Mike,
The only 'dumb' question is the one you don't ask. A
counterpoise is the same thing as a radial. A radial is
'normally' thought of as being on or under ground. The
counterpoise is thought of as an above ground radial.
'Doc

2966. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1DF5EB.451D1B6B@IEEE.org>
Source record: 175838

Reg Edwards wrote:
> Cecil, wouldn't you rather have a meter which just indicated
> radiated power - everybody else does.

I certainly have one that is useful for mobile measurements.
But how do you guarantee that your field strength is measuring
horizontal far field in the direction of propagation? How do you
know it's not measuring minor lobe near field vertical radiation?

What I am most comfortable with is getting the maximum power
to the antenna and trusting a modeling program for the radiation
pattern shape. But it is an interesting question.
--
http://www.mindspring.com/~w6rca

2967. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1DF799.9CD1B7C8@IEEE.org>
Source record: 175839

Rick Littlefield wrote:
> By saying "what's going on with the antenna", are you suggesting that maximum
> difference between forward and reflected power results in maximum field
> strength?

Actually, I said "what's going *into* the antenna". Could also be what's
going into a dummy load so, no, I'm not saying it results in maximum
field strength.

After getting maximum power to the antenna, I trust the modeling program
to tell me what the radiation pattern is. Based on experience, I haven't
ever found a reason to doubt that approach.

I know a ham who tunes for maximum field strength. When I ask him if
that's near field or far field he says he doesn't know. When I ask him
if he's measuring horizontal radiation or vertical radiation, he says
he doesn't know. When I ask him what is the take-off angle of the radiation
measured by his FSM, he says he doesn't know. That seems like a lot of
unknowns to me.
--
http://www.mindspring.com/~w6rca

2968. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1DFF91.D62CCFAF@IEEE.org>
Source record: 175840

Bill Nelson wrote:
> A signal strength meter in the far field is then used to peak radiated
> power.

I can see how that would work with vertical antennas, Bill, but
what about horizontal antennas?
--
http://www.mindspring.com/~w6rca

2969. A pleasant Thanksgiving ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <kp4T5.193$iv2.1233@newsfeed.slurp.net>
Source record: 175899

.. to all.

73, Dave, K3BHJ

2970. No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vis99$4f4$1@bcarh8ab.ca.nortel.com>
Source record: 175900

Allow me to provide the simple analysis that caused me to conclude
that there is no such THING as reflected power.

It seemed to me that any acceptable explanation of where 'reflected
power' goes should work:

a. at a frequency of 0 hertz.
b. with the transmission line open-circuited.
c. with the transmission line short-circuited.
d. with any generator. In particular, it should work if the
generator is replaced with:
d1. its Thevenin equivalent circuit.
d2. its Norton equivalent circuit.

Since these boundary conditions lead to fairly simple arithmetic,
it can all be done in your head.

Let us start with a transmission line (TL) of impedance 50 Ohms,
length t (the time for one way propagation along the line) and a
generator with an output impedance of 50 Ohms.
Leave the right end of the TL open-circuit.
Set the generator to 50 V (into 50 Ohms) and attach it to the left
end of the TL.
One Amp begins to flow into the TL.
This charge propagates down the TL creating a voltage step of 50 V.
To the right of the voltage step, no current is flowing and the
voltage is zero; to the left of the voltage step, 1 A is flowing
and the voltage is 50 V.
At time t, the voltage step reaches the end of the TL and the current
can flow no further since the TL is open-circuit.
But charge is still arriving so a voltage step from 50 to 100 V occurs
which propagates back along the line.
To the right of this step, the voltage is 100 V and no current is flowing;
while to the left of the step, the voltage is still 50 V and 1 A is still
flowing.
At time 2*t, this voltage step has propagated all the way back to the start
of the TL.

While the line was charging, the generator was providing 50V * 1A -> 50 Watts
into the line. This continued for 2 * t seconds.

Now the TL is fully charged to 100 V and no current is flowing anywhere in
the line.
The generator is no longer adding energy to the TL.
The energy delivered to charge the TL is stored in the capacitance of the TL.
Since the current is zero everywhere in the TL, there cannot be energy flow

anywhere in the TL so the power must be zero.

And yet believers in reflected power would like me to accept that there is
50 W of forward power and 50 W of reflected power for a net 0.
But I can easily see that there is no power flowing in this TL, anywhere.
It is only a charged capacitor.
As for the 50 forward and reverse, one could just as easily argue that it
is a megawatt forward and reverse. It yields the same result.

So I conclude there is no such thing as 'reflected power' because it does
not explain the 0 frequency situation and therefore the question 'Where
does the reflected power go?' is meaningless.

To carry the study a bit further we can ask what is happening in the
generator after time 2 * t.
If we assume a Thevenin circuit for the generator it is dissipating 0 W.
If we assume Norton, it is dissipating 200 W.
Dissipation in generators depends more on generator design than 'reflected
power'. Any argument that 'reflected power' is dissipated in the generator
can easily be shown to be false by substituting Norton for Thevenin or vice
versa.

For a short-circuited TL after 2 * t:
- the voltage will be 0 V everywhere
- the current will be 2 A
- this still leads to 0 W
- the energy is stored in the inductance of the TL
- Thevenin will dissipate 200 W
- Norton will dissipate 0 W

The so called 'reflected power' is the same but the dissipations are all
different.

Some might argue that it is the 0 frequency case that is special and that
'reflected power' makes sense for non-zero frequency.

Let us consider an open-circuited TL of several wavelength driven by a
matched generator.
After time 2 * t there is a standing wave on the line.
At the end of the line the current must be zero since it is open-circuit.
Every 0.5 wavelength back from the end the current is 0.
0.25 wavelengths from the end the voltage is 0.
Every 0.5 wavelength back from there, the voltage is 0.
We know that power is voltage times current.
Since every quarter wavelength back from the end, either the voltage or
the current is always 0, the power must be 0, so there is no energy
flowing across these points.
If there is no energy flowing, there can not be any 'reflected power'
flowing unless 'reflected power' is not actually a flow of energy and
therefore not a power.

And this is the answer. 'Reflected power' results from a computation
that yields a dimension of power but does not result in anything that

is real. This mathematical convenience does have value though, because when it is combined with another computation yielding a non-existent 'forward power', one can compute SWR and net delivered power.

This is an example of analysis where the intermediate results have no physical meaning but the final result is useful. Remembering the type of circuit analysis (I can not remember the name) where all voltage sources are set to zero and then one-by-one they are set to their desired value and the resulting currents are computed. Later all the computed currents are summed to find the real currents. While the intermediate computations yield values with dimensions of current, these currents do not physically exist. A simple example will suffice.

Consider two 10 VDC sources whose negatives are grounded and whose positives are connected with a 10 Ohm resistor. Analysis yields 1 Amp flowing clockwise and 1 Amp flowing counter-clockwise for a net of 0 A in the resistor. The final answer is correct; the intermediate answers do not represent currents which are flowing.

To make this very clear, replace the 10 Ohm resistor with a zero Ohm resistor. Result: infinite current clockwise, infinite counter-clockwise, but the net is still correct at 0.

Never assume that intermediate results, no matter how useful to solving the problem, represent real things.

...Keith

2971. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a1cfd4d_2@news.cybertours.com>
Source record: 175901

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A1C2B13.4CDE8EA5@eznec.com...
> I've used a slingshot for many years for Field Day and other portable
> operation, but not for a fixed home antenna. The problem is that the
> line very quickly digs into the tree and seizes, so it's impossible to
> get the antenna down after a few days. But I've only used nylon twine or
> rope, and with Douglas fir or other pitchy trees. One person some time
> back reported using very heavy nylon monofilament fishing line and was
> able to get the antenna back down -- apparently the line is slippery
> enough so it can be pulled even after cutting into the tree. I don't
> recall what kind of trees he was putting the antennas up in.
>
> What's your experience with the kevlar rope? Can you get the antenna
> back down after a month or two? What kind of trees?
>
> Roy Lewallen, W7EL
>
Hi Roy,

You Make a good Point.. I've used this method for 10 years in in White Pine Trees.. Using Large 3/4 inch Polypropaline rope. The Black Stuff is best.. (It has to be replaced every so often but it cheap around here because it's what the fishermen use for their nets and Lobster pots.) I use one rope up over the branch and then attach that to another rope with a pulley.. that way even if the rope should seize up there i can still get the antenna down.. But at least in the White pine had it seize yet.. I have had nylon and Dacron seize up there.
For what it's worth.
Dave KC1DI

2972. Plan for dipole 40&80

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Gomes <ct1hix@netc.pt>
Message-ID: <3a1d01b9@212.18.160.197>
Source record: 175902

Can someone please email me instrucions on building the dipole 40&80 meters
.
The max length possible 25 meters !!!!!!!!!!

73`s Gomes CT1HIX

2973. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1D0D4E.51C49726@mwci.net>
Source record: 175903

Keith Dysart wrote:

> Let us start with a transmission line (TL) of impedance 50 Ohms,
> length t (the time for one way propagation along the line) and a
> generator with an output impedance of 50 Ohms.
> Leave the right end of the TL open-circuit.
> Set the generator to 50 V (into 50 Ohms) and attach it to the left
> end of the TL.

The open-circuit generator volts is 100 V.

> At time t, the voltage step reaches the end of the TL and the current
> can flow no further since the TL is open-circuit.
> But charge is still arriving so a voltage step from 50 to 100 V occurs
> which propagates back along the line.

The return current is -1.0 A (note the change of polarity). The net current to the right of the returning wave is 1.0 - 1.0 = 0.0 A. To the right of the return wave the power is 50 W forward and 50 W reflected. This is what a directional wattmeter would read. To the left of the return wave it reads 50 W forward and 0.0 W reflected.

> Now the TL is fully charged to 100 V and no current is flowing anywhere in
> the line.
> The generator is no longer adding energy to the TL.
> The energy delivered to charge the TL is stored in the capacitance of the TL.
> Since the current is zero everywhere in the TL, there cannot be energy flow
> anywhere in the TL so the power must be zero.

OK. The wattmeter reads 50 W forward and 50 W reflected, for a net of 50 - 50 = 0.0 W

> And yet believers in reflected power would like me to accept that > there is

> 50 W of forward power and 50 W of reflected power for a net 0.
> But I can easily see that there is no power flowing in this TL, anywhere.
> It is only a charged capacitor.
> As for the 50 forward and reverse, one could just as easily argue that it
> is a megawatt forward and reverse. It yields the same result.

The wattmeter in your example reads 50 W forward and 50 W refelected.

> So I conclude there is no such thing as 'reflected power'

It has been said several times (suggest you review) in this forum that because of the way it is designed, the wattmeter (an impedance bridge) is in actuality responding to the voltage *across* its output terminals and the current *into* its output terminals. It does *not* respond *directly* to a power value. The

thing is that the meter scale is marked in terms of watts. The concept of forward and reflected *power* is convenient. One reason is that these two values can easily be used to calculate SWR. And when the return power reading is zero, the true load power is what is the forward meter reads. And the actual load power is always forward minus reflected. When we talk about forward and reflected power we are actually thinking in terms of what a directional wattmeter scale reads. But the real action is in the forward and reflected voltage and current waves.

> 'Where
> does the reflected power go?' is meaningless.

OK. That has been said several times also.

> To carry the study a bit further we can ask what is happening in the
> generator after time 2 * t.
> If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> If we assume Norton, it is dissipating 200 W.

Not OK. The conversion from Thevenin to Norton is not that simple. In the steady state the Thevenin current is 0.0 because the Thevenin impedance is infinite (generator plus line). The Norton current must therefore also be 0.0 in the steady state. The condition "no current flows" must always be satisfied when the load is an open-circuit. Stand at the end of the line and look back. We must see 0.0 A in both cases. In other words, Norton and Thevenin *must* produce identical results or they are not equivalent.

Bill W0IYH

2974. Re: Plan for dipole 40&80

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vj44n$73$1@neptunium.btinternet.com>
Source record: 175904

Put up your dipole as high as possible. Centre feed it via
450-ohm or 600-ohm balanced line. Connect a 1:1 choke balun
between end of line and the tuner. Connect the tuner
directly to the transceiver. It will work OK with a 25
metres long dipole.

But it will tune up more easily if you increase length of
dipole by bending both ends either sideways or downwards by
90 degrees.

You can afford to be only 50% efficient, 1/2 S-unit or more,
before anybody notices your signals are getting weaker.

To analyse performance of dipoles plus feedlines plus
tuners, download program VARNEY.exe from my website.
Download in a few seconds. Not zipped up. Run immediately.

Just put up your dipole and enjoy the DX.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Gomes <ct1hix@netc.pt> wrote in message
news:3a1d01b9@212.18.160.197...
> Can someone please email me instrucions on building the
dipole 40&80 meters
> .
> The max length possible 25 meters !!!!!!!!!!
>
>
> 73`s Gomes
CT1HIX
>
>

2975. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D156C.CB966F4D@IEEE.org>
Source record: 175905

Keith Dysart wrote:
> So I conclude there is no such thing as 'reflected power' because it does
> not explain the 0 frequency situation and therefore the question 'Where
> does the reflected power go?' is meaningless.

Does a pendulum clock keep time when the pendulum is swinging? How about when the pendulum is not swinging? An AC system is simply different, in many ways, from a DC system.

Reflected power is a *dynamic* exchange of energy. It simply doesn't exist under steady-state DC conditions. Note that reactance is either zero (short) or infinite (open) at 0 frequency. Does that mean there is no such thing as reactance?

We know that reflected power exists because it causes additional losses in the transmission line over and above the matched line loss.
--
http://www.mindspring.com/~w6rca

2976. Re: Dipole trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D1695.34016B4E@IEEE.org>
Source record: 175906

Reg Edwards wrote:
> Cecil, I am referring to the reflection coefficient and
> mismatch presented to the line by the internal impedance of
> the transmitter as modified by the tuner.

That's the beauty of a Z0-match, Reg, the internal impedance of the transmitter doesn't matter if no reflected energy is allowed to reach the transmitter. That's the basic function of an antenna tuner - to keep reflected energy from invading the transmitter. A Z0-match is all we need. We don't need a conjugate match.
--
http://www.mindspring.com/~w6rca

2977. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D1750.4D1958A9@IEEE.org>
Source record: 175907

K9SQG wrote:
> Make the bolts stainless steel, and use nylon insert locknuts and you're in
> business...

Ever had a problem with the nylon deteriorating due to UV?
--
http://www.mindspring.com/~w6rca

2978. Re: Hamstick and coupler--again!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D1A0C.E8F97E1@IEEE.org>
Source record: 175908

'Doc wrote:
> The HamStick ought to work with your tuner very
> well on 80 meters. It should work as well as a 102"
> whip on the higher bands, and probably better, maybe.

The Hamstick is the lesser of two evils on 80m. But an
80m Hamstick should not be used on the higher bands.

One runs into a condition known as self-resonance which
is a series resonant condition where vast amounts of
energy are exchanged between the inductance and the
capacitance of the antenna resulting in massive ohmic
losses.

IMO, a 102' whip plus SGC would be a superior mobile antenna
to an 80m Hamstick plus SGC when used on 20m, for instance.
--
http://www.mindspring.com/~w6rca

2979. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1D1B84.BB5967C5@IEEE.org>
Source record: 175909

Roy Lewallen wrote:
> I'd be surprised if you'll see any difference in RF pickup by using the
> double shielded cable. I've seen a noticeable difference, but only when
> looking at very small signals using extremely well shielded test
> equipment. You should connect both shields at both ends of the cable
> just as you would a single shield.

Not really applicable to antenna systems, but, to reduce noise, control
systems use double-shielded cable with the outer shield tied to earth
ground and the inner shield tied to system common.
--
http://www.mindspring.com/~w6rca

2980. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1D2175.EAB14A54@mwci.net>
Source record: 175910

William E. Sabin wrote:

> Keith Dysart wrote:
>
> > Let us start with a transmission line (TL) of impedance 50 Ohms,
> > length t (the time for one way propagation along the line) and a
> > generator with an output impedance of 50 Ohms.
> > Leave the right end of the TL open-circuit.
> > Set the generator to 50 V (into 50 Ohms) and attach it to the left
> > end of the TL.
>
> The open-circuit generator volts is 100 V.
>
> > At time t, the voltage step reaches the end of the TL and the current
> > can flow no further since the TL is open-circuit.
> > But charge is still arriving so a voltage step from 50 to 100 V occurs
> > which propagates back along the line.
>
> The return current is -1.0 A (note the change of polarity). The net current to
> the right of the returning wave is 1.0 - 1.0 = 0.0 A. To the right of the return
> wave the power is 50 W forward and 50 W reflected. This is what a directional
> wattmeter would read. To the left of the return wave it reads 50 W forward and
> 0.0 W reflected.
>
> > Now the TL is fully charged to 100 V and no current is flowing anywhere in
> > the line.
> > The generator is no longer adding energy to the TL.
> > The energy delivered to charge the TL is stored in the capacitance of the TL.
> > Since the current is zero everywhere in the TL, there cannot be energy flow
> > anywhere in the TL so the power must be zero.
>
> OK. The wattmeter reads 50 W forward and 50 W reflected, for a net of 50 - 50 =
> 0.0 W
>
> > And yet believers in reflected power would like me to accept that > there is
>
> > 50 W of forward power and 50 W of reflected power for a net 0.
> > But I can easily see that there is no power flowing in this TL, anywhere.
> > It is only a charged capacitor.
> > As for the 50 forward and reverse, one could just as easily argue that it
> > is a megawatt forward and reverse. It yields the same result.
>
> The wattmeter in your example reads 50 W forward and 50 W refelected.
>

> > So I conclude there is no such thing as 'reflected power'
>
> It has been said several times (suggest you review) in this forum that because
> of the way it is designed, the wattmeter (an impedance bridge) is in actuality
> responding to the voltage *across* its output terminals and the current *into*
> its output terminals. It does *not* respond *directly* to a power value. The
> thing is that the meter scale is marked in terms of watts. The concept of
> forward and reflected *power* is convenient. One reason is that these two values
> can easily be used to calculate SWR. And when the return power reading is zero,
> the true load power is what is the forward meter reads. And the actual load power
> is always forward minus reflected. When we talk about forward and reflected power
> we are actually thinking in terms of what a directional wattmeter scale reads.
> But the real action is in the forward and reflected voltage and current waves.
>
> > 'Where
> > does the reflected power go?' is meaningless.
>
> OK. That has been said several times also.
>
> > To carry the study a bit further we can ask what is happening in the
> > generator after time 2 * t.
> > If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> > If we assume Norton, it is dissipating 200 W.
>
> Not OK. The conversion from Thevenin to Norton is not that simple. In the steady
> state the Thevenin current is 0.0 because the Thevenin impedance is infinite
> (generator plus line). The Norton current must therefore also be 0.0 in the
> steady state. The condition "no current flows" must always be satisfied when the
> load is an open-circuit. Stand at the end of the line and look back. We must see
> 0.0 A in both cases. In other words, Norton and Thevenin *must* produce
> identical results or they are not equivalent.
>
> Bill W0IYH

There is something else that I overlooked. In an RF power amplifier the output series resistance (Thevenin) or the shunt conductance (Norton) do not dissipate power. They are almost entirely lossless, *dynamic resistances* that are due to a *negative feedback* effect within the amplifier tubes/transistors. This idea has been very well established, but is still having some acceptance problems for some folks.

The result is that in your example, the power dissipated in both the Thevenin and Norton circuits are 0.0 watts. The current generator is 2.0 A and develops 100 V across a 50 ohm *dynamic resistance*. In the Thevenin the 50 ohm generator *dynamic resistance* dissipates 0.0 W and the output voltage is 100 V. Both circuits are equivalent *inside* the circuit..

In ordinary situations of real resistors your comments about Thevenin and Norton do illustrate a problem. In general, the equivalence can only be measured by the results that they produce *beyond* the equivalent circuit. The insides of the equivalent circuit may not produce the same actions, just as you said.

The rule is that we are not supposed to look inside the equivalent circuit, but only look beyond the equivalent circuit, to see how the rest of the circuit is behaving.

Bill W0IYH

2981. dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Kirby Cave <kirbycave@starpower.net>
Message-ID: <8vj8g3eda1@bob.news.rcn.net>
Source record: 175911

recently built a 40 meter dipole from 12 gauge "flex" and 50 feet of rg8
with w2au balun at center.
center hung at approx. 30 feet and ends at approx. 20 feet. don't remember
what the final pruned
length was but appears to be resonant at approx. 7060 khz where swr is
1.4:1. assume this represents
difference in impedence between 50 ohm coax and whatever feedpoint impedence
happens to be.
works fb. no tuner.
my intention was to use this antenna on 40 and 15, so expected to see some
reasonable match around
21180 (7060 x 3rd harmonic). unfortunately, swr is no better than approx.
4 or 5 to 1 across entire
15 meter band. had i discovered a match somewhere, i planned on adding
capacitance hats about
a third of the way out from center to bring it back down to the cw portion
of 15.
will the capacitance hats still correct this? suggestions? thanks in
advance..

wb3bbc

2982. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <XiUdOiPsZYCwithjEEnhn2Vw7IEB@4ax.com>
Source record: 175912

"Tim" <tthomps@nospam.erols.com> wrote:

>
> excerpted...
>
>Good luck,
>
>Tim
>KB3EKG
>

The only thing I would add would be to get a copy of the ARRL Handbook
for Radio Amateurs. It starts with basic theory, and advances to
theory that is quite complex. This would be a good reference to have,
in addition to the ARRL License Manuals. I'd get all three ARRL
license manuals -- technician, general and amateur extra.

Bob
k5qwg

2983. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1D2F5D.9DBA503B@bellatlantic.net>
Source record: 175913

I don't know why people get sucked in to thinking there
is no such thing as reflected power.

Anyone who has ever done any TDR work knows that
to be false.

Keith Dysart wrote:

> Allow me to provide the simple analysis that caused me to conclude
> that there is no such THING as reflected power.
>
> It seemed to me that any acceptable explanation of where 'reflected
> power' goes should work:
>
> a. at a frequency of 0 hertz.
> b. with the transmission line open-circuited.
> c. with the transmission line short-circuited.
> d. with any generator. In particular, it should work if the
> generator is replaced with:
> d1. its Thevenin equivalent circuit.
> d2. its Norton equivalent circuit.
>
> Since these boundary conditions lead to fairly simple arithmetic,
> it can all be done in your head.
>
> Let us start with a transmission line (TL) of impedance 50 Ohms,
> length t (the time for one way propagation along the line) and a
> generator with an output impedance of 50 Ohms.
> Leave the right end of the TL open-circuit.
> Set the generator to 50 V (into 50 Ohms) and attach it to the left
> end of the TL.
> One Amp begins to flow into the TL.
> This charge propagates down the TL creating a voltage step of 50 V.
> To the right of the voltage step, no current is flowing and the
> voltage is zero; to the left of the voltage step, 1 A is flowing
> and the voltage is 50 V.
> At time t, the voltage step reaches the end of the TL and the current
> can flow no further since the TL is open-circuit.
> But charge is still arriving so a voltage step from 50 to 100 V occurs
> which propagates back along the line.
> To the right of this step, the voltage is 100 V and no current is flowing;
> while to the left of the step, the voltage is still 50 V and 1 A is still
> flowing.
> At time 2*t, this voltage step has propagated all the way back to the start
> of the TL.

>
> While the line was charging, the generator was providing 50V * 1A -> 50 Watts
> into the line. This continued for 2 * t seconds.
>
> Now the TL is fully charged to 100 V and no current is flowing anywhere in
> the line.
> The generator is no longer adding energy to the TL.
> The energy delivered to charge the TL is stored in the capacitance of the TL.
> Since the current is zero everywhere in the TL, there cannot be energy flow
> anywhere in the TL so the power must be zero.
>
> And yet believers in reflected power would like me to accept that there is
> 50 W of forward power and 50 W of reflected power for a net 0.
> But I can easily see that there is no power flowing in this TL, anywhere.
> It is only a charged capacitor.
> As for the 50 forward and reverse, one could just as easily argue that it
> is a megawatt forward and reverse. It yields the same result.
>
> So I conclude there is no such thing as 'reflected power' because it does
> not explain the 0 frequency situation and therefore the question 'Where
> does the reflected power go?' is meaningless.
>
> To carry the study a bit further we can ask what is happening in the
> generator after time 2 * t.
> If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> If we assume Norton, it is dissipating 200 W.
> Dissipation in generators depends more on generator design than 'reflected
> power'. Any argument that 'reflected power' is dissipated in the generator
> can easily be shown to be false by substituting Norton for Thevenin or vice
> versa.
>
> For a short-circuited TL after 2 * t:
> - the voltage will be 0 V everywhere
> - the current will be 2 A
> - this still leads to 0 W
> - the energy is stored in the inductance of the TL
> - Thevenin will dissipate 200 W
> - Norton will dissipate 0 W
>
> The so called 'reflected power' is the same but the dissipations are all
> different.
>
> Some might argue that it is the 0 frequency case that is special and that
> 'reflected power' makes sense for non-zero frequency.
>
> Let us consider an open-circuited TL of several wavelength driven by a
> matched generator.
> After time 2 * t there is a standing wave on the line.
> At the end of the line the current must be zero since it is open-circuit.
> Every 0.5 wavelength back from the end the current is 0.

> 0.25 wavelengths from the end the voltage is 0.
> Every 0.5 wavelength back from there, the voltage is 0.
> We know that power is voltage times current.
> Since every quarter wavelength back from the end, either the voltage or
> the current is always 0, the power must be 0, so there is no energy
> flowing across these points.
> If there is no energy flowing, there can not be any 'reflected power'
> flowing unless 'reflected power' is not actually a flow of energy and
> therefore not a power.
>
> And this is the answer. 'Reflected power' results from a computation
> that yields a dimension of power but does not result in anything that
> is real. This mathematical convenience does have value though, because
> when it is combined with another computation yielding a non-existent
> 'forward power', one can compute SWR and net delivered power.
>
> This is an example of analysis where the intermediate results have no
> physical meaning but the final result is useful. Remembering the type
> of circuit analysis (I can not remember the name) where all voltage
> sources are set to zero and then one-by-one they are set to their
> desired value and the resulting currents are computed. Later all the
> computed currents are summed to find the real currents. While the
> intermediate computations yield values with dimensions of current,
> these currents do not physically exist. A simple example will suffice.
>
> Consider two 10 VDC sources whose negatives are grounded and whose
> positives are connected with a 10 Ohm resistor. Analysis yields 1 Amp
> flowing clockwise and 1 Amp flowing counter-clockwise for a net of
> 0 A in the resistor. The final answer is correct; the intermediate
> answers do not represent currents which are flowing.
>
> To make this very clear, replace the 10 Ohm resistor with a zero Ohm
> resistor. Result: infinite current clockwise, infinite counter-clockwise,
> but the net is still correct at 0.
>
> Never assume that intermediate results, no matter how useful to solving
> the problem, represent real things.
>
> ...Keith

2984. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: dmartin560@aol.com
Message-ID: <20001123100011.22568.00001143@ng-bk1.aol.com>
Source record: 175914

Hi Wes,
So you're saying that a 3/4" wrench fits these bolts?
Dwayne

>I climbed my Rohn 45 foldover today and checked the hinge bolts. They are
>1/2"
>grade 5 with double nuts for locking. Don't know whether your '25 uses the
>same
>size, but I would go with the largest size you can get through the holes.
>
>Wes
>

2985. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8vjbo3air1@bob.news.rcn.net>
Source record: 175915

"Keith Dysart" <dysart@nortel.ca> wrote in message
news:8vis99$4f4$1@bcarh8ab.ca.nortel.com...
> Allow me to provide the simple analysis that caused me to conclude
> that there is no such THING as reflected power.
> snip

Why do they keep putting reject loads on ferrite isolators??

Pete

2986. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1D333E.2AC6D43D@bellatlantic.net>
Source record: 175916

Dave,

You mention that you've had nylon and Dacron seize, but
that the polypropaline never seized. I wonder if that is a
function of the size of the material (3/4) or the type. Did
you try 3/4 nylon or Dacron, or were they of smaller
diameter? You also mentioned the need to replace the
poly from time to time - can you give an estimate of
how long it lasts, and what is the main cause of deterioration?

Abrasion is my main problem. Someone recommended
kernmantle rope - but it runs about $130.00 for 50 meters.
It is mountain climbers rope and a lot stronger than needed.
So my intent is to haul new rope up periodically, replacing the
old stuff. Once it seizes, I'm sunk - but as long as it "rides" on
the smaller ends of the branches, it doesn't seize. "Fat" poly
might be a great way for me to go.

KC1DI wrote:

> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3A1C2B13.4CDE8EA5@eznec.com...
> > I've used a slingshot for many years for Field Day and other portable
> > operation, but not for a fixed home antenna. The problem is that the
> > line very quickly digs into the tree and seizes, so it's impossible to
> > get the antenna down after a few days. But I've only used nylon twine or
> > rope, and with Douglas fir or other pitchy trees. One person some time
> > back reported using very heavy nylon monofilament fishing line and was
> > able to get the antenna back down -- apparently the line is slippery
> > enough so it can be pulled even after cutting into the tree. I don't
> > recall what kind of trees he was putting the antennas up in.
> >
> > What's your experience with the kevlar rope? Can you get the antenna
> > back down after a month or two? What kind of trees?
> >
> > Roy Lewallen, W7EL
> >
> Hi Roy,
>
> You Make a good Point.. I've used this method for 10 years in in White Pine
> Trees.. Using Large 3/4 inch Polypropaline rope. The Black Stuff is best..
> (It has to be replaced every so often but it cheap around here because it's
> what the fishermen use for their nets and Lobster pots.) I use one rope up
> over the branch and then attach that to another rope with a pulley.. that
> way even if the rope should seize up there i can still get the antenna

> down.. But at least in the White pine had it seize yet.. I have had nylon
> and Dacron seize up there.
> For what it's worth.
> Dave KC1DI

2987. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011231522240.23621-100000@unics>
Source record: 175917

On Wed, 22 Nov 2000, Tom W8JI wrote:

Hi Tom,

sorry to contradict:
>
> As we all know, electric fields and magnetic fields both must occur in
> EM radition. If one is zero, the other is also zero.
>
There is no doubt about this, I did not tell different (hope one could not misinterpret me in this direction).
Nevertheless there are 'antennas' which mainly respond to the magentic field component. The most famous example is the atomic transition that is used to build the cesium atomic clock, which is mainly produced by the interaction of the magnetic moment of the nucleus and a time varying magnetic field. I don't know if the atom knows about the Maxwell equations, but I know that it mainly responds to the magnetic field.

In opposite, the sodium D light used in street lamps is mainly due to interaction of
the electrical dipole moment with the electric field.

> Any antenna, even the small loop antenna, has all fields. It's just
> that very close to the antenna the magnetic induction field dominates
> (unless you move up near the capacitor, where the two ends have a
> large potential difference and the electric induction field will be
> quite large in a small area) the radiation and the electric induction
> field.

Does that mean that the 'magnetic' loops used for measuring the magentic near field component are useless ? There was a series about constructing a near field probe in german cq DL magazine last year mentioning and testing the H/E relation in TEM chamber simulating a plane wave.

In the far field E and H waves are totally equivalent (they must be because of energy conservation). In the near field both parts are necessary too, but one goes like 1/r^2 while the other goes like 1/r^3. Since both functions never reach zero, this is no contradiction to the Maxwell equations.

> While the loop has a low impedance, remember with every time-varying
> magnetic field there is a time varying electric field. At any
> distance, they are essentially equal.
>
This only holds for the far field component.

> That's why small loops can be calibrated to read electrical field
> strength. They read it accurately as long as the loop is some distance
> from the source.
The calibration of the magnetic probe to read electrical field strength
relies on the assumption H=E/377 Ohms, which is true for the plane wave
aka far field. It does not work in the near field.

> The shield on a small loop isn't a shield at all, it simply is the
> actual antenna. All the shield does at the operating frequency of the
> loop is allow us to improve the balance of the loop if we ground the
> shield properly, at the electrical ceneter of the shield.
>
> Ground the shield off center, or at one end, and you can actually
> INCREASE the antenna effect of the loop! Some articles show the shield
> grounded at one end, and the user would probably be better off with no
> shield at all than the improperly configured shield.

I agree.

> What the DOC does in your country makes sense, because they are
> talking about right next to the antenna. It also could be a physically
> large antenna.
I don't know the cited study myself. In germany you have limitng
values for the magnetic and electric near field per band. The normal,
accepted (though inaccurate) procedure is to put ur power and antenna gain
into the far field formula and see what safety distance comes out. But in
some cases you need accurate near field calculations or measurements. For
magnetic loops the study is said to show that the main limitation is the
magnetic field strength, at least if you get closer than 6 or 7 metres to
the loop (on 40 metres).

> The only thing that surprises me is why people think noise or unwanted
> signals are somehow always "electric" and good signals are always
> "magnetic". Perhaps it is because we call the noise "electrical
> interference".
For the far field it makes no differences. But if your noise source is
using an 'electric' antenna and you are close to this antenna you will
mainly see the electric near field component: Of course this depends on
where you are relative to the transmitting antenna. Put a ten meter dipole
5 metres in the air and measure the electric and magnetic field strength
just below one end. According to what people who did it told me you will
be surprised that the equivalence between H and E known from the far field
does not hold. The E field is 'larger' (although we compare different
units of measure here). This means you can not measure the magentic field
and calculate the electric field, you have to measure both.
If you are right and the fields are always equivalent, which probe do I
have to believe in this case, the electric or the magnetic one ?

>
> I can hear Europeans quite nicely on a one foot clip lead sitting in
> my room on 160 meters and 80 meters. If I use a small loop in the
> room, my computer wipes out the signals. I'd bet in the next room, the
> effect is entirely different.

>
Is it the computer itself or the magentic field produced by the monitor ?

>
> Of course when I'm receiving a signal in the favored direction of
> whatever Beverage I'm using! It is directional and hears less noise
> from unwanted directions. But the same Beverage has LESS S/N when
> receiving in directions other than its favored direction compared to a
> simple vertical.
>
I think this is why people are putting up beverages ?

>
> My vertical arrays essentially use four primary verticals spaced about
> 5/8th wavelength broadside and 1/4 wl endfire (some arrays use 1/8 wl
> endfire spacing) . If you look at the patterns of such an array, with
> proper phase delay, it is very clean and much narrower than a Beverage
> even multiple wavelengths long.

True

> What I did to solve this problem is use multiple phase-locked
> receivers on small arrays (maybe 500 feet by 300 feet area) separated
> by thousands of feet. Each receiver feeds an audio channel that I pick
> with a switch. I constantly rotate the switch to pick the best two
> channels to feed my stereo headphones when a signal is marginal.

Interesting solution.

By the way there was another article about a broadband active antenna
using two magentic loops perpindicular to each other. I know four people
who built this antenna and say they have better S/N than with active
electric antennas (although the signal difference is something like 20 dB
on a spectrum analyzer). Two of the four comparison antennas are produced
by Rohde und Schwarz company and have IP3 of 30 dBm and NF of 5 dB.
The magnetic antenna's active part has similar characteristics (the NF is
around 7 dB and IP3 maybe little bit higher.

Vy 73

Ralf

DL 6 OAP

==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

==========

2988. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a1d361a_2@news3.prserv.net>
Source record: 175918

Roy:
In the average Ham/SWL application, you are probably correct. However, in locations where the runs are long, and all kinds of other types of cables are in the same cable trays, it really makes a difference. Some measurements were performed on 100 foot runs of RG-58/U vs. RG-223/U several years ago, and if my filing system were organized, I could quote you the numbers, but there was a easily measurable difference. Today, the problem tends to be something like CAT-5 signal cables running along receive coax runs, and it doesn't take many feet of that to start showing up in the receiver input. A few feet of RG-58 running in the vicinity of some of the poorer computers will also produce measurable (and hearable) signals in a HF receiver.
--
Crazy George
Roy Lewallen <w7el@eznec.com> wrote in message
news:3A1C2C0B.E824EC03@eznec.com...
> I'd be surprised if you'll see any difference in RF pickup by using the
> double shielded cable. I've seen a noticeable difference, but only when
> looking at very small signals using extremely well shielded test
> equipment. You should connect both shields at both ends of the cable
> just as you would a single shield.
>
<snip>
>
> Roy Lewallen, W7EL
>

2989. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 01:48:56 UTC
From: n7ws@azstarnet.com
Message-ID: <3a1c76b3.2510178@news.azstarnet.com>
Source record: 175896

On Sun, 19 Nov 2000 21:57:30 -0500, "Peter Bertini" <commquart@erols.com> wrote:

>Anyone have information on why Rohn discontinued the FK series?
>
>Was it a lack of sales, or safety related issues?
>
>I called Rohn the other day looking for info on my FK25 foldover section,
>and the person I spoke to didn't know they ever made a foldover kit for the
>25G or 45G series!
>
>I need info on the hinge bolts used in the FK25, size, specs, etc. so I can
>replace
>the old ones in the used section I just picked up with proper new ones.
>
>
>Pete

I climbed my Rohn 45 foldover today and checked the hinge bolts. They are 1/2"
grade 5 with double nuts for locking. Don't know whether your '25 uses the same
size, but I would go with the largest size you can get through the holes.

Wes

>
>

2990. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 02:11:51 UTC
From: k9sqg@aol.com
Message-ID: <20001122211151.05982.00001244@ng-ck1.aol.com>
Source record: 175897

Make the bolts stainless steel, and use nylon insert locknuts and you're in business...

2991. CDR-1 Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-23 05:58:32 UTC
From: Michael Hart <mhart-NOSPAM@terrigal.net.au>
Message-ID: <3a1cb2fb$1@turakina.six.asn.au>
Source record: 175898

I just acquired one of these devices.

Can some one let me know the general specs, such as load capacity, does it have a brake etc?

I want to try to build a control box for it so I need to know what the four connecting wires are for. Does anyone have a circuit diagram for one of these rotators. Which connections are for the motor windings, how does the motor direction work and which connections are for position sensing and what type of position sensing it has?

All help is appreciated.

Michael

2992. Re: dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Gail Meserve <zepposmom@earthlink.net>
Message-ID: <uwuT5.24709$xd3.2044316@newsread1.prod.itd.earthlink.net>
Source record: 175769

"Kirby Cave" <kirbycave@starpower.net> wrote in message
news:8vj8g3eda1@bob.news.rcn.net...
> recently built a 40 meter dipole from 12 gauge "flex" and 50 feet of rg8
> with w2au balun at center. center hung at approx. 30 feet and ends at
> approx. 20 feet. don't remember what the final pruned length was but
> appears to be resonant at approx. 7060 khz where swr is 1.4:1. assume
> this represents difference in impedence between 50 ohm coax and whatever
> feedpoint impedence happens to be. works fb. no tuner.
> my intention was to use this antenna on 40 and 15, so expected to see some
> reasonable match around 21180 (7060 x 3rd harmonic). unfortunately, swr
> is no better than approx. 4 or 5 to 1 across entire 15 meter band. had i
> discovered a match somewhere, i planned on adding capacitance hats about
> a third of the way out from center to bring it back down to the cw portion
> of 15. will the capacitance hats still correct this? suggestions? thanks
in
> advance..
>
> wb3bbc

Dale (W4OP) had some good suggestions and here are a few more.

The capacitance hats, situated about 1/3 of the distance from the feed,
should
work but I have, in the past, found them difficult to work with and hard to
adjust.

One suggestion would be to place another wire, in parallel with your current
radiator, that is tuned to 15 Meters. This will have some effect on your 40
Meter wire but if you tune the 15 Meter wire first and then the 40 Meter
wire,
the interaction should be minimum. Keep the second wire spaced from the
first
by about 6 to 12 inches. You could also configure it as a fan.

Another possibility is to use a trap. A trap could be placed at the proper
distance
for 15 Meters so that when you operate on 15 Meters the wire past the trap
is
isolated and not seen. On 40 Meters you will see all of the wire. A trap has
the
added effect of shortening the 40 Meter section of wire so, when you
initially put
the trap in, you will see the overall resonance of the antenna go down in
frequency.

I am currently running a 4 band (40,20,15,10) trap dipole and use no tuner. The
match is good across all of 40, 20, and 15 Meters and most of 10 Meters. I admit
that traps are not easy to work with but they worked the best for me and I get more
band coverage in less space.

Good Luck
Martin K7MEM

p.s. Send any replies to martin dot e dot meserve at lmco dot com. This is my XYLs
account.

2993. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1E7E62.3702FD8B@IEEE.org>
Source record: 175770

Keith Dysart wrote:
> The assertion that "We know that reflected power exists because it causes
> additional losses in the transmission line over and above the matched
> line loss." is a classic logic flaw of assuming that a single case
> consistent with the hypothesis proves the hypothesis.

It's not just a single case. I've shown that with a 100 joules/second
generator looking into a one-second long transmission line with an SWR
of 5.83:1, the energy stored in the transmission line is 300 joules.
Take away the dynamic generated energy and you have 200 joules left
which is reflected power going both ways and causing additional losses.

Reflected power can be seen on a TDR. Reflected power can be used to
boil water using the load tied to a circulator.

Exactly how much of reality are you capable of ignoring?
--
http://www.mindspring.com/~w6rca

2994. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1E7EC9.374057B3@IEEE.org>
Source record: 175771

Keith Dysart wrote:
> I believe I have provided that counter-example.

Do you also believe in Santa Claus?
--
http://www.mindspring.com/~w6rca

2995. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1E7FC0.57A87CF5@IEEE.org>
Source record: 175772

Keith Dysart wrote:
>
> In article <8vjbo3air1@bob.news.rcn.net>,
> Peter Bertini <commquart@erols.com> wrote:
> >Why do they keep putting reject loads on ferrite isolators??
>
> I don't know, but since 'reflected power' does not exist, that is not
> the reason.

You can cook your hand using the nonexistent reflected power
collected by a circulator load resistor.
--
http://www.mindspring.com/~w6rca

2996. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1E8108.AD42BB35@IEEE.org>
Source record: 175773

Keith Dysart wrote:
> On the other hand you might wish to consider the following psuedo-AC-DC
> example. Turn the generator on for 5 hours and off for 5 hours and then
> on, etc. This is clearly an AC environment.

Yes it is and I'll be glad to explain. Assume a lossless unterminated
transmission line that is 2.5 hours long. Pour a kilowatt of DC into it
for five hours. Disconnect the transmitter and grab the conductors with
your hands. What is frying you with no other source of energy attached
is reflected power.
--
http://www.mindspring.com/~w6rca

2997. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1E8375.93CF55B@IEEE.org>
Source record: 175774

"R.Wilhelm" wrote:
>
> On Thu, 23 Nov 2000, Cecil wrote:
> > I can see how that would work with vertical antennas, Bill, but
> > what about horizontal antennas?
>
> why do you think there is a difference ?

With a vertical antenna, not much radiation is aimed directly
at the ground. Most of it is radiated parallel to the ground.
But with a horizontal antenna, things are rotated 90 degrees
and a lot of radiation is aimed directly down toward the ground.
Ever try to use a FSM to adjust for minimum F/B ratio on a
horizontal beam?
--
http://www.mindspring.com/~w6rca

2998. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1e96c9.62269186@news.akorn.net>
Source record: 175775

On Fri, 24 Nov 2000 03:07:30 GMT, Cortland Richmond
<ka5s@earthlink.net> wrote:

Courtland,

>Tom,
>You're mixing up calibration with response, OM. A loop doesn't respond to an E
>field, if it's built right.

You are missing the point OM. You can NOT have a time-varying electric
field without a time-varying magnetic field.

>Plus, look at the loop antennas used to measure RF. They're not only balanced
>(one of the tests for balance is that they should NOT respond to an E-field)
>but shielded from E-fields. That shield is not connected to the feedline, and
>is cut so that it does nor even provide a path for induced currents to flow. So
>THAT is not the antenna. Also, taking it off doesn't reduce the signal.

You can NOT shield a loop from a time varying magnetic field. All the
shield will do is act as the antenna.

The shield becomes the antenna, and the winding inside the shield
simply couples to the shield's inside with normal coupling involving
both fields.

The shield's inside (assuming it is more than a few skin depths thick)
couples to the outside of the loop because it has a direct connection
at the open shield ends, where the current spills over the edge.

There is an electric field across that junction.

Taking the shield off can actually increase the signal, because the
path length of the current is decreased.

That's how a sheilded loop works, no matter what misinformation is
circulated through popular rumor. You can find that information
documented in later copies of Reference Data for Radio, as well as
other technical publications.

73 Tom

2999. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vmsfbsal1@neptunium.btinternet.com>
Source record: 175776

What is meant by a 'better ground' ?

A better ground need not be one with a higher conductivity.
There are circumstances when a higher resistance ground is
better. As exemplified by an arid sand desert. Such soil
is a very good low-loss insulator. Almost as loss-less as a
copper sheet.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
'Doc <w5lz@oio.net> wrote in message
news:3A1EB4B9.28F5257A@oio.net...
>
>
> Tom,
> Any antenna will benifit from a good ground system
under
> it, not just verticals. Most of us who use the lower HF
> bands probably don't have the antenna at a 1/4 wave above
> ground, much less higher, and antennas like these will
also
> benifit from a 'better' ground under it.
> 'Doc

3000. 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Dave <DaveA204@mailops.com>
Message-ID: <3a1f10b1_1@excalibur.gbmtech.net>
Source record: 175777

Anyone ever did this or know someone who has?
I would appreciate any information on this. I no longer
need the Moonraker 4 so its either sell it or convert it...

thanks
Dave

3001. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1F1823.1040009@hiwaay.net>
Source record: 175778

Thanks, Cecil. I have a reason to ask. My QTH is on what is locally called a 'Mountain", but is really the southern tip of the Cumberland plateau. This is old seabed, eroded, so the hills are flat on top, with valleys cutting into the table. In my case, the drop off to my west is about 300 ft away, and to the east is about 400 ft. This tapers to the south, so that there is a point about 1250 ft away. It is shaped like a triangle, with the edges dropping off sharply, about 300 ft in the first 1/8 mile, and almost 1000 ft to the valley floor, which is near the level of the Tennessee river. The river is at 600 ft above Sea level, and I am at 1600 ft.

THe whole terrain is broken up into valleys, so that, despite an 800 ft drop in between, I can see other points to the east and west, about a mile away, that are at my altitude. To the south, the next ridge is over 5 miles away. In winter, I can see the river, to the SE.

I am pretty isolated (nearest neighbor is 1/4 mile north) and, electrically, pretty quite. I have thought about getting a Terrain analysis, but don't know if it is worth it, except for curiosity satisfaction.

Do you (or anyone else) have an opinion about this kind of situation?

Bill-W4BSG

Cecil wrote:

> Bill Aycock wrote:
>
>> Hey Cecil- if the performance is 'noticeable'- in what way is it
>> noticeable, good, bad, ??
>
>
> Performance in the direction of the downslope is noticeably better
> than any other direction.

3002. This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8vn6tudoo1@nntp9.atl.mindspring.net>
Source record: 175779

<gratuitous post>

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

3003. Call for an autotuner smackdown

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8vn7ea$pn5$1@nntp9.atl.mindspring.net>
Source record: 175780

I have an Alinco DX70TH so naturally I'm keeping an eye on that one. Also curious about Smartuner, LDG, etc. They seem like a good idea for a versatile mobile/portable/limited-space system, but even I know you don't get something for nothing.

Main concerns: effectiveness, ruggedness, lightning vulnerability, compatibility.

Corry
--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

3004. Re: Thread changes

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1F2966.3070202@hiwaay.net>
Source record: 175781

Harry is RIGHT!
Why do you jerks HAVE to keep bringing this up? the NG has been peacful
and quite for a week, and you guys just will not let it alone. If you
will just enjoy the peace, it will be MUCH better.

Just my $.02 worth.- Bill- W4BSG

Harry Harms wrote:

> Group,
> I have evoked the "Fractenna" filter, so I never get any of his churlish
> posts or responses, and if we all did it, he would vanish...
> Harry
> "N8wwm" <n8wwm@aol.com> wrote in message
> news:20001124200612.09164.00001054@ng-cf1.aol.com...
>
>> I think this clown Chip is just an asshole, plain and simple. He obviously
>
> has
>
>> severe mental problems.
>>
>> He reminds me of this guy we have here
>> in Toledo in a local chat room. This guy will get into a discussion about
>> something, I mean just anything at all, and when it comes to a point where
>
> he
>
>> might ought to say "ya know you may be right" he instead says "What is
>
> your
>
>> education level?"
>>
>> Everyone ignores this pompous 47 year old baby now except newbies to our
>
> chat
>
>> room...
>>
>> And additional laugh for ya...his AOL screen name is WoWwutaGuy...
>> I think he is Chip's lost brother.

3005. Re: Call for an autotuner smackdown

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1F3DDB.CF2EB473@oio.net>
Source record: 175782

Corry,
I'm sure you can think of a few of the "pro"s of this kind of
an antenna system. The "con"s that I can think of, off hand, are
that the effectiveness of such an antenna system depends on the
length of the 'whip', or radiating element. The shorter the 'whip'
part of the system, the worse the efficiency. The 'usual' six or
eight foot whip that comes with a few of the autotuners is just
worthless on most of the HF bands.
Another one of the "con"s is that your limited as to output
power.
'Doc

3006. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1F5005.7CD28E88@IEEE.org>
Source record: 175783

Bill Nelson wrote:
> Please repost the criteria - with supporting documentation to show why
> they should apply to the question of reflected power.

His basic argument is that under steady-state conditions at a frequency
of zero Hz, there are no reflections. Therefore, reflections don't exist.
--
http://www.mindspring.com/~w6rca

3007. GPS QUESTION ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Lloyd <NOT-GIVEN@NO-SPAM.NO>
Message-ID: <xuJT5.71273$Z2.960382@nnrp1.uunet.ca>
Source record: 175784
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

Due to my last posting about a ham question I have been spamed to death
from
using my real email address. Please send your reply directly to
VE7LWB@rac.ca

Here is my GPS question. I have a GPS handheld unit made by Lowrance. My
question is this, what frequency is the sat on that GPS runs on? I know
it's somewhere
in the gig range, but where about's 5Ghz?? 10Ghz?? 20?? or higher ?? I
know it's
up high as I can see the differance in the signal locks I get on the bird
from a clear
sunny day to a heavy cloudy day. On a very heavy cloudy rainy day out on
the boat I
get less birds I can get a signal lock on. I have also heard something that
there are
GPS units that run on frequencies in or around that 400 to 500 Mhz area. Is
this true
or was I being fed a line of BS ? And if there are ones in that range, who
makes them?
And any other info on it would be nice....

3008. 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Dave <DaveA204@mailops.com>
Message-ID: <3a203b09_1@excalibur.gbmtech.net>
Source record: 175785

Anyone ever did this or know someone who has?
I would appreciate any information on this. I no longer
need the Moonraker 4 so its either sell it or convert it...

thanks
Dave

3009. 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Dave <DaveA204@mailops.com>
Message-ID: <3a2280c4_1@excalibur.gbmtech.net>
Source record: 175786

Anyone ever did this or know someone who has?
I would appreciate any information on this. I no longer
need the Moonraker 4 so its either sell it or convert it...

thanks
Dave

3010. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1E498B.D8761F73@mwci.net>
Source record: 175855

Cecil wrote:

> On my IC-706, the maximum
> difference between forward power and reflected power seems to be
> when reflected power is zero.

The load impedance for the PA is then 50 ohms pure resistive, which is what the rig was designed for. This suggests best efficiency and best cleanliness of the output sig.

Bill W0IYH

3011. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011241227250.19225-100000@unics>
Source record: 175856

On Thu, 23 Nov 2000, Cecil wrote:

>
> I know a ham who tunes for maximum field strength. When I ask him if
> that's near field or far field he says he doesn't know. When I ask him
> if he's measuring horizontal radiation or vertical radiation, he says
> he doesn't know. When I ask him what is the take-off angle of the radiation
> measured by his FSM, he says he doesn't know. That seems like a lot of
> unknowns to me.
> --
>
Hi Cecil,

if the OM can be sure that all field strength he sees is radiated by the
antenna, that his method is correct since there is monotone relationship
between the power 'absorbed' by the antenna and the field strength (field
strength goes like square root of power). Anyway you have to be sure if
your field strength meter does not pick up feedline radiation etc. and
this unkonown remains.

Vy 73

Ralf

DL 6 OAP

==
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==

==

3012. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011241236220.19225-100000@unics>
Source record: 175857

On Thu, 23 Nov 2000, Cecil wrote:

> I can see how that would work with vertical antennas, Bill, but
> what about horizontal antennas?
> --
Hi Cecil,

why do you think there is a difference ?

Vy 73

Ralf

DL 6 OAP
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

==========

3013. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vljr9$ob0$1@neptunium.btinternet.com>
Source record: 175858

George,

I agree some form of instrument is essential.

But what your meter indicates is not swr. It is a
reflection coeficient meter which should be scaled linearly
from 0 to 1.

SWR = 1 corresponds to RC = 0. SWR = Infinity corresponds
to RC = 1.

Let's scale the meter properly and call it it by its correct
name. And only one moving coil movement is needed.

There is not even a transmission line on which the indicated
swr is imagined to exist. Novices trying to understand the
technicalities are confused and misled by imaginary standing
waves on non-existent lines. As shown by questions posed to
this newsgroup.

In the year 2000 it is time the radio amateur handbooks were
expurgated. (Incidentally, the conjugate match should have
been allowed to remain.)
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
George, W5YR <w5yr@att.net> wrote in message
news:3A1DFE81.3B6BA165@att.net...
> I prefer to tune with and to monitor reflected power. My
MFJ 989C has a
> cross-pointer meter which makes it easy to tune by
observing the
> reflected power meter reading. I seldom glance at the
"forward" power
> meter reading except to verify that the transmitter is
putting out its
> maximum if so adjusted. I know that if I adjust the tuner
for minimum
> reflected power, the "forward" power is maximized, and
that is the
> condition we all seek. I don't think that I have ever
looked close

> enough at the meter scale to see what SWR readings are
involved. This is
> a derived reading that may be of academic interest but has
little to do
> with how I adjust the tuner. Neatest thing since sliced
bread:
> dual-pointer meter.
>
> 72/73, George W5YR - the Yellow Rose of Texas
NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L
1373
> Amateur Radio W5YR, in the 55th year and it just keeps
getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99)
IC-765 (6/90)
>
>
> Reg Edwards wrote:
> >
> > Cecil said -
> > > If the SWR meter reads forward power and reflected
power
> > then
> > > the difference in those two readings is what makes it
into
> > the
> > > antenna (neglecting feedline losses).
> > ========================
> > Cecil, wouldn't you rather have a meter which just
indicated
> > radiated power - everybody else does. Much more
> > interesting. And no need to make two measurements
followed
> > by mental arithmetic. Down with SWR meters - a
parameter
> > in which nobody is interested. The very name should be
> > investigated by local authority Trading Standards
officers.

3014. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1E53A0.32BE7F03@mwci.net>
Source record: 175859

William E. Sabin wrote:

> William E. Sabin wrote:
>
> > Keith Dysart wrote:
> >
> > > Let us start with a transmission line (TL) of impedance 50 Ohms,
> > > length t (the time for one way propagation along the line) and a
> > > generator with an output impedance of 50 Ohms.
> > > Leave the right end of the TL open-circuit.
> > > Set the generator to 50 V (into 50 Ohms) and attach it to the left
> > > end of the TL.
> > >
> > The open-circuit generator volts is 100 V.
> >
> > > At time t, the voltage step reaches the end of the TL and the current
> > > can flow no further since the TL is open-circuit.
> > > But charge is still arriving so a voltage step from 50 to 100 V occurs
> > > which propagates back along the line.
> >
> > The return current is -1.0 A (note the change of polarity). The net current to
> > the right of the returning wave is 1.0 - 1.0 = 0.0 A. To the right of the return
> > wave the power is 50 W forward and 50 W reflected. This is what a directional
> > wattmeter would read. To the left of the return wave it reads 50 W forward and
> > 0.0 W reflected.
> >
> > > Now the TL is fully charged to 100 V and no current is flowing anywhere in
> > > the line.
> > > The generator is no longer adding energy to the TL.
> > > The energy delivered to charge the TL is stored in the capacitance of the TL.
> > > Since the current is zero everywhere in the TL, there cannot be energy flow
> > > anywhere in the TL so the power must be zero.
> >
> > OK. The wattmeter reads 50 W forward and 50 W reflected, for a net of 50 - 50 =
> > 0.0 W
> >
> > > And yet believers in reflected power would like me to accept that > there is
> >
> > > 50 W of forward power and 50 W of reflected power for a net 0.
> > > But I can easily see that there is no power flowing in this TL, anywhere.
> > > It is only a charged capacitor.
> > > As for the 50 forward and reverse, one could just as easily argue that it
> > > is a megawatt forward and reverse. It yields the same result.
> >

> > The wattmeter in your example reads 50 W forward and 50 W refelected.
> >
> > > So I conclude there is no such thing as 'reflected power'
> >
> > It has been said several times (suggest you review) in this forum that because
> > of the way it is designed, the wattmeter (an impedance bridge) is in actuality
> > responding to the voltage *across* its output terminals and the current *into*
> > its output terminals. It does *not* respond *directly* to a power value. The
> > thing is that the meter scale is marked in terms of watts. The concept of
> > forward and reflected *power* is convenient. One reason is that these two values
> > can easily be used to calculate SWR. And when the return power reading is zero,
> > the true load power is what is the forward meter reads. And the actual load power
> > is always forward minus reflected. When we talk about forward and reflected power
> > we are actually thinking in terms of what a directional wattmeter scale reads.
> > But the real action is in the forward and reflected voltage and current waves.
> >
> > > 'Where
> > > does the reflected power go?' is meaningless.
> >
> > OK. That has been said several times also.
> >
> > > To carry the study a bit further we can ask what is happening in the
> > > generator after time 2 * t.
> > > If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> > > If we assume Norton, it is dissipating 200 W.
> >
> > Not OK. The conversion from Thevenin to Norton is not that simple. In the steady
> > state the Thevenin current is 0.0 because the Thevenin impedance is infinite
> > (generator plus line). The Norton current must therefore also be 0.0 in the
> > steady state. The condition "no current flows" must always be satisfied when the
> > load is an open-circuit. Stand at the end of the line and look back. We must see
> > 0.0 A in both cases. In other words, Norton and Thevenin *must* produce
> > identical results or they are not equivalent.
> >
> > Bill W0IYH
>
> There is something else that I overlooked. In an RF power amplifier the output
> series resistance (Thevenin) or the shunt conductance (Norton) do not dissipate
> power. They are almost entirely lossless, *dynamic resistances* that are due to a
> *negative feedback* effect within the amplifier tubes/transistors. This idea has been
> very well established, but is still having some acceptance problems for some folks.
>
> The result is that in your example, the power dissipated in both the Thevenin and
> Norton circuits are 0.0 watts. The current generator is 2.0 A and develops 100 V
> across a 50 ohm *dynamic resistance*. In the Thevenin the 50 ohm generator *dynamic
> resistance* dissipates 0.0 W and the output voltage is 100 V. Both circuits are
> equivalent *inside* the circuit..
>
> In ordinary situations of real resistors your comments about Thevenin and Norton do
> illustrate a problem. In general, the equivalence can only be measured by the

> results that they produce *beyond* the equivalent circuit. The insides of the
> equivalent circuit may not produce the same actions, just as you said.
>
> The rule is that we are not supposed to look inside the equivalent circuit, but only
> look beyond the equivalent circuit, to see how the rest of the circuit is behaving.

An additional clarification.Stand at the end of the line and look back. If the equivalent circuit is Thevenin the voltage is 100 and the resistance looking back is 50 ohms. The dissipation inside the equivalent circuit is 0.0 W.

If the equivalent circuit is Norton the voltage is also 100 and the resistance is also 50 ohms. But the dissipation inside the equivalent circuit is 200 W.

So the two equivalent circuits are equivalent when viewed from *outside*. But in your example the power dissipations *inside the equivalent circuits* are much different. This is a problem with equivalent circuits that says that we should not focus on what is going on inside the equivalent circuit, but should see what these equivalent circuits produce, outside the equivalent circuits

Bill W0IYH

3015. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1E54F9.4609B7D8@mwci.net>
Source record: 175860

Reg Edwards wrote:

> In the year 2000 it is time the radio amateur handbooks were
> expurgated. (Incidentally, the conjugate match should have
> been allowed to remain.)

Try to imagine a world with an expurgated Reg. Would we really
be better off than we were before?

Bill W0IYH

3016. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vll0t$1u9$1@bcarh8ab.ca.nortel.com>
Source record: 175861

In article <3A1D0D4E.51C49726@mwci.net>,
William E. Sabin <sabinw@mwci.net> wrote:

>Keith Dysart wrote:

[snip]
>The open-circuit generator volts is 100 V.

True.

[snip]
>The return current is -1.0 A (note the change of polarity). The net current to
>the right of the returning wave is 1.0 - 1.0 = 0.0 A. To the right of the return
>wave the power is 50 W forward and 50 W reflected. This is what a directional
>wattmeter would read. To the left of the return wave it reads 50 W forward and
>0.0 W reflected.

Yes, these are the intermediate values that the computations produce but
one does have to be careful about falling into the trap of believing
that these currents which sum to 0 actually exist.

[snip]
>OK. The wattmeter reads 50 W forward and 50 W reflected, for a net of 50 - 50 =
>0.0 W

I agree that is what a wattmeter would read. Again readers, be careful
of the trap. Just because a wattmeter has a scale calibrated in watts
does not make those watts real.

[explanation of how wattmeter works snipped]
>But the real action is in the forward and reflected voltage and current waves.

I agree completely. I was attempting to make the inconsistencies of
'reflected power' clear without explaining how it was actually derived.
I accept its usefulness as an intermediate result in a computation.

[snip]
>> If we assume a Thevenin circuit for the generator it is dissipating 0 W.
>> If we assume Norton, it is dissipating 200 W.
>
>Not OK. The conversion from Thevenin to Norton is not that simple. In the steady
>state the Thevenin current is 0.0 because the Thevenin impedance is infinite
>(generator plus line). The Norton current must therefore also be 0.0 in the
>steady state. The condition "no current flows" must always be satisfied when the
>load is an open-circuit. Stand at the end of the line and look back. We must see
>0.0 A in both cases. In other words, Norton and Thevenin *must* produce
>identical results or they are not equivalent.

I fear I did not write clearly here. I should have said: 'For the purposes of this thought experiment let's consider what would happen in a generator actually constructed using Thevenin's or Norton's circuit.' For these easy to compute examples, the conditions outside the generator will be the same, but the power dissipations inside will be completely different. I was attempting to demonstrate that computing 'where the reflected goes' using a Thevenin generator can easily be proved incorrect by substituting a Norton generator. The computed dissipations will be all different and yet it would seem reasonable that 'reflected power', if it existed, would not go different places depending on the circuit design of the generator.

3017. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vllcf$22l$1@bcarh8ab.ca.nortel.com>
Source record: 175862

In article <3A1D2F5D.9DBA503B@bellatlantic.net>,
<ehsjr@bellatlantic.net> wrote:
>I don't know why people get sucked in to thinking there
>is no such thing as reflected power.
>
>Anyone who has ever done any TDR work knows that to be false.

I proposed 5 criteria that reflected power should meet and used two counter-examples to demonstrate that so-called 'reflected power' did not meet these criteria.

If you can demonstrate any flaws in my criteria or logic I will happily reconsider my position.

Remember though, that providing examples which are consistent with an hypothesis do not prove the hypothesis, no matter how many examples are available. Only a single counter-example is needed to disprove an hypothesis.

I believe I have provided that counter-example.

...Keith

3018. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vll8a$21u$1@bcarh8ab.ca.nortel.com>
Source record: 175863

In article <3A1D2175.EAB14A54@mwci.net>,
William E. Sabin <sabinw@mwci.net> wrote:

[large snip]
>The rule is that we are not supposed to look inside the equivalent circuit, but only
>look beyond the equivalent circuit, to see how the rest of the circuit is behaving.

I agree and again apologize for not making clear that I meant: "Let's
analyze a generator constructed using Thevenin's or Norton's circuit."

Of course, there are few situations in the real world where one would
want to use these circuits. They are terribly inefficient.

...Keith

3019. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vllkm$29r$1@bcarh8ab.ca.nortel.com>
Source record: 175864

In article <8vjbo3air1@bob.news.rcn.net>,
Peter Bertini <commquart@erols.com> wrote:
>Why do they keep putting reject loads on ferrite isolators??

I don't know, but since 'reflected power' does not exist, that is not
the reason.

...Keith

3020. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1E63A9.2409AE01@mwci.net>
Source record: 175865

Keith Dysart wrote:

> In article <8vjbo3air1@bob.news.rcn.net>,
> Peter Bertini <commquart@erols.com> wrote:
> >Why do they keep putting reject loads on ferrite isolators??
>
> I don't know, but since 'reflected power' does not exist, that is not
> the reason.

The "dump resistor" does indeed get hot, so there is power in it. That is not the issue here. The issue is precisely this (one more time):

Power itself is not a basic entity that travels on a transmission line. Voltage waves and current waves are the entities that travel, and that is how mathematical analyses, for example Johnson's Equation 4.23 and his entire book, handle this subject. This conforms to the basic nature of a transmission line, which consists of distributed inductance and distributed capacitance, in which voltage and current are the basic players that decide what is going on inside the line.

At any location the "power" is *calculated* as the real part of the product of voltage and current. That is, real power is a *derived* number. This is what heats up the dump resistor (or the resistor in the reflected port of a directional wattmeter).

Bill W0IYH

3021. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: dysart@nortel.ca
Message-ID: <8vlnfm$3cp$1@bcarh8ab.ca.nortel.com>
Source record: 175866

In article <3A1D156C.CB966F4D@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:
>Does a pendulum clock keep time when the pendulum is swinging? How about
>when the pendulum is not swinging? An AC system is simply different, in
>many ways, from a DC system.
>
>Reflected power is a *dynamic* exchange of energy. It simply doesn't
>exist under steady-state DC conditions. Note that reactance is either
>zero (short) or infinite (open) at 0 frequency. Does that mean there
>is no such thing as reactance?

I considered that someone might consider DC and AC to be fundamentally different and that is why I provided the second counter-example. You are invited to consider it.

On the other hand you might wish to consider the following psuedo-AC-DC example. Turn the generator on for 5 hours and off for 5 hours and then on, etc. This is clearly an AC environment. I suggest that for the 5 hours the generator is on (minus 2 * t seconds) the system behaves exactly as I described for the DC case, but your objection can be removed because it is actually an AC example.

While I agree that "AC is different in many ways from DC", I do not find that to be the case with regards to so-called "reflected power", especially in the counter-examples I have provided which were specifically selected not to have reactive elements.

The assertion that "We know that reflected power exists because it causes additional losses in the transmission line over and above the matched line loss." is a classic logic flaw of assuming that a single case consistent with the hypothesis proves the hypothesis.

...Keith

3022. Re: generic radio interface for the ATAS 100?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <5EtT5.11740$u62.111085@news4.atl>
Source record: 175867

http://www.amcominc.com/productdetail.cfm?Prod_ID=85

The Atas 100 controller.

Here is the link you want.

--
73's from W4BEN,
Benjamin Blavat

"Dan Hayman" <DanHayman@Accomplishments.com> wrote in message
news:kdUS5.18903$xd3.1381348@newsread1.prod.itd.earthlink.net...
> I understand that there is a group which produces a box which will
interface
> the ATAS 100 to any radio (not just the FT100). If anybody knows about
this,
> I would like to get the contact information, etc.
>
> Thanks,
>
> Dan, KD0DAN
>
>

3023. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A1E69F3.62FD0959@mwci.net>
Source record: 175868

Keith Dysart wrote:

> In article <3A1D0D4E.51C49726@mwci.net>,
> William E. Sabin <sabinw@mwci.net> wrote:
>
> >The return current is -1.0 A (note the change of polarity). The net current to
> >the right of the returning wave is 1.0 - 1.0 = 0.0 A. To the right of the return
> >wave the power is 50 W forward and 50 W reflected. This is what a directional
> >wattmeter would read. To the left of the return wave it reads 50 W forward and
> >0.0 W reflected.
>
> Yes, these are the intermediate values that the computations produce but
> one does have to be careful about falling into the trap of believing
> that these currents which sum to 0 actually exist.

As a matter of fact they do exist, and a directional ammeter in the line at that point would show them. A directional voltmeter would show two 50 V waves, whose readings add to 100 V. The algebraic sum of the two currents waves is zero. The transmission line is a linear circuit, and it is possible for two distinct currents to flow in opposite directions at the same time. This kind of thing goes on all the time.

> [snip]
> >OK. The wattmeter reads 50 W forward and 50 W reflected, for a net of 50 - 50 =
> >0.0 W
>
> I agree that is what a wattmeter would read. Again readers, be careful
> of the trap. Just because a wattmeter has a scale calibrated in watts
> does not make those watts real.

Not true. The wattmeter readings in the forward and reverse direction are, in fact, true watts. It is only the difference between the two (0.0 in this case) that is delivered to the load. And the reflected reading is the true wattage that is delivered to a *50 ohm* dump resistor.

> I was attempting to demonstrate that computing
> 'where the reflected goes' using a Thevenin generator can easily be
> proved incorrect by substituting a Norton generator. The computed
> dissipations will be all different and yet it would seem reasonable that
> 'reflected power', if it existed, would not go different places
> depending on the circuit design of the generator.

As I have mentioned previously, what is going on inside the equivalent circuit cannot be used as part of the explanation of transmission line behavior, because of the difficulties with Thevenin and Norton equivalent circuits.

Bill W0IYH

3024. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 02:09:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vkienffs1@uranium.btinternet.com>
Source record: 175841

Cecil said -
> If the SWR meter reads forward power and reflected power
then
> the difference in those two readings is what makes it into
the
> antenna (neglecting feedline losses).
==========
Cecil, wouldn't you rather have a meter which just indicated radiated power - everybody else does. Much more interesting. And no need to make two measurements followed by mental arithmetic. Down with SWR meters - a parameter in which nobody is interested. The very name should be investigated by local authority Trading Standards officers.

Reg

3025. WTT Isotron 80M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 02:19:20 UTC
From: w8irq@aol.com
Message-ID: <20001123211920.15401.00000235@ng-fm1.aol.com>
Source record: 175842

I would like to trade a Isotron 80m antenna for a 40m Isotron. Might even consider buying one if price is right. Nick, W8IRQ 330-225-7499

3026. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 02:26:19 UTC
From: k1bqt@aol.com
Message-ID: <20001123212619.11923.00000985@ng-ci1.aol.com>
Source record: 175843

Cecil--

By saying "what's going on with the antenna", are you suggesting that maximum difference between forward and reflected power results in maximum field strength?

Rick K1BQT

3027. Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 02:46:08 UTC
From: mdemeo@frontiernet.net
Message-ID: <3a1dd51d.2489366@news.frontiernet.net>
Source record: 175844

I have purchased an Alinco DX70 TH HF radio and would like to use it in a base configuration. I am leaning towards an all band vertical antenna due to space considerations and am a little confused as to what to use. I would like to cover 10 meters thru 80 meters. Which antenna is best? The Hustler model says it needs radials if mounted elevated and yet I do not see them listed in the description. Also, what is a counterpoise? I see some antennas need one.

Please excuse my dumb questions. I am new to HF.

Thanks
Mike
Standard Broadcast
W2MDM

If you like old Telechron Clocks
Check Out
www.frontiernet.net/~mdemeo

3028. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 03:07:30 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A1DDAC7.B4DFA7B1@earthlink.net>
Source record: 175845

Tom,

You're mixing up calibration with response, OM. A loop doesn't respond to an E field, if it's built right.

If properly balanced (and it may also be shielded) it responds only to the magnetic field, which is -- in the far field -- 1/377 times as strong as the electric field. Since THAT is known, it is easy to a calibrate a loop antenna in terms of uV/m. (You can also calibrate a rod antenna - which does not respond appreciably to the magnetic field -- in terms of uA/m.)

Take a wideband portable receiver, tuned to a local AM BC station, with a whip antenna, under a metal building roof. Listen as reception fades away, when the nearby metal shorts out the E-field (you can hear this under lamp standards, too if they extend over a car). Then connect a loop. The signal will come back. Considering that the E-field is 377 times stronger than the H field this is a pretty good demo.

Plus, look at the loop antennas used to measure RF. They're not only balanced (one of the tests for balance is that they should NOT respond to an E-field) but shielded from E-fields. That shield is not connected to the feedline, and is cut so that it does nor even provide a path for induced currents to flow. So THAT is not the antenna. Also, taking it off doesn't reduce the signal.

Regards,

Cortland

Tom W8JI wrote:

> While the loop has a low impedance, remember with every time-varying
> magnetic field there is a time varying electric field. At any
> distance, they are essentially equal.
>
> That's why small loops can be calibrated to read electrical field
> strength. They read it accurately as long as the loop is some distance
> from the source.
>
> Right against something, where the induction field dominates, the
> small loop will couple quite heavily to magnetic fields. Move it back
> a bit and that all changes.
>
> The shield on a small loop isn't a shield at all, it simply is the
> actual antenna. All the shield does at the operating frequency of the
> loop is allow us to improve the balance of the loop if we ground the
> shield properly, at the electrical ceneter of the shield.
>

> Ground the shield off center, or at one end, and you can actually
> INCREASE the antenna effect of the loop! Some articles show the shield
> grounded at one end, and the user would probably be better off with no
> shield at all than the improperly configured shield.

3029. Make Your Own High Gain Yagi Vhf & Uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 03:30:17 UTC
From: Schneider <js@sprintmail.com>
Message-ID: <3A1DE0CE.D1EEB808@sprintmail.com>
Source record: 175846

Please visit the page below to see how to make a simple high gain yagi antenna.
(6.46 dBd gain on VHF & 10.5 dBd on UHF)

Jeff

--
http://www.homestead.com/KK5UFO/

3030. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 03:54:14 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1DE6C5.CAFCE241@bellatlantic.net>
Source record: 175847

Reg Edwards wrote:

> Cecil said -
> > If the SWR meter reads forward power and reflected power
> then
> > the difference in those two readings is what makes it into
> the
> > antenna (neglecting feedline losses).
> ========================
> Cecil, wouldn't you rather have a meter which just indicated
> radiated power - everybody else does. Much more
> interesting. And no need to make two measurements followed
> by mental arithmetic. Down with SWR meters - a parameter
> in which nobody is interested.

What do you propose to replace SWR meters for the thousands
of hams who would, without them, cook their radios/be unable
to prune an antenna/waste a lot of power, adjust a gamma, etc?

It's not a perfect tool - but, all things considered, it is the best
tool within the reach and understanding level of most amateurs.

And modeling programs, texts, and on-air discussions would
seem to demonstrate that plenty of people are interested in
that parameter.

> The very name should be
> investigated by local authority Trading Standards officers.
> ---
> Reg

3031. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 03:58:44 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A1DE7D4.D7D020C8@bellatlantic.net>
Source record: 175848

Yes, that is helpful! Thanks.

KC1DI wrote:

> <ehsjr@bellatlantic.net> wrote in message
> news:3A1D333E.2AC6D43D@bellatlantic.net...
> > Dave,
> >
> > You mention that you've had nylon and Dacron seize, but
> > that the polypropaline never seized. I wonder if that is a
> > function of the size of the material (3/4) or the type. Did
> > you try 3/4 nylon or Dacron, or were they of smaller
> > diameter? You also mentioned the need to replace the
> > poly from time to time - can you give an estimate of
> > how long it lasts, and what is the main cause of deterioration?
> >
> > Abrasion is my main problem. Someone recommended
> > kernmantle rope - but it runs about $130.00 for 50 meters.
> > It is mountain climbers rope and a lot stronger than needed.
> > So my intent is to haul new rope up periodically, replacing the
> > old stuff. Once it seizes, I'm sunk - but as long as it "rides" on
> > the smaller ends of the branches, it doesn't seize. "Fat" poly
> > might be a great way for me to go.
> >
> Hi,
> your corret the nylon (I find that a little too stretchy) was only 1/2" and
> the Darcron was only 3/8" so it may be that the size is the factor here..
> the reason for the need to replace the ploy is that it will break down in
> sunlight after awhile.. here in western Maine I have one peace that's been
> up for about 8 years with little sign of deterioration. but it is pretty
> much sheilded from sunlight.. I'd say 4 to 5 years would be a good guess as
> to how often 3/4" should be replaced if in direct sun.
>
> Hope that's of help..
>
> 73 Dave

3032. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 04:04:31 UTC
From: n7ws@azstarnet.com
Message-ID: <3a1de4a9.1139301@news.azstarnet.com>
Source record: 175849

On 23 Nov 2000 02:11:51 GMT, k9sqg@aol.com (K9SQG) wrote:

>Make the bolts stainless steel, and use nylon insert locknuts and you're in
>business...

Ordinarily, I would agree but recent experience suggests caution. I just built a rotor plate for my tower and am mounting it about three rungs down from the top. Welding it in is out of the question so I'm using some homebrew clamps to secure it to the tower rungs. I used stainless bolts and nylon stop nuts on the clamps. Unfortunately, the tower rungs aren't normal to the tower legs, so I had some bind between the thrust bearing and the rotor so had to remove the plate to do some shimming.

The one bolt that I forgot to lubricated prior to assembly galled and I wound up twisting it off. I hesitate to think about having this happen on one of the hinge bolts, although one normally doesn't worry about ever talking these things apart.

Wes N7WS

3033. Re: Suggestions for (indoor) small space HF antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 05:01:29 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <JCmT5.232336$g6.106625831@news2.rdc2.tx.home.com>
Source record: 175850

Hi Don, I would look at this page
http://www.sgcworld.com/publications/stealth.htm
A "smart tuner" or weather proofed manual tuner, with 3/4" copper tubing built into a loop around your balcony might be your best solution. Another is a magnetic loop as in MFJ's 1786 (10m - 30m) or 1788 (15m - 40m). But your desire to work 40M, 10M, 6M, 2M, and .70M might rule them out. One thought is Yaesu's ATAS-100 small screwdriver, with the proper counterpoise (maybe a ground screen on the floor of your balcony, or radials cut for each band) this one antenna will cover all the bands you mentioned. Unless you have the Ft-100 or the FT-847 you would have to use one of the controller boxes available (ad in back of QST). Another idea is folded dipoles run along you balcony for the bands you want.
I personally would go with the loop-tuner combo with separate verticals or vertical dipoles built on to the inside of balcony for UHF & VHF. Also the best chances to reduce RFI to your neighbors would be to get the RF outside. For more ideas check out my site at http://www.geocities.com/n0hc/.

Good Luck Cliff N0HC
"Don Faulkner" <dfaulkner@pobox.com> wrote in message
news:3a1c9874@inout.beachnet.com...
> Hello, all.
>
> I've recently moved to the big city (LA) from Arkansas, and I'm trying to
> get my HF station back on the air. My most immediate problem is finding a
> good antenna solution.
>
> I live on the 2nd floor of a 3 floor building. As you can imagine,
> getting any antenna up is going to be a challenge. I do have a balcony
> that I could use, but the railing is wood, so I expect I'll have to find
> a good ground. Of course, I'll have to do that indoors as well.
>
> I'm considering a 1/4-wave end-fed wire (for 40M) with a balancing
> 1/4-wave ground. My initial thought was to run the driven element in a
> loop around the ceiling of my spare bedroom, and treat the ground element
> similarly around the baseboard. With this setup, though, I'm concerned
> about the amount of RF exposure in the bedroom, let alone the rest of the
> unit. I know I'm going to have to keep the power down, and that of course
> limits my abilities.
>
> I'm sure there are other folks in similar situations. Can anyone offer me
> some other options that are perhaps a little safer?
>
> What about RFI and neighbors? Is there anything I can do to minimize the
> effects of my operating (primarily 40M, 10M, 6M, 2M, .70M)?

>
> --
> Don Faulkner, KB5WPM |
> | "All that is gold does not glitter."
> (This space unintentionally | "not all those who wander are lost."
> left blank) | --J.R.R. Tolkien

3034. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 05:16:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vktk9cfi6@bashir.peak.org>
Source record: 175853

Cecil <Cecil.A.Moore@ieee.org> wrote:

: You should tune for the maximum difference between forward power and
: reflected power. The difference between forward power and reflected
: power is what is going into the antenna. On my IC-706, the maximum
: difference between forward power and reflected power seems to be
: when reflected power is zero.

This certainly provides the best coupling of power into the antenna.
It does not guarantee that the antenna is resonant (and thus radiating
at peak efficiency).

--
Bill Nelson (billn@peak.org)

3035. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 05:18:29 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vktn5cfi7@bashir.peak.org>
Source record: 175852

Rick Littlefield <k1bqt@aol.com> wrote:
: Cecil--

: By saying "what's going on with the antenna", are you suggesting that maximum
: difference between forward and reflected power results in maximum field
: strength?

I hope not, because it doesn't.

In my opinion, the proper use of a VSWR meter is to get matching "close".
A signal strength meter in the far field is then used to peak radiated
power.

--
Bill Nelson (billn@peak.org)

3036. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 05:37:13 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A1DFE81.3B6BA165@att.net>
Source record: 175851

I prefer to tune with and to monitor reflected power. My MFJ 989C has a cross-pointer meter which makes it easy to tune by observing the reflected power meter reading. I seldom glance at the "forward" power meter reading except to verify that the transmitter is putting out its maximum if so adjusted. I know that if I adjust the tuner for minimum reflected power, the "forward" power is maximized, and that is the condition we all seek. I don't think that I have ever looked close enough at the meter scale to see what SWR readings are involved. This is a derived reading that may be of academic interest but has little to do with how I adjust the tuner. Neatest thing since sliced bread: dual-pointer meter.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Reg Edwards wrote:
>
> Cecil said -
> > If the SWR meter reads forward power and reflected power
> then
> > the difference in those two readings is what makes it into
> the
> > antenna (neglecting feedline losses).
> ==========
> Cecil, wouldn't you rather have a meter which just indicated
> radiated power - everybody else does. Much more
> interesting. And no need to make two measurements followed
> by mental arithmetic. Down with SWR meters - a parameter
> in which nobody is interested. The very name should be
> investigated by local authority Trading Standards officers.

3037. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 07:05:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A1E134B.10E2@wt.net>
Source record: 175854

Cecil wrote:

>
> I know a ham who tunes for maximum field strength. When I ask him if
> that's near field or far field he says he doesn't know. When I ask him
> if he's measuring horizontal radiation or vertical radiation, he says
> he doesn't know. When I ask him what is the take-off angle of the radiation
> measured by his FSM, he says he doesn't know. That seems like a lot of
> unknowns to me.
> --
> http://www.mindspring.com/~w6rca

Maybe so, but I still think can be valid on some antennas like mobile's.
I've noticed pruning loading coils and testing with antennas, that the
maximum field strength is just a bit off from where the antenna is
resonant. Overall, don't think it amounts to a whole lot, but I seemed
to a see 10-20 kc difference in the max field strength point of tuning,
and the point of least least SWR. Of course in the real world I'm not
really that nit picky as even on 75m, I have 40-50 kc bandwidth 2:1/2:1
swr. Double that on 40m. Just something I noticed when making them.
Normally I wouldn't waste any time with FS measurements here at home. At
least HF stuff anyway. MK

http://web.wt.net/~nm5k

3038. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 17:24:17 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1e98a1.62741076@news.akorn.net>
Source record: 175787

On Thu, 23 Nov 2000 16:17:41 +0100, "R.Wilhelm"
<nhbiwilh@rrzn-user.uni-hannover.de> wrote:

>On Wed, 22 Nov 2000, Tom W8JI wrote:

I wrote:
>> As we all know, electric fields and magnetic fields both must occur in
>> EM radition. If one is zero, the other is also zero.

You responded:
>There is no doubt about this, I did not tell different (hope one could not
>misinterpret me in this direction).

Then it is settled. Since BOTH fields always accompany any radiation,
the induction field respoonse of the antenna can make no difference in
sorting out noise from signals if they are in the farfield.

It is a popular but incorrect myth that loops are quieter than
antennas that have a high electric induction field response.

>Nevertheless there are 'antennas' which mainly respond to the magentic
>field component.

That's true, inside the induction field area. But even inside the
farfield distance the field response varies.

A small loop that responds more to the magnetic induction field very
near the loop (within 1/10 wl or so for a very small loop) actually
respoonds more to the electric field at a distance somewhere between
1/10wl or so out and the farfield distance.

That is even a correction factor that must be applied to small loops
when determining the electric field at small distances from the loop.

If the electric field didn't increase with distance, the loop could
not respond to EM radiation.

>> Any antenna, even the small loop antenna, has all fields. It's just
>> that very close to the antenna the magnetic induction field dominates
>> (unless you move up near the capacitor, where the two ends have a
>> large potential difference and the electric induction field will be
>> quite large in a small area) the radiation and the electric induction
>> field.=20
>
>Does that mean that the 'magnetic' loops used for measuring the magentic
>near field component are useless ? There was a series about constructing
>a near field probe in german cq DL magazine last year mentioning and
>testing the H/E relation in TEM chamber simulating a plane wave.=20

I never said they were "useless". Inn the nearfield very near the
antenna small loops have a very low field impedance. It is very low,
but it isn't zero ohms.

Immediately as we move away from the antenna the field impedance
increases. It actually is higher than 377 ohms at some distances
between 1/10 and 1 wl away from the antenna.

>> While the loop has a low impedance, remember with every time-varying
>> magnetic field there is a time varying electric field. At any
>> distance, they are essentially equal.

>This only holds for the far field component.

You may be able then to make the CFA antenna work!!

Please descibe a system that I can build that has only a magnetic
field, and produces a time-varying field. Remember, it can have NO
electric field at any point in space.

>=20
>> That's why small loops can be calibrated to read electrical field
>> strength. They read it accurately as long as the loop is some distance
>> from the source.=20
>The calibration of the magnetic probe to read electrical field strength
>relies on the assumption H=3DE/377 Ohms, which is true for the plane wave
>aka far field. It does not work in the near field.

It does in some cases if you correct for the field impedance of the
loop, which is HIGHER than the field impedance of a short dipole at
modest distances from the loop and lower than a short dipole near the
loop.

>> The shield on a small loop isn't a shield at all, it simply is the
>> actual antenna. All the shield does at the operating frequency of the
>> loop is allow us to improve the balance of the loop if we ground the
>> shield properly, at the electrical ceneter of the shield.
>>=20
>> Ground the shield off center, or at one end, and you can actually
>> INCREASE the antenna effect of the loop! Some articles show the shield
>> grounded at one end, and the user would probably be better off with no
>> shield at all than the improperly configured shield.
>
>I agree.

OK, we agree the shield does nothing except affect balance of the
system. We'd better agree, because that is how it works.

>> The only thing that surprises me is why people think noise or unwanted
>> signals are somehow always "electric" and good signals are always
>> "magnetic". Perhaps it is because we call the noise "electrical
>> interference".=20

>For the far field it makes no differences. But if your noise source is
>using an 'electric' antenna and you are close to this antenna you will

>mainly see the electric near field component:

Right. That is what I said. I said it is the luck of the draw.

If you are in the near region of the noise source, the dominant induction field can be anything!! It can be electric or magnetic dominant.

In all likelihood, if the noise is radiated from power lines or other large long conductors, it is magnetic field dominant near the source although in every single case (unless you can tell me how to generate a time-varying magnetic field without having a time-varying electric field) both foelds will be present.

It is an absolute myth that noise is an "electric field" and that shielding a loop stops it from responding to noise. If the loop is properly balanced and constructed, shielding the loop has no effect at all on response except to add a little bit of additional loss.

>Of course this depends on
>where you are relative to the transmitting antenna. Put a ten meter dipole
>5 metres in the air and measure the electric and magnetic field strength
>just below one end. According to what people who did it told me you will
>be surprised that the equivalence between H and E known from the far field
>does not hold. The E field is 'larger' (although we compare different
>units of measure here). This means you can not measure the magentic field
>and calculate the electric field, you have to measure both.

In the near field, in many cases, that is true.

>If you are right and the fields are always equivalent, which probe do I
>have to believe in this case, the electric or the magnetic one ?

Did I say equivalent? Please show me where I said that. I can not find it.

>> I can hear Europeans quite nicely on a one foot clip lead sitting in
>> my room on 160 meters and 80 meters. If I use a small loop in the
>> room, my computer wipes out the signals. I'd bet in the next room, the
>> effect is entirely different.
>>
>Is it the computer itself or the magentic field produced by the monitor ?

Why does it matter? Either one could produce either field in dominace close to the source and which field is greater would vary with distance and location.

With that in mind, why on earth how could anyone say a loop or an electric field probe would be quieter in random applications? It is a matter of chance which one is less responsive.

If you are that close to the noise, you can not say which one will be better without trying both.

It is an absolute myth that loops are quieter for reasonably distant noise, and it is a matter of luck if they are quieter for nearfield noise.

The only definite advantage of a loop is you can null groundwave or direct wave noise sources easier than with a vertical. Rotating the loop can place a null in the direction of a single groundwave noise source, but you can't move the null of a vertical around without using a second vertical.

>By the way there was another article about a broadband active antenna
>using two magentic loops perpindicular to each other. I know four people
>who built this antenna and say they have better S/N than with active
>electric antennas (although the signal difference is something like 20 dB
>on a spectrum analyzer). Two of the four comparison antennas are produced
>by Rohde und Schwarz company and have IP3 of 30 dBm and NF of 5 dB.
>The magnetic antenna's active part has similar characteristics (the NF is
>around 7 dB and IP3 maybe little bit higher

The only thing the two loops that are very close together and at right angles allows you to do is null one "line" of response cenetered on one angle. You can get the same effect by rotating one loop.

Because the null is very narrow, the S/N only improves when most of the noise is from a single stable direction. It won't do anything for distant noise, or propagated noise, that varies in direction or angle.

In order to improve S/N ratio for noises like thunderstorms and general terrestrial and galactic (where it can penetrate the ionosphere) noise sources, the null has to be very wide. That can only occur when the antenna array is spatially large.

The biggest single increase in S/N that mosty people report, when the loop isn't used to null a local noise source, is because the loop produces less signal. The receiver isn't "banged" into saturation on sharp noise pulses, and so they are not lengthened out. The AGC is also generally operated in a non-linear part of its response at low signal levels, giving the effect of more expanded dynamics. The S meter become more non-linear, and 1 dB often is a whole S unit near the bottom of the S scale.

If I look at my S meters and measure S/N at 10 dB over nine, it might look like an immeasurable difference. If I attenuate the signals to S 1, the difference on the meter (and by ear) seems larger. That's because my receivers AGC starts to fall out of range, and my S meters are about 1 or 2 dB per S unit at the low end of the scale. Virtually all amateur receivers behave this way.

You can do the same thing with an attenuator. I often, on very noisy nights, open up the selectivity and through a large attenuator in line. It has the effect of making the S/N difference large to my ears on the receivers output.

73 Tom

3039. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 17:48:14 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1ea433.65704055@news.akorn.net>
Source record: 175788

On Thu, 23 Nov 2000 09:14:32 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>Roy:
>In the average Ham/SWL application, you are probably correct. However, in
>locations where the runs are long, and all kinds of other types of cables
>are in the same cable trays, it really makes a difference.

I have runs of coax that are laid out almost a mile long. They are
single shielded cables.

When I unterminate the far ends, I can't hear any signals on a
receiver that goes to -130 dBm.

If I just connect a small one foot wire to the far end, signals
appear. Even on 160 meters or the BC band.

This tells me that a mile or so of single shielded cable has less
"radiation" than a greatly mismatched antenna 1/500th of a wavelength
long.

>measurements were performed on 100 foot runs of RG-58/U vs. RG-223/U several
>years ago, and if my filing system were organized, I could quote you the
>numbers, but there was a easily measurable difference.

You may have had defective cables or connections, or something was
unbalanced and causing common mode response.

I have all my receiving amplfiers right in the house, and very very
long ruins of coax. My own 1500 watt transmitter is only 20-40 dB out
of noise floor on a long run of cable going right past my transmitting
antenna.

I've never measured a difference on repeaters, or on receiving
systems. As a matter of fact I REMOVED double and triple shielded
cable from an apartment building that was next to a 50 kW FM and 10 kW
AM transmitter, and replaced it with propely installed single shield
cable and cured the RFI problems.

How you connect the cable is much more important than the number of
shield.

>receiver input. A few feet of RG-58 running in the vicinity of some of the
>poorer computers will also produce measurable (and hearable) signals in a HF
>receiver.

My station has up to three computers running, as well as two 30
ampere switching power supplies.

I use single shield subminature cables for internal wiring to switches, receivers and phasing boxes. I use standard foil shielded CATV cable, which has basically just a foil for a shield (a very sparse thin aluminum braid allows a connection to the foil at the connectors) for the lines from the grounding panel at the entrance to the amplifier board..

Unless I have a bad connector or connection, I can not hear anything from anything in my shack. My noise floor doesn't even move the S meters during the daytime.

Of course if I get a bad connection, the noise from the switching supplies and computer is well over S-9.

I also tie-wrapped two poorly shielded RG-8 type cables together for about 20 or 30 feet some months ago, and applied a few thousand watts to one of the cables feeding a dummy load. The cross-talk between those very cheap cables was more than 80 or 100 dB down at HF.

I have to agree with Roy. Unless you have a very very well shielded receiver and strong external fields you'll never see the difference as long as the cables are properly installed.

I remember the pains I went through to get double shielded coax for repeaters in the 60's because the books told me I needed it. What I learned later was it made no difference at all in signal at the receiver from the transmitter. The cavities leaked far more signal through than ever came from the cable, even with the transmitter and receiver cable routed in parallel for a wavelength or so.

73 Tom

3040. Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 17:52:16 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <kVxT5.321315$4d.39491377@news02.optonline.net>
Source record: 175789

Hi,

A couple of simple questions:

If you put an antenna on the side of large hill what is the effect on the far field pattern of the antenna ?

How big (in wavelengths) does the hill need to be in order to effect the pattern ?

An example:

The antenna is a simple dipole 30 feet up in the air. The antenna is cut to a half wave at 20 meters. The hill slopes about 6 degrees (10 foot drop for 100 foot run). The antenna is at least 800 feet from the "edge" of the hill in any direction.

Can you simply take the standard text book dipole pattern and tip it 6 degrees to get the pattern of this antenna ?

Thanks!

Bob
KB8TQ

3041. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 17:56:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1ea9e2.67158950@news.akorn.net>
Source record: 175790

On Fri, 24 Nov 2000 02:46:08 GMT, mdemeo@frontiernet.net (W2MDM)
wrote:

>I have purchased an Alinco DX70 TH HF radio and would like to use it in a base
>configuration. I am leaning towards an all band vertical antenna due to space
>considerations and am a little confused as to what to use. I would like to cover 10
>meters thru 80 meters. Which antenna is best? The Hustler model says it needs radials if
>mounted elevated and yet I do not see them listed in the description. Also, what is a
>counterpoise? I see some antennas need one.
>
>Please excuse my dumb questions. I am new to HF.

For a fixed or home station (most old grumpy HF operators cringe when
they hear it called a "base station", because that came from CB) the
best antenna is one that uses radials assuming you install a good
radial system.

No-ground or small counterpoise antennas, while they look good in ads,
will be very poor performers on the lower bands. Up closer to ten
meters, where the small counterpoises become electrically larger, many
of the "no ground" verticals work quite well.

Remember that any vertical antenna mounted near earth (in terms of the
wavelength), like say 1/8 wl or less above earth, needs a large
radiual system with many radials to be really effective. But if you do
install the radials, that antenna will be much more effective than a
no-radial vertical.

73 Tom

3042. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 18:34:33 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1EB4B9.28F5257A@oio.net>
Source record: 175791

Tom,
Any antenna will benifit from a good ground system under
it, not just verticals. Most of us who use the lower HF
bands probably don't have the antenna at a 1/4 wave above
ground, much less higher, and antennas like these will also
benifit from a 'better' ground under it.
'Doc

3043. Re: WTT Isotron 80M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 18:35:22 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1EB4EA.2B364FCF@oio.net>
Source record: 175792

W8IRQ wrote:
>
> I would like to trade a Isotron 80m antenna for a 40m Isotron. Might even
> consider buying one if price is right. Nick, W8IRQ 330-225-7499

Would you swap for an R-7??
'Doc

3044. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 19:11:59 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A1EBD7F.8479F399@oio.net>
Source record: 175793

Bob,
Until the 'slant' of the antenna is about 25-35* relative
to ground, the radiation pattern doesn't change all that
much. There is some 'slewing', but I doubt if you'd ever
be able to tell it. At somewhere around 25-35* the pattern
starts to be directional.
-'Doc

3045. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 20:09:38 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011242039540.4361-100000@unics>
Source record: 175794

Hi Tom,

there seem to be two points involved. As all of us do agree there is no time dependent H without a time dependent E.
I made some numerical simulations using a mininec based program.
I modelled a short dipole and a 2 x 2 square metres loop. The loop is shortened and I use the current in one segment as a measure for the coupling.
Two configs were checked.

#1 loop is at 'same height' as feeding point of dipole so that whole config is symmetric
#2 loop is offset by 5 metres to one end of dipole.

the loop and the dipole form one plane in both configs.

config 1:
distance current H E
10 0.05 9.5 6.1
6 0.11 7.5 8.6
4 0.2 5.5 9.8
2 0.52 2.9 10.88

config 2:
10 0.31 18.6 10.73
8 0.43 19 14.4
6 0.64 18.2 19.3
4 1.1 15 25.6
2 2.64 9 32

I think one can see from the data:
1. The current neither represents the electric nor the magnetic field alone although it's closer to the electric field
2. while both fields are necessary they are not equivalent
3. The magnetic field behaves totally different from what I expected (?)

It seems that a real world, non infinitesimal loop shows a response to both fields. The current distribution on ths loop is far from homogenous due to the presense of the (inhomoegenous) electric field.

I don't know what would change with a tuned loop and who a short electrical antenna would behave.

Seems the response of the magloop is a mixture of magnetic and electric field.

Vy 73

Ralf

DL 6 OAP
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

==========

3046. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 20:12:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1ECBC3.16C67CE8@IEEE.org>
Source record: 175795

Bob Camp wrote:
> If you put an antenna on the side of large hill what is the effect on
> the far field pattern of the antenna ?

Depending on the extent of the slope, it can be appreciable. My
terrain slants down for miles toward AZ/CA and the performance
in the direction of that slope is noticeable.
--
http://www.mindspring.com/~w6rca

3047. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 20:43:18 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A1ED2E6.8070203@hiwaay.net>
Source record: 175796

Hey Cecil- if the performance is 'noticeable'- in what way is it
noticeable, good, bad, ??
Bill-W4BSG

Cecil wrote:

> Bob Camp wrote:
>
>> If you put an antenna on the side of large hill what is the effect on
>> the far field pattern of the antenna ?
>
>
> Depending on the extent of the slope, it can be appreciable. My
> terrain slants down for miles toward AZ/CA and the performance
> in the direction of that slope is noticeable.

3048. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 22:05:15 UTC
From: k1bqt@aol.com
Message-ID: <20001124170515.12001.00001254@ng-ci1.aol.com>
Source record: 175797

>I would like to cover 10 meters thru 80 meters.<

As a happy DX-70 owner, I hope you have as much fun with yours! I'm not sure there is any one good antenna that will "do it all" over the range of that radio. Many people find a G5RV and a small tuner the cheapest and most effective solution "for openers". Might not want to spend a lot of money until you discover where your real preferences lay! Then, you can specialize your antenna system and get performance only on the bands where you really want it.

73

Rick

3049. Nathan Cohen changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 22:29:01 UTC
From: w1rfi@aol.com
Message-ID: <20001124172901.11581.00000078@ng-fm1.aol.com>
Source record: 175798

Chip,

Your changing thread titles reminds me of my wife's two year old grandson. When he doesn't get his way, he pouts and does whatever else he can to be disruptive.

This is as bad as "this thread is closed." I really do believe that your sole purpose for participating in this newsgroup is to be disruptive.

73,
Ed Hare, W1RFI

>Subject: Re: Ed Hare another thread gone wrong
>From: fractenna@aol.com (Fractenna)
>Date: 11/21/00 7:35 PM Eastern Standard Time
>Message-id: <20001121193532.06808.00000812@ng-mj1.aol.com>
>
>>From: fractenna@aol.com (Fractenna)
>>
>>>I should not be part--PERSONALLY-- of ANY conversations here.
>>
>>Perhaps it would convince people if you never used the word "I" in your
>>posts.
>>:-)
>>
>>73,
>>Ed Hare, W1RFI
>>
>>
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>

3050. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 22:33:36 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <41CT5.234242$g6.107763439@news2.rdc2.tx.home.com>
Source record: 175799

Take a look at the GAP antennas....

www.gapantenna.com

Okay, I must confess that I'm not a GAP user just yet. Indeed, right now I'm pretty happy with my 1/4 wave, 20m ground plane mounted on the roof (up 28 ft.) with four radials. (By the way, the higher up the base of the antenna, the fewer radials needed.)

However, I've been doing some research on multiband verticals and find the GAP very different and interesting. I'd love to hear from others with their thoughts.

Pete, KA0TZK

3051. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 23:03:02 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A1EF3A6.916F40D7@netscape.net>
Source record: 175800

Pete Holden wrote:
>
> .... (By the way, the higher up the base of the
> antenna, the fewer radials needed.)

Could/would you explain, please?

--
Jim Fuller

3052. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 23:38:53 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1ef7cc.87107889@news.akorn.net>
Source record: 175801

On Fri, 24 Nov 2000 21:09:38 +0100, "R.Wilhelm"
<nhbiwilh@rrzn-user.uni-hannover.de> wrote:

>Hi Tom,
>
>there seem to be two points involved. As all of us do agree there is no
>time dependent H without a time dependent E.
>I made some numerical simulations using a mininec based program.
>I modelled a short dipole and a 2 x 2 square metres loop. The loop is
>shortened and I use the current in one segment as a measure for the
>coupling.
SNIP
>I think one can see from the data:
>1. The current neither represents the electric nor the magnetic field
>alone although it's closer to the electric field
>2. while both fields are necessary they are not equivalent=09=09=09=09=09 =
> =09=09
>3. The magnetic field behaves totally different from what I expected (?)
>
>It seems that a real world, non infinitesimal loop shows a response to
>both fields. The current distribution on ths loop is far from homogenous
>due to the presense of the (inhomoegenous) electric field.
>
>I don't know what would change with a tuned loop and who a short
>electrical antenna would behave.=20
>
>Seems the response of the magloop is a mixture of magnetic and electric
>field.

Yes indeed Ralf, it is always a mixture at any distance in any
antenna we can build!

The shield doesn't change that at all, except as it changes balance of
antenna.

So now you see the truth under the popular myth. We don't know the
field impedance of the noise, we most likely have no idea what it is
unless it is the far field, and in that case it would make no
difference what antenna we used. Only a response null in the direction
of the noise compared to the response to the desired signal would
reduce the noise.

A magnetic loop isn't "magnetic only", it can't possibly be if it
actually couples to space,

As we move out from the antenna, the field impedance changes. It might be low at the antenna but in a small distance it is actually higher than far field , and with a small dipole voltage probe the opposite occurs!

All the people saying closed loops are quieter because they are "magnetic" loops are just "repeating things" that they hear, and those things are not correct.

So what this means is you just have to try an antenna an see if it helps. If the noise is induction field coupled, certainly the "mode" of the antenna can make a difference. The actual effect that makes an antenna quieter in most cases is simply the directivity, unless the noise is being generated in or very near the antenna. And if the noise is being created in or very near the antenna, we really don't know whether a loop or a probe will be quieter until we try it.

And the shield does little except change balance.

Neat, isn't it? This loop-thing has to be one of the most entrenched myths circulating.

73 Tom

3053. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 23:41:43 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1efbfe.88182604@news.akorn.net>
Source record: 175802

On Fri, 24 Nov 2000 22:33:36 GMT, "Pete Holden" <peholden@home.com>
wrote:

>Take a look at the GAP antennas....
>
>www.gapantenna.com

Better yet, take a listen to them on the lower bands....if you can
hear them in the background noise.

They work OK on some higher bands, but they really stink on the lower
bands. A modest mobile antenna can actually be better on the low
bands.

73 Tom

3054. Re: Nathan Cohen changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-24 23:54:19 UTC
From: 2w8ji@contesting.com
Message-ID: <3a1efca3.88346690@news.akorn.net>
Source record: 175803

On 24 Nov 2000 22:29:01 GMT, w1rfi@aol.com (W1RFI) wrote:

>Chip,
>
>Your changing thread titles reminds me of my wife's two year old grandson.
>When he doesn't get his way, he pouts and does whatever else he can to be
>disruptive.
>
>This is as bad as "this thread is closed." I really do believe that your sole
>purpose for participating in this newsgroup is to be disruptive.
>
>73,
>Ed Hare, W1RFI

Hi Ed,

I don't think responding to him will change anything or make any
difference, no matter how right you are.

73 Tom

3055. Re: dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Kirby Cave <kirbycave@starpower.net>
Message-ID: <8voc3d$1lk$1@bob.news.rcn.net>
Source record: 175669

many thanks to Jim, Dale and Martin for their suggestions. i'm not married to that balun, mostly
it represented a convenient, weatherproof center insulator. think i'll rig up a couple of capacitance
hats today and see what happens, otherwise install a plain center insulator and remove the balun.

trying to avoid a 15 meter trap cause eventually i planned to add 40 meter coax traps and additional
wire to the ends for 80. thought 2 traps per leg would cause too much sag.

btw, rig is ten tec triton iv. now the days when i would tune my dx100 into a light bulb, and didn't
know (or care) what the swr was, look nice and uncomplicated...

3056. Re: Thread changes

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001125080718.28399.00001525@ng-cr1.aol.com>
Source record: 175670

>From: Bill Aycock baycock@hiwaay.net

>Why do you jerks HAVE to keep bringing this up? the NG has been peacful
>and quite for a week, and you guys just will not let it alone.

Do you think that calling people jerks adds to the peace?

73,
Ed, W1RFI

3057. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <TyQT5.324769$4d.40270259@news02.optonline.net>
Source record: 175671

Doc,

Since this obviously isn't a simple situation is there a way to model
what's going on ?

Thanks!

Bob

"'Doc" <w5lz@oio.net> wrote in message
news:3A1EBD7F.8479F399@oio.net...
>
>
> Bob,
> Until the 'slant' of the antenna is about 25-35* relative
> to ground, the radiation pattern doesn't change all that
> much. There is some 'slewing', but I doubt if you'd ever
> be able to tell it. At somewhere around 25-35* the pattern
> starts to be directional.
> -'Doc

3058. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <xAQT5.324770$4d.40271323@news02.optonline.net>
Source record: 175672

Cecil,

In my case the slope is > 10 wavelengths in all directions from the
antenna.

So, is 10 wavelengths enough to have an effect ?

Thanks!

Bob

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A1ECBC3.16C67CE8@IEEE.org...
> Bob Camp wrote:
> > If you put an antenna on the side of large hill what is the effect
on
> > the far field pattern of the antenna ?
>
> Depending on the extent of the slope, it can be appreciable. My
> terrain slants down for miles toward AZ/CA and the performance
> in the direction of that slope is noticeable.
> --
> http://www.mindspring.com/~w6rca

3059. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <YBQT5.324772$4d.40272252@news02.optonline.net>
Source record: 175673

Bill,

My situation is fairly similar to yours. I wonder if there is a way to model all this stuff .....

Bob

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3A1F1823.1040009@hiwaay.net...
> Thanks, Cecil. I have a reason to ask. My QTH is on what is locally
> called a 'Mountain", but is really the southern tip of the Cumberland
> plateau. This is old seabed, eroded, so the hills are flat on top, with
> valleys cutting into the table. In my case, the drop off to my west is
> about 300 ft away, and to the east is about 400 ft. This tapers to the
> south, so that there is a point about 1250 ft away. It is shaped like a
> triangle, with the edges dropping off sharply, about 300 ft in the first
> 1/8 mile, and almost 1000 ft to the valley floor, which is near the
> level of the Tennessee river. The river is at 600 ft above Sea level,
> and I am at 1600 ft.
>
> THe whole terrain is broken up into valleys, so that, despite an 800 ft
> drop in between, I can see other points to the east and west, about a
> mile away, that are at my altitude. To the south, the next ridge is over
> 5 miles away. In winter, I can see the river, to the SE.
>
> I am pretty isolated (nearest neighbor is 1/4 mile north) and,
> electrically, pretty quite. I have thought about getting a Terrain
> analysis, but don't know if it is worth it, except for curiosity
> satisfaction.
>
> Do you (or anyone else) have an opinion about this kind of situation?
>
> Bill-W4BSG
>

> Cecil wrote:
>
> > Bill Aycock wrote:
> >
> >> Hey Cecil- if the performance is 'noticeable'- in what way is it
> >> noticeable, good, bad, ??
> >
> >
> > Performance in the direction of the downslope is noticeably better
> > than any other direction.
>
>
>

3060. Re: GPS QUESTION ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Carl <cll@ix.netcom.com>
Message-ID: <3A1FDAA8.4A03@ix.netcom.com>
Source record: 175674

Lloyd wrote:
>
>
> Here is my GPS question...

(I am posting this reply only to the newsgroup I read the original question in, not to the other 10 or so in the original distribution.)

You might look at sci.geo.satellite-nav, a newgroup dedicated to GPS.

Carl

3061. Re Dual Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: "Mr. Arthur Garabedian" <westernmobiletel@worldnet.att.net>
Message-ID: <3A1FB2F3.18DFB5D2@worldnet.att.net>
Source record: 175675

Hello, Can someone tell me how to connect 2 VHF mobile antennas and tune them for mobile use, one in the front and one in the back of the car using the same transmitter at the same time?
Very Best Regards, Arthur . . .

3062. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <oomov8.40p.ln@mail.specsol.com>
Source record: 175676

Gilbert Mouget <gilbert.mouget@waika9.com> wrote:

> Fri, 24 Nov 2000 20:07:15 -0600 dans l'article
> <8vn6tudoo1@nntp9.atl.mindspring.net>
> l'honorable Unclaimed Mysteries <k4doh@mindspring.com> escrivit :

>><gratuitous post>

> Last post on my server :

> Date: 22 Nov 2000 12:26:39 GMT
> From: fractenna@aol.com (Fractenna)
> Newsgroups: rec.radio.amateur.antenna

> I am afraid he may be sick.

> --
> Gilbert.

Other possibilities exist:

He may have come to his senses. Not terribly likely, but possible.

He may have gone to a real lawyer and was told he first has to stop being the provoker before he has a chance in hell of suing anybody.

AOL may have told him to knock off the posts with the changed subject line and no new content. This wouldn't explain the lack of new diatribes though.

He may have gotten a real job and no longer has the time to play usenet.

He may just be on vacation.

In any case, I think it would be best to leave sleeping dogs alone.

Jim Pennino

3063. True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <qtRT5.2270$nh5.218077@newsread1.prod.itd.earthlink.net>
Source record: 175677
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

About once a month I post the availability of this font that I had
modified by a commercial font designer. It is a true slashed-zero Andale
Mono fixed-width font extremely suitable for DXBase 2000 / 2001 and really
any logging software. It's advantages are two-fold

1. It allows for easy discernment between O's and 0's with the slashed zero

2. Because it is a fixed width font it provides perfectly aligned columns in
the DX cluster windows.

Available as a 47K zip file download with installation instructions.
Last month there were over 230 downloads of this font.
It is on the Software Download Page of my site directly beneath the text
that describes DXBase 2001. Enjoy.....it's FREE.
--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages

Downloadable IOTA List
Live DX Cluster Telnet Links
Online DX Logbook
http://www.ab7sl.com

3064. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A1FF9F3.A374EEC9@sccoast.net>
Source record: 175678
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Charles Johnston wrote:
>
> About once a month I post the availability
> of this font that I had modified by a commercial
> font designer.

Doesn't almost every font have a slashed zero (ï¿½) as one of the characters? I just checked a few of my fonts and all of the ones I checked did.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3065. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001125124909.11376.00001242@ng-df1.aol.com>
Source record: 175679

>Gilbert Mouget <gilbert.mouget@waika9.com> wrote:
>
>> Fri, 24 Nov 2000 20:07:15 -0600 dans l'article
>> <8vn6tudoo1@nntp9.atl.mindspring.net>
>> l'honorable Unclaimed Mysteries <k4doh@mindspring.com> escrivit :
>
>>><gratuitous post>
>
>> Last post on my server :
>
>> Date: 22 Nov 2000 12:26:39 GMT
>> From: fractenna@aol.com (Fractenna)
>> Newsgroups: rec.radio.amateur.antenna
>
>> I am afraid he may be sick.
>
>> --
>> Gilbert.
>
>Other possibilities exist:
>
>He may have come to his senses. Not terribly likely, but possible.
>
>He may have gone to a real lawyer and was told he first has to stop being the
>
>provoker before he has a chance in hell of suing anybody.
>
>AOL may have told him to knock off the posts with the changed subject
>line and no new content. This wouldn't explain the lack of new diatribes
>though.
>
>He may have gotten a real job and no longer has the time to play usenet.
>
>He may just be on vacation.
>
>In any case, I think it would be best to leave sleeping dogs alone.
>
>Jim Pennino
>

I think it would be best to keep your personal abuse against others to
yourself.

NC

3066. Re: Ed Hare changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001125124946.11376.00001243@ng-df1.aol.com>
Source record: 175680

```
>Subject: Nathan Cohen changes thread titles. Re: Ed Hare another thread gone
>wrong
>From: w1rfi@aol.com (W1RFI)
>Date: 11/24/00 5:29 PM Eastern Standard Time
>Message-id: <20001124172901.11581.00000078@ng-fm1.aol.com>
>
>Chip,
>
>Your changing thread titles reminds me of my wife's two year old grandson.
>When he doesn't get his way, he pouts and does whatever else he can to be
>disruptive.
>
>This is as bad as "this thread is closed." I really do believe that your
>sole
>purpose for participating in this newsgroup is to be disruptive.
>
>73,
>Ed Hare, W1RFI
>
>
>>Subject: Re: Ed Hare another thread gone wrong
>>From: fractenna@aol.com (Fractenna)
>>Date: 11/21/00 7:35 PM Eastern Standard Time
>>Message-id: <20001121193532.06808.00000812@ng-mj1.aol.com>
>>
>>>From: fractenna@aol.com (Fractenna)
>>>
>>>>I should not be part--PERSONALLY-- of ANY conversations here.
>>>
>>>Perhaps it would convince people if you never used the word "I" in your
>>>posts.
>>>:-)
>>>
>>>73,
>>>Ed Hare, W1RFI
>>>
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3067. Re: Charles Thomas Rauch changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001125125027.11376.00001244@ng-df1.aol.com>
Source record: 175681

>Subject: Re: Nathan Cohen changes thread titles. Re: Ed Hare another thread
>gone wrong
>From: 2w8ji@contesting.com (Tom W8JI)
>Date: 11/24/00 6:54 PM Eastern Standard Time
>Message-id: <3a1efca3.88346690@news.akorn.net>
>
>On 24 Nov 2000 22:29:01 GMT, w1rfi@aol.com (W1RFI) wrote:
>
>>Chip,
>>
>>Your changing thread titles reminds me of my wife's two year old grandson.
>>When he doesn't get his way, he pouts and does whatever else he can to be
>>disruptive.
>>
>>This is as bad as "this thread is closed." I really do believe that your
>sole
>>purpose for participating in this newsgroup is to be disruptive.
>>
>>73,
>>Ed Hare, W1RFI
>
>Hi Ed,
>
>I don't think responding to him will change anything or make any
>difference, no matter how right you are.
>
>73 Tom
>

3068. Re: Harry Harms changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001125125113.11376.00001245@ng-df1.aol.com>
Source record: 175682

```
>Subject: Re: Nathan Cohen changes thread titles. Re: Ed Hare another thread
>gone wrong
>From: "Harry Harms" hrbe@dingoblue.net.au
>Date: 11/24/00 8:29 PM Eastern Standard Time
>Message-id: <3a1f1509$0$18135$7f31c96c@news01.syd.optusnet.com.au>
>
>Group,
>I have evoked the "Fractenna" filter, so I never get any of his churlish
>posts or responses, and if we all did it, he would vanish...
>Harry
>"N8wwm" <n8wwm@aol.com> wrote in message
>news:20001124200612.09164.00001054@ng-cf1.aol.com...
>> I think this clown Chip is just an asshole, plain and simple. He obviously
>has
>> severe mental problems.
>>
>> He reminds me of this guy we have here
>> in Toledo in a local chat room. This guy will get into a discussion about
>> something, I mean just anything at all, and when it comes to a point where
>he
>> might ought to say "ya know you may be right" he instead says "What is
>your
>> education level?"
>>
>> Everyone ignores this pompous 47 year old baby now except newbies to our
>chat
>> room...
>>
>> And additional laugh for ya...his AOL screen name is WoWwutaGuy...
>> I think he is Chip's lost brother.
```

3069. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1FFDAA.B29626D9@IEEE.org>
Source record: 175683

Bob Camp wrote:
> Since this obviously isn't a simple situation is there a way to model
> what's going on ?

It seems somewhat obvious to me that a far-ranging ground slope,
extending far into the far-field, would lower the take-off angle
of the maximum gain point referenced to level ground in the
direction of the down slope and raise the take-off angle in the
direction of the up slope. If the slope extends far into the far
field, it's like taking a level ground plot of the radiation
pattern and tilting the azimuth.
--
http://www.mindspring.com/~w6rca

3070. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2000BE.CC030D00@IEEE.org>
Source record: 175684
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dwight Stewart wrote:
> Doesn't almost every font have a slashed zero (ï¿½) as one of the
> characters?

Yep, but an Apple computer, for instance, won't display that zero
correctly if it was typed on an IBM/Microsoft machine.
--
http://www.mindspring.com/~w6rca

3071. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1FFF7B.A35CF3F5@IEEE.org>
Source record: 175685

Bob Camp wrote:
> In my case the slope is > 10 wavelengths in all directions from the
> antenna. So, is 10 wavelengths enough to have an effect ?

My down slope is greater than that, at least two miles, maybe more.
I'm close to the highest point in Madison County, TX. I would guess
that 10 wavelengths is enough to have some effect but that is a
qualitative opinion, not a qualitative one. I recently read something
about this effect but I can't remember where I read it.
--
http://www.mindspring.com/~w6rca

3072. Re: Re Dual Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A20000A.B0828693@IEEE.org>
Source record: 175686

"Mr. Arthur Garabedian" wrote:
> Hello, Can someone tell me how to connect 2 VHF mobile antennas and
> tune them for mobile use, one in the front and one in the back of the
> car using the same transmitter at the same time?

Are you trying to effect mobile phased verticals?
--
http://www.mindspring.com/~w6rca

3073. Re: Thread changes

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A202B3E.2070404@hiwaay.net>
Source record: 175687

Ed- I apologize for the word 'jerks', but- really- he WAS quiet, 3 on the 21st, 1 one the 22nd, none on the 23rd and 24th, then- his chain got pulled, and he went childish again. Peace is what you make it, and the word 'jerks' is a mild annoyance compared to his lengthy quoted replies with no added content.

Bill-W4BSG

W1RFI wrote:

>> From: Bill Aycock baycock@hiwaay.net
>
>
>> Why do you jerks HAVE to keep bringing this up? the NG has been peacful
>> and quite for a week, and you guys just will not let it alone.
>
>
> Do you think that calling people jerks adds to the peace?
>
> 73,
> Ed, W1RFI

3074. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <rOWT5.325070$4d.40658751@news02.optonline.net>
Source record: 175688

Cecil,

That was the logic I was figuring on. However it would not be the first time I got something like that wrong working with antennas. A lot of it depends on how many wave lengths is enough. Is this something that you need 10 wavelengths for or 100 (or 1000 ....).

Bob

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A1FFDAA.B29626D9@IEEE.org...
> Bob Camp wrote:
> > Since this obviously isn't a simple situation is there a way to model
> > what's going on ?
>
> It seems somewhat obvious to me that a far-ranging ground slope,
> extending far into the far-field, would lower the take-off angle
> of the maximum gain point referenced to level ground in the
> direction of the down slope and raise the take-off angle in the
> direction of the up slope. If the slope extends far into the far
> field, it's like taking a level ground plot of the radiation
> pattern and tilting the azimuth.
> --
> http://www.mindspring.com/~w6rca

3075. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn920f88.vnq.X@animas.frontier.net>
Source record: 175689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 25 Nov 2000 12:42:45 -0500, Dwight Stewart scribbled:
>Charles Johnston wrote:
>>
>> About once a month I post the availability
>> of this font that I had modified by a commercial font designer.
>
> Doesn't almost every font have a slashed zero (ï¿½) as one of the
>characters? I just checked a few of my fonts and all of the ones I
>checked did.

Ya, but...

Just because _you_ can type a slashed zero with your font, and just
because _you_ can see it's rendering on _your_ screen, means *nothing*
for the hundreds of thousands of usenet users out here.

I suppose your font is proprietary to the operating system from
from the convicted monopolist from Redmond, Washington -- nicht wahr?

Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

3076. MAJOR SOLAR EVENT (G-3 Level)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Nevil <kclapdw@aol.com>
Message-ID: <kBXT5.2554$II2.275913@newsread2.prod.itd.earthlink.net>
Source record: 175690
Cross-posted to: alt.astronomy,alt.astronomy.solar,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

Saturday, November 25 2:05 PM SGT

Strong solar storms could wreak havoc in Northern Latitudes
WASHINGTON, Nov 25 (AFP) -

Across the United States this weekend, fire alarms and anti-theft devices may be triggered for no reason, pictures on television screens may flicker and fade to black, and entire communities could be plunged into sudden darkness.
Such unusual goings-on things could result from what scientists describe as a wave of major geomagnetic storms expected to strike beginning late Saturday and last for several days.

In an alert issued Friday, the US government's Space Environment Center said "a major solar flare from a large, active sunspot group" was observed on the Sun from Boulder, Colorado, last Thursday, at 8:13 am local time (1513 GMT), likely producing "additional major events."

The solar radiation storms and strong geomagnetic storms categorized by the center as a "G3 Event", officials said.
Under such storms "power system voltage corrections may be required, false alarms triggered on some protection devices, surface charging may occur on satellite components, drag may increase on low-Earth-orbit satellites, and corrections may be needed for orientation problems," the center pointed out.

The list of possible calamities doesn't end there, however. The storm wave could cause interruptions in navigation satellite communications and become a real headache for high-frequency ham radio operators, according to the center.
"In the worst case scenario, power can be lost," Norman Cohen, a space environment forecaster with the National Oceanic and Atmospheric Administration, told AFP. He said failures of power grids were more likely to occur "at higher latitudes in both hemispheres," but the geomagnetic storms -- to continue for at least several days -- would affect the whole planet.

"It will be global event. And we won't know the magnitude until it actually starts," Cohen stressed.
He said the flare observed on the surface of the Sun on Thursday has spawned a large cloud of plasma, which is heading towards the Earth. "From its appearance, we have been able to determine that it was Earth-directed," Cohen explained. "It will be a major event." The magnitude of the storms was expected to reach six or seven on a scale of nine, according to the forecaster.

As a result, orbiting satellites may experience "some orientation problems" and "will need correction from ground control," Cohen said. That may affect some communications, but television networks and cellular phones should be working normally, said the forecaster. If interruptions were to occur, they should be brief. Power grids, however, may be worst-equipped to withstand the geomagnetic onslaught from space. In 1989, most of the power grid in the Canadian province of Quebec went down for an expended period of time due to such a storm, Cohen reminded.

On the bright side, night-time skywatchers in areas far beyond the Arctic could be treated to a spectacle they have never seen before. Aurora Borealis, otherwise known as Northern Lights, could be seen in North America as far south as the US states of Oregon and Illinois, the center said. "Most of Europe will be able to see it too," added Cohen.

He said in Illinois and Oregon, the aurora will probably be visible starting at around midnight Saturday. In Europe, it is most likely to be detected on Sunday and following days after dark.

3077. Re: Ed Hare changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A20763E.D77F365C@dvol.com>
Source record: 175691

Fractenna wrote:

> >Subject: Nathan Cohen changes thread titles. Re: Ed Hare another thread gone
> >wrong
> >From: w1rfi@aol.com (W1RFI)
> >Date: 11/24/00 5:29 PM Eastern Standard Time
> >Message-id: <20001124172901.11581.00000078@ng-fm1.aol.com>
> >
> >Chip,
> >
> >Your changing thread titles reminds me of my wife's two year old grandson.
> >When he doesn't get his way, he pouts and does whatever else he can to be
> >disruptive.
> >
> >This is as bad as "this thread is closed." I really do believe that your
> >sole
> >purpose for participating in this newsgroup is to be disruptive.
> >
> >73,
> >Ed Hare, W1RFI
> >
> >
> >>Subject: Re: Ed Hare another thread gone wrong
> >>From: fractenna@aol.com (Fractenna)
> >>Date: 11/21/00 7:35 PM Eastern Standard Time
> >>Message-id: <20001121193532.06808.00000812@ng-mj1.aol.com>
> >>
> >>>From: fractenna@aol.com (Fractenna)
> >>>
> >>>I should not be part--PERSONALLY-- of ANY conversations here.
> >>>
> >>>Perhaps it would convince people if you never used the word "I" in your
> >>>posts.
> >>>:-)
> >>>
> >>>73,
> >>>Ed Hare, W1RFI
> >>>
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>
Either he finally came completely unglued or whoever owns the server which hosts this NG has had enough of his dimwitted nonsense as we have and is playing with his head for jollies, either works for me!
>
w3rv

3078. Re: Harry Harms changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2074C8.E096973B@dvol.com>
Source record: 175692

Fractenna wrote:

> >Subject: Re: Nathan Cohen changes thread titles. Re: Ed Hare another thread
> >gone wrong
> >From: "Harry Harms" hrbe@dingoblue.net.au
> >Date: 11/24/00 8:29 PM Eastern Standard Time
> >Message-id: <3a1f1509$0$18135$7f31c96c@news01.syd.optusnet.com.au>
> >
> >Group,
> >I have evoked the "Fractenna" filter, so I never get any of his churlish
> >posts or responses, and if we all did it, he would vanish...
> >Harry
> >"N8wwm" <n8wwm@aol.com> wrote in message
> >news:20001124200612.09164.00001054@ng-cf1.aol.com...
> >> I think this clown Chip is just an asshole, plain and simple. He obviously
> >has
> >> severe mental problems.
> >>
> >> He reminds me of this guy we have here
> >> in Toledo in a local chat room. This guy will get into a discussion about
> >> something, I mean just anything at all, and when it comes to a point where
> >he
> >> might ought to say "ya know you may be right" he instead says "What is
> >your
> >> education level?"
> >>
> >> Everyone ignores this pompous 47 year old baby now except newbies to our
> >chat
> >> room...
> >>
> >> And additional laugh for ya...his AOL screen name is WoWwutaGuy...
> >> I think he is Chip's lost brother.

>
One more brilliant post, bravo.
>
w3rv

3079. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A208EF6.DE2266E1@sccoast.net>
Source record: 175693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jynx wrote:
>
> Dwight Stewart scribbled:
> >
> > Doesn't almost every font have a slashed
> > zero (ï¿½) as one of the characters? I
> > just checked a few of my fonts and all of
> > the ones I checked did.
>
> Ya, but...
>
> Just because _you_ can type a slashed zero
> with your font, and just because _you_ can
> see it's rendering on _your_ screen, means
> *nothing* for the hundreds of thousands of
> usenet users out here.

Is there anybody out there who cannot see the slashed zero in the parenthesis above, or in the parenthesis here (ï¿½)? I was under the impression that this character was included in standard ASCII, and therefore should be visible on all computers using western character sets. Perhaps I'm wrong.

> I suppose your font is proprietary to the
> operating system from from the convicted
> monopolist from Redmond, Washington
> -- nicht wahr?

Nope, I have the Cupertino operating system, with a whole lot of fonts (some proprietary and some not).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3080. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A208FF0.D78E9D0E@sccoast.net>
Source record: 175694
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Paul Keinanen wrote:
>
> That is not slashed zero, it is a vowel
> in at least Norwegian and Danish, the
> uppercase ï¿½ is at U+00D8 and the lower
> case ï¿½ at U+00F8.

Okay, it looked like a slashed zero to me. But, I suppose in a
spreadsheet program it won't act like a slashed zero.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3081. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <hk9qv8.67i.ln@mail.specsol.com>
Source record: 175695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In rec.radio.amateur.antenna Dwight Stewart <stewartx@sccoast.net> wrote:
> Jynx wrote:
>>
>> Dwight Stewart scribbled:
>> >
>> > Doesn't almost every font have a slashed
>> > zero (ï¿½) as one of the characters? I
>> > just checked a few of my fonts and all of
>> > the ones I checked did.
>>
>> Ya, but...
>>
>> Just because _you_ can type a slashed zero
>> with your font, and just because _you_ can
>> see it's rendering on _your_ screen, means
>> *nothing* for the hundreds of thousands of
>> usenet users out here.

> Is there anybody out there who cannot see the slashed zero in the
> parenthesis above, or in the parenthesis here (ï¿½)? I was under the
> impression that this character was included in standard ASCII, and
> therefore should be visible on all computers using western character
> sets. Perhaps I'm wrong.

You're wrong. I see a question mark in the parenthesis when reading the
post, and backslash three three zero in writting this followup.

The default character set here is US-ASCII; I had to change it to
ISO-8859-1 to even get this thing to post.

<rest snipped>

Jim Pennino

3082. Re: Satellite antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: antennas_ca@my-deja.com
Message-ID: <8vor05$u6c$1@nnrp1.deja.com>
Source record: 175815

Yes a QHA will work fine and also many other designs. Look at the web
page of K5OE. Excellent site with plans for antennas. Good luck!
ANdrew

In article <0_UR5.11273$3j.3291405@news1.gvcl1.bc.home.com>,
"Brew99" <bruce-icq@home.com> wrote:
> Hello,
>
> Does anyone have a suggestion for a design of antenna to operate
satellite
> on 401 or 406 MHz (ARGOS and GOES respectively). I am obviously
looking
> for a design which directs most of the energy above the horizon (say
from 15
> to 90 degrees). This antenna needs to be physically small (say max.
of 3
> feet tall and 1 foot wide) with no ground plane required.
>
> Is a quadra helical design suited for this application? Any web
pages or
> other info. with design parameters would be appreciated.
>
> Cheers,
> Bruce
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3083. Re: GPS QUESTION ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: Greg <greg@notmyemail.com.au>
Message-ID: <8vnvob$n8g$1@news.eisa.net.au>
Source record: 175816
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

Hi Lloyd,
I do not know the Lowrance brand however the following is true for all gps receivers.
The satellite transmissions are on 2 frequencies L1 signal at 1575.42 MHz and L2 signal at 1227.6 MHz.

All satellites transmit on the same frequencies and each satellite uses a unique orhthogonal code for its PRN (pseudo random noise) sequence. In this way the receiver can distinguish each satellite even though they are onthe same frequency (spread spectrum at its best)

The L1 signal is the CA or Coarse Acquisition code (read here civilian uses) and the L2 signal is used in P or Y code capable receivers (read here military).

encoded on each satellite transmission is the ephemeris data etc which is used to determine your position. This data is encoded at a data rate of 50 bps.

AS of a few months ago there is no selective availabilty applied to the empheris data, so now position indications are far more accurate than the +/- 100m specification for CA receivers. Some receivers used the L2 signal (even though they cannot extract the data) to give predictions on atmospheric errors.

When your out on the ocean, you have a clear view of the horizon and you are more likely to acquire satellites that are on the horizon.

There is also a russian satellite nav system called GLONASS. this operates in the bands of 1246 - 1257 MHz and 1602 - 1616 MHz.

There is also a system which integrates GPS and inmarst 3 to provide better atmposheric error prediction and correction. Dont know to much about this !

Thats enough for a start, if you have any further questions just post em.
Cheers,
Greg

"Lloyd" <NOT-GIVEN@NO-SPAM.NO> wrote in message
news:xuJT5.71273$Z2.960382@nnrp1.uunet.ca...
>
> Due to my last posting about a ham question I have been spamed to death
> from
> using my real email address. Please send your reply directly to

> VE7LWB@rac.ca
>
> Here is my GPS question. I have a GPS handheld unit made by Lowrance.
My
> question is this, what frequency is the sat on that GPS runs on? I know
> it's somewhere
> in the gig range, but where about's 5Ghz?? 10Ghz?? 20?? or higher ??
I
> know it's
> up high as I can see the differance in the signal locks I get on the bird
> from a clear
> sunny day to a heavy cloudy day. On a very heavy cloudy rainy day out on
> the boat I
> get less birds I can get a signal lock on. I have also heard something
that
> there are
> GPS units that run on frequencies in or around that 400 to 500 Mhz area.
Is
> this true
> or was I being fed a line of BS ? And if there are ones in that range,
who
> makes them?
> And any other info on it would be nice....
>
>
>
>

3084. Re: newbie question (help ALL)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: JER67@webtv.net
Message-ID: <25642-3A1F94B5-77@asg-storefull-1112.public.svc.webtv.net>
Source record: 175817

Still need assistance....

3085. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a1fabeb_1@news.cybertours.com>
Source record: 175818

"W2MDM" <mdemeo@frontiernet.net> wrote in message
news:3a1dd51d.2489366@news.frontiernet.net...
> I have purchased an Alinco DX70 TH HF radio and would like to use it in a
base
> configuration. I am leaning towards an all band vertical antenna due to
space
> considerations and am a little confused as to what to use. I would like
to cover 10
> meters thru 80 meters. Which antenna is best? The Hustler model says it
needs radials if
> mounted elevated and yet I do not see them listed in the description.
Also, what is a
> counterpoise? I see some antennas need one.
>
> Please excuse my dumb questions. I am new to HF.
>
> Thanks
> Mike
> Standard Broadcast
> W2MDM
Ok Mike,
Gotta get my two cents worth in also.. I would as Rick has sugested that you start with something cheap if possible put up a dipole feed it with open wire line.. find an MFJ 901b tuner or similar unit to feed it with until you get the feel of the bands.. then make your Choice.. as a generl (I mean general rule) A vertical will work better on the lower bands IE 80/40/30 meters. but there are no Shortcuts.. Verticals without radials will work but not as well as with them.. that's the short answer.. You need to determine your main interest before you decide which way to go..
For 75/80 and forty meter ragchews.. a low dipole is almost always better than the vertical , but if you want to work Dx the the vertical is better on those bands (assuming you have a low noise RX antenna.)

If I had only one antenna that I could use and wanted multi band performance from a Vertical I would choose one of the Butternut models.
They have extensively tested and written their results for all to read.. (no magic Just plain proof). you can read about it at
http://www.bencher.com/pdf_download.html#vert_ant

look under Tech notes. you'll need a PDF reader such as Acrobat which if you don't already have it can be down loaded free.
There are 4 Articles you need to read.. "Dirty Little Secrets 1&2 ,Ground Radial systems and Why Radials?"

Also W4Rnl did a good paper on verticals at
http://www.cebik.com/radio.html

Remember that any wire will radiate some RF in some direction.. the Trick
is to radiate the most RF in the direction you want at the moment you want..
and in this no antenna system is perfect. all are a compromise of one sort
or other.. but there is alot of miss understanding on this issue !

Hope to hear you on the air.. Soon Mike
God Bless, happy hamming 73 Dave KC1DI

3086. Re: Ground Slope?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 00:23:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A1F067A.EC4112C4@IEEE.org>
Source record: 175804

Bill Aycock wrote:
> Hey Cecil- if the performance is 'noticeable'- in what way is it
> noticeable, good, bad, ??

Performance in the direction of the downslope is noticeably better
than any other direction.
--
http://www.mindspring.com/~w6rca

3087. Nathan Cohen changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 01:06:12 UTC
From: n8wwm@aol.com
Message-ID: <20001124200612.09164.00001054@ng-cf1.aol.com>
Source record: 175805

I think this clown Chip is just an asshole, plain and simple. He obviously has severe mental problems.

He reminds me of this guy we have here
in Toledo in a local chat room. This guy will get into a discussion about something, I mean just anything at all, and when it comes to a point where he might ought to say "ya know you may be right" he instead says "What is your education level?"

Everyone ignores this pompous 47 year old baby now except newbies to our chat room...

And additional laugh for ya...his AOL screen name is WoWwutaGuy...
I think he is Chip's lost brother.

3088. Re: Nathan Cohen changes thread titles. Re: Ed Hare another thread gone wrong

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 01:29:56 UTC
From: Harry Harms <hrbe@dingoblue.net.au>
Message-ID: <3a1f1509$0$18135$7f31c96c@news01.syd.optusnet.com.au>
Source record: 175806

Group,
I have evoked the "Fractenna" filter, so I never get any of his churlish posts or responses, and if we all did it, he would vanish...
Harry
"N8wwm" <n8wwm@aol.com> wrote in message news:20001124200612.09164.00001054@ng-cf1.aol.com...
> I think this clown Chip is just an asshole, plain and simple. He obviously has
> severe mental problems.
>
> He reminds me of this guy we have here
> in Toledo in a local chat room. This guy will get into a discussion about
> something, I mean just anything at all, and when it comes to a point where he
> might ought to say "ya know you may be right" he instead says "What is your
> education level?"
>
> Everyone ignores this pompous 47 year old baby now except newbies to our chat
> room...
>
> And additional laugh for ya...his AOL screen name is WoWwutaGuy...
> I think he is Chip's lost brother.

3089. Sommer Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 01:50:12 UTC
From: Tracy Seaton <tracy.seaton@home.com>
Message-ID: <oVET5.20159$iy3.4567608@news1.rdc1.tn.home.com>
Source record: 175807

Looking for comments on Sommer beams

Tony W4SX tony.seaton@home.com

3090. FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 02:15:46 UTC
From: Chickenhawk <chickenhawk@softhome.net>
Message-ID: <8vn7f9$2rcg$1@corolla.OntheNet.com.au>
Source record: 175808

Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I would be greatly Appreciated
Thanks In advance
73's

3091. Re: Duel VHF ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 03:58:54 UTC
From: "Mr. Arthur Garabedian" <westernmobiletel@worldnet.att.net>
Message-ID: <3A1F0C71.F6CBEB03@worldnet.att.net>
Source record: 175809

Hello, Can someone tell me how connect 2 VHF mobile antennas and tune them for mobile use, one in the front and one in the back of the car using the same transmitter at the same time?

Very Best Regards, Arthur ...

3092. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 05:08:33 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vnhghrk7@bashir.peak.org>
Source record: 175810

Keith Dysart <dysart@nortel.ca> wrote:
:>
:>Anyone who has ever done any TDR work knows that to be false.

: I proposed 5 criteria that reflected power should meet and used two
: counter-examples to demonstrate that so-called 'reflected power' did not
: meet these criteria.

This only proves a couple of things: 1) your criteria may be invalid,
2) your "counter-examples" may not show what you think they do.

: If you can demonstrate any flaws in my criteria or logic I will happily
: reconsider my position.

Could you list the criteria again? I cannot seem to find them.

: Remember though, that providing examples which are consistent with an
: hypothesis do not prove the hypothesis, no matter how many examples are
: available. Only a single counter-example is needed to disprove an
: hypothesis.

: I believe I have provided that counter-example.

But, your "counter-example" is only an example that may support your
hypothesis (5 criteria). So, by our own statement above, you have not
proven anything.

Please repost the criteria - with supporting documentation to show why
they should apply to the question of reflected power.

--
Bill Nelson (billn@peak.org)

3093. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 05:24:13 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vnidtrk8@bashir.peak.org>
Source record: 175812

: Keith Dysart wrote:

: Let us start with a transmission line (TL) of impedance 50 Ohms,
: length t (the time for one way propagation along the line) and a
: generator with an output impedance of 50 Ohms.
: Leave the right end of the TL open-circuit.
: Set the generator to 50 V (into 50 Ohms) and attach it to the left
: end of the TL.

: At time t, the voltage step reaches the end of the TL and the current
: can flow no further since the TL is open-circuit.
: But charge is still arriving so a voltage step from 50 to 100 V occurs
: which propagates back along the line.

: Now the TL is fully charged to 100 V and no current is flowing anywhere in
: the line.
: The generator is no longer adding energy to the TL.

How do you know this? Have you actually tried this experiment, and seen
the power draw by the generator go to zero?

Isn't it possible that the generator is now trying to dissipate this 50
watts of power and rapidly overheating?

:> And yet believers in reflected power would like me to accept that > there is

:> 50 W of forward power and 50 W of reflected power for a net 0.
:> But I can easily see that there is no power flowing in this TL, anywhere.
:> It is only a charged capacitor.

Here is a setup that will disprove your statement.

Generator - circulator - transmission line (open on the far end).
On the "return leg" of the circulator, attach a load resistor.

If you measure the power in the transmission line, you have 50 watts
forward and 50 watts reflected.

The load resistor will dissipate that 50 watts - proving that power
returned back along the transmission line.

If there were no reflected power, then that load resistor would not heat
up.

And don't argue that adding the circulator to the system invalidates the
experiment. It doesn't. The only way power could get to the load resistor
is if power flowed back towards the circulator from the open end of the
transmission line.

:> As for the 50 forward and reverse, one could just as easily argue that it
:> is a megawatt forward and reverse. It yields the same result.

Nope. You only measure 50 watts in each direction. So stating that there
is a megawatt in each direction is silly and meaningless.

--
Bill Nelson (billn@peak.org)

3094. Re: 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 05:28:20 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vnilkrk9@bashir.peak.org>
Source record: 175811

Dave <DaveA204@mailops.com> wrote:
: Anyone ever did this or know someone who has?
: I would appreciate any information on this. I no longer
: need the Moonraker 4 so its either sell it or convert it...

I don't know of anyone who has done so, but there is no reason
why you couldn't convert it.

--
Bill Nelson (billn@peak.org)

3095. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 06:11:32 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <oKIT5.235473$g6.108419228@news2.rdc2.tx.home.com>
Source record: 175813

Well, Jim, this comes from "The Radio Amateur Antenna Handbook", William Orr and Stuart Cowan (1978), pp. 92, 93. A chart on p. 93 shows that on the ground, a vertical needs 120 radials, at 0.2 wavelengths it needs 10 radials and at 0.5 wavelengths four or five will do.

And, as I said, I've been getting excellent signal reports from all over North America (my QTH is Colorado). I must admit that I have not worked any real DX , but, I don't really try. I'm just happy to ragchew on CW.

Pete, KA0TZK

"Jim Fuller" <jefuller@netscape.net> wrote in message
news:3A1EF3A6.916F40D7@netscape.net...
> Pete Holden wrote:
> >
> > .... (By the way, the higher up the base of the
> > antenna, the fewer radials needed.)
>
> Could/would you explain, please?
>
>
> --
> Jim Fuller

3096. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 06:21:32 UTC
From: WE0H <mikereid1@uswest.net>
Message-ID: <gSIT5.3607$gv3.651925@news.uswest.net>
Source record: 175814

Hey Mike,
I use a 65 and 135 foot #14 insulated wires in a inverted L configuration. They both are fed at the same point and same feedline. The vertical section is 55 feet and the horizontal parts go in opposite directions. This antenna setup is matched with a homebrew T type tuner. It works very well on everything from 160 to 10. I have a little over 3000 feet of #14 insulated copper in the ground as the radial system. It is composed of 65 and 135 foot radials all connected to a 8 foot 3/4 inch copper pipe in the ground. I do have 4 of the 65 foot radials terminated to a 8 foot copper pipe also. Soil here is sand. Give it a try if you have the space.
73's Mike> WE0H.

3097. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-25 22:19:27 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <3nb02t07dv37q38g8qb0u5uq8gp3a8p9bi@4ax.com>
Source record: 175696
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 25 Nov 2000 12:11:10 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Dwight Stewart wrote:
>> Doesn't almost every font have a slashed zero (ï¿½) as one of the
>> characters?

That is not slashed zero, it is a vowel in at least Norwegian and
Danish, the uppercase ï¿½ is at U+00D8 and the lower case ï¿½ at U+00F8.

>Yep, but an Apple computer, for instance, won't display that zero
>correctly if it was typed on an IBM/Microsoft machine.

These characters are in the same positions in Unicode, ISO-8859-1 or
Latin1 (as used by most modern unixes), Windows code page 1252 etc.

MS-DOS and Apple have both their own incompatible code pages for
Western European languages. HP-UX had their own incompatible code
pages and of course all big IBM machines use EBCDIC, which is
completely incompatible with anything else.

Paul OH3LWR

3098. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2611000010170001@a3a05603.sympatico.bconnected.net>
Source record: 175704
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3A208EF6.DE2266E1@sccoast.net>, stewartx@sccoast.net wrote:

> Is there anybody out there who cannot see the slashed zero in the
> parenthesis above, or in the parenthesis here (ø)? I was under the
> impression that this character was included in standard ASCII, and
> therefore should be visible on all computers using western character
> sets. Perhaps I'm wrong.

Never expect a character typed using the Option key on a Mac to come out the same on a Windows machine. Never expect a character typed using the Alt key on a Windows machine to come out the same on a Mac.

> > I suppose your font is proprietary to the
> > operating system from from the convicted
> > monopolist from Redmond, Washington
> > -- nicht wahr?
>
>
> Nope, I have the Cupertino operating system, with a whole lot of fonts
> (some proprietary and some not).

The character in parentheses looked somewhat like a slashed zero on this Macintosh, but it really is not. It was typed by holding down both the Shift and Option keys while typing the letter "o". If a Windows user typed what looks like a slashed zero, when I looked at it on this Mac I have no idea what it would look like, but I'll bet it would look different (unless he typed an ordinary zero; then it _WOULD_ look like a slashed zero to me).

This is one reason why Mac users should never use the Option key in e-mail or newsgroup posts, and likewise Windows users should never use the Alt key. I figured out from context some time ago that the lower and upper case Pi characters I occasionally see on this newsgroup really were intended to be 1/4 and 1/2. I can get those Pi characters by using the Option key, or both the Shift and the Option keys, with the letter "p" (easy to remember) but I have no idea what they would look like to a Windows user. Let's find out: Here's the one with Option alone: ø. And here's the one with both Shift and Option: ø.

By the way, the current versions of the Monaco and Mishawaka fonts (both monospaced), and the Chicago font (not monospaced) on the Mac give a slashed zero just by typing the ordinary zero. Since I use Mishawaka as the screen font for my e-mail program (Eudora) and my newsreader (NewsWatcher) I see lots of those slashed zeros onscreen.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

3099. Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <504U5.18727$zF6.158702@afrodite.telenet-ops.be>
Source record: 175705
Cross-posted to: alt.nl.radio.zendamateur.gelicentieerd,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Hi,

I'm looking for a program to use in Windows that shows all PREFIX on a
detailed map.
It would be great if I even can calculate worked distances and bearings.
All info is welcome on thsi subject !

Thanks and 73 de Phil
ON4BAW

3100. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <6ib12ts4gvc59k2o73tooguetudqskgo75@4ax.com>
Source record: 175706
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 25 Nov 2000 23:18:44 -0500, Dwight Stewart
<stewartx@sccoast.net> wrote:

> Is there anybody out there who cannot see the slashed zero in the
>parenthesis above, or in the parenthesis here (ï¿½)? I was under the
>impression that this character was included in standard ASCII, and
>therefore should be visible on all computers using western character
>sets. Perhaps I'm wrong.

Standard US-ASCII (ANSI_X3.4-1968) is that obsolete 7 bit character
encoding containing 0..9, A..Z, a..z and 24 punctuation characters
and 32 control characters. Standard US-ASCII and its international 7
versions (ISO-646, in which a few punctuation marks were replaced with
non-English vowels and consonants) were used in most non-IBM computers
into 1980's. For instance the mechanical Teletype or the VT-100
terminal supported only US-ASCII or other international 7 bit
variants.

The only way to display the (ï¿½) character on these systems is to use
a Danish or Norwegian terminal and send the 0x5C code to the terminal,
which on the US-ASCII terminal would be displayed as the backslash (\)
character.

In 1983 the VT-220 terminal supported an 8 bit with some modifications
became the ISO-8859-1 (Latin1) in 1987 supporting most Western
languages at the same time, includes the (ï¿½) character.

Thus, if you are using 7 bit devices, such as VT-100 terminals, you
will not see that character.

>> I suppose your font is proprietary to the
>> operating system from from the convicted
>> monopolist from Redmond, Washington
>> -- nicht wahr?

Western Windows variants use code page 1252, which is superset of
ISO-8859-1, so the ï¿½ is in exactly the same position.

However, in MS-DOS, the US code page 437 does not contain the ï¿½
character at all and the Western European code page 850 keeps it in a
different position, thus, some transcoding is required to display it.

The Mac Roman character set has the ï¿½ character in yet an other
position, so some transcoding is still required.

Paul OH3LWR

3101. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kmo12t87pmv9fp1d2pq272trn5fhs0mdjr@4ax.com>
Source record: 175707
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 26 Nov 2000 00:10:17 -0800, ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote:

>The character in parentheses looked somewhat like a slashed zero on this
>Macintosh, but it really is not.

As far as I can figure out, there has never been any slashed zero characters in any computer character sets. However, there has been a large number of font variations that displayed the ordinary digit zero in somewhat different ways. Some used a completely round glyph, other used an elongated glyph, some a truly elliptical glyph, some a zero with a right facing slash, some with a left facing slash, some used a centre dot and some even some kind of underscore to distinguish from the letter O. All these are simply glyph variations of the ordinary zero digit.

On hard copy devices you could use overprint by sending the digit 0, backspace and slash. In Unicode a slashed zero could even be constructed by using U+0030 U+0336 (digit zero and combining long stroke overlay).

All the talks about slashed zero appearing in all fonts is a misunderstanding, by people who think that Norwegian and Danish uppercase vowel (ï¿½) U+00D8 and lover case vowel (ï¿½) U+00F8 look like a slashed zero. I am writing this on a Norwegian keyboard layout and that vowel is immediately to the right of the L-key. This paragraph should be correctly displayed on any system supporting ISO-8859-1 (Latin1).

Paul OH3LWR

3102. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: stanb@dial.pipex.com
Message-ID: <20001126131218661265@useraq29.uk.uudial.com>
Source record: 175708
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dwight Stewart <stewartx@sccoast.net> wrote:
>
> Is there anybody out there who cannot see the slashed zero in the
> parenthesis above, or in the parenthesis here (ï¿½)? I was under the
> impression that this character was included in standard ASCII, and
> therefore should be visible on all computers using western character
> sets. Perhaps I'm wrong.

Yes, but it's *not* a zero...it's <Option><Shift><o> Hex 'AF' which
may not display the same in other fonts or operating systems. As far
as I know, codes above 127 are not part of the ASCII standard, which
is 7-bit, and they will vary from implentation to implementaion.

>
>
> > I suppose your font is proprietary to the
> > operating system from from the convicted
> > monopolist from Redmond, Washington
> > -- nicht wahr?
>
>
> Nope, I have the Cupertino operating system, with a whole lot of fonts
> (some proprietary and some not).

So do I...

--
Stan Barr stanb@dial.pipex.com

The future was never like this!

3103. Re: Ed Hare changes thread titles. Re: Ed Hare another thread gone

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126083438.28473.00001832@ng-cr1.aol.com>
Source record: 175709

>Either he finally came completely unglued or whoever owns the server which
>hosts
>this NG has had enough of his dimwitted nonsense as we have and is playing
>with
>his head for jollies, either works for me!
>>
>w3rv

Keep personal attacks off this NG.

73
Chip N1IR

3104. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <0k8U5.2021$LQ3.2936@newsfeed.slurp.net>
Source record: 175710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

An ascii zero is 30 hex. Other codes will display what looks like a slashed zero on some machines. Software, such as logging programs and call sign capture functions in terminal programs, are not likely to recognize these other characters as a zero. Sending anything other than 30 hex should be avoided. If you want to see a slashed zero, the correct way to do it is to install a font that displays a slashed zero on the screen for 30 hex.

3105. More writeups - Heathkit SB620 spectrum analyser, Microwave filter KW40 antenna balun etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Stefan Viljoen <Stefan_Viljoen@excite.com>
Message-ID: <8vr7kv$1fc$1@ctb-nnrp2.saix.net>
Source record: 175711

Hi!

I am looking for writeups for the Heathkit SB620 spectrum analyser - any info will be very welcome.

Also, I am looking for info on the Microwave Co. KW40 antenna balun as well as for the The Big Signal W2AU balun Mod 1-1.

Thanks!

Stefan Viljoen
rylan@intekom.co.za

3106. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <8vr93ooiv1@nnrp2.phx.gblx.net>
Source record: 175712

Fractenna <fractenna@aol.com> wrote:
: >Gilbert Mouget <gilbert.mouget@waika9.com> wrote:
: >
: >> Fri, 24 Nov 2000 20:07:15 -0600 dans l'article
: >> <8vn6tudoo1@nntp9.atl.mindspring.net>
: >> l'honorable Unclaimed Mysteries <k4doh@mindspring.com> escrivit :
: >
: >>><gratuitous post>
: >
: >> Last post on my server :
: >
: >> Date: 22 Nov 2000 12:26:39 GMT
: >> From: fractenna@aol.com (Fractenna)
: >> Newsgroups: rec.radio.amateur.antenna
: >
: >> I am afraid he may be sick.
: >
: >> --
: >> Gilbert.
: >
: >Other possibilities exist:
: >
: >He may have come to his senses. Not terribly likely, but possible.
: >
: >He may have gone to a real lawyer and was told he first has to stop being the
: >
: >provoker before he has a chance in hell of suing anybody.
: >
: >AOL may have told him to knock off the posts with the changed subject
: >line and no new content. This wouldn't explain the lack of new diatribes
: >though.
: >
: >He may have gotten a real job and no longer has the time to play usenet.
: >
: >He may just be on vacation.
: >
: >In any case, I think it would be best to leave sleeping dogs alone.
: >
: >Jim Pennino
: >

: I think it would be best to keep your personal abuse against others to
: yourself.

: NC

That's a very strange comment coming form an individual who is
widely recognized as the single most obnoxious abuser on this newsgroup,
not to mention the mail lists and interest groups, such as Antennex, that
you have been tossed out of. The rest of us are all still on those
groups, unhindered by anyone who would seek to intrude and disrupt or
bring to a halt any and all discussion on certain subjects, such as you
did on AntenneX after openly announcing your intentions on the NEC
mail list.

How does it feel to be the sole possessor of that recognition?
Your legacy began all the way back at the Arecibo Observatory, where you
were almost sent back home for spamming the observatory's email system.
A real harbinger of things to come.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

3107. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126095654.20369.00001657@ng-bj1.aol.com>
Source record: 175713

```
>
>Fractenna <fractenna@aol.com> wrote:
>: >Gilbert Mouget <gilbert.mouget@waika9.com> wrote:
>: >
>: >> Fri, 24 Nov 2000 20:07:15 -0600 dans l'article
>: >> <8vn6tu$doo$1@nntp9.atl.mindspring.net>
>: >> l'honorable Unclaimed Mysteries <k4doh@mindspring.com> escrivit :
>: >
>: >>><gratuitous post>
>: >
>: >> Last post on my server :
>: >
>: >> Date: 22 Nov 2000 12:26:39 GMT
>: >> From: fractenna@aol.com (Fractenna)
>: >> Newsgroups: rec.radio.amateur.antenna
>: >
>: >> I am afraid he may be sick.
>: >
>: >> --
>: >> Gilbert.
>: >
>: >Other possibilities exist:
>: >
>: >He may have come to his senses. Not terribly likely, but possible.
>: >
>: >He may have gone to a real lawyer and was told he first has to stop being
>the
>: >
>: >provoker before he has a chance in hell of suing anybody.
>: >
>: >AOL may have told him to knock off the posts with the changed subject
>: >line and no new content. This wouldn't explain the lack of new diatribes
>: >though.
>: >
>: >He may have gotten a real job and no longer has the time to play usenet.
>: >
>: >He may just be on vacation.
>: >
>: >In any case, I think it would be best to leave sleeping dogs alone.
>: >
>: >Jim Pennino
>: >
>
>: I think it would be best to keep your personal abuse against others to
```

>: yourself.
>
>: NC
>
> That's a very strange comment coming form an individual who is
>widely recognized as the single most obnoxious abuser on this newsgroup,
>not to mention the mail lists and interest groups, such as Antennex, that
>you have been tossed out of. The rest of us are all still on those
>groups, unhindered by anyone who would seek to intrude and disrupt or
>bring to a halt any and all discussion on certain subjects, such as you
>did on AntenneX after openly announcing your intentions on the NEC
>mail list.
>
> How does it feel to be the sole possessor of that recognition?
>Your legacy began all the way back at the Arecibo Observatory, where you
>were almost sent back home for spamming the observatory's email system.
>A real harbinger of things to come.
>
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
>(__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Member #40274515
> . ( ) \
> '-|)__| :. \ Email: ctrask@primenet.com
> | | | | \ '. http://www.primenet.com/~ctrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

This has gone on long enough.

Under guidance from my attorney, you will be receiving a cease and desist order for the malicious and prevaricative libel which you continue to attack me with, indeed, repeat even here in the attached post . Continued attacks from you will lead to a suit for malicious libel against you.

Mr. Trask continues these attacks for no other reason than obsessed and focused intent to defame my reputation and tarnish my ability to practice and make progress in my profession.

Nathan Cohen, Ph.D.

3108. Re: Ed Hare changes thread titles. Re: Ed Hare another thread gone

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <8vr989oiv2@nnrp2.phx.gblx.net>
Source record: 175714

Fractenna <fractenna@aol.com> wrote:
: >Either he finally came completely unglued or whoever owns the server which
: >hosts
: >this NG has had enough of his dimwitted nonsense as we have and is playing
: >with
: >his head for jollies, either works for me!
: >>
: >w3rv

: Keep personal attacks off this NG.

: 73
: Chip N1IR

Follow your own advice.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

3109. Re: FAQ for this group?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A212799.52D3EBAE@ix.netcom.com>
Source record: 175715

Sodah wrote:

> I have a question about FM antennae, etc, but before asking the group I'd
> like to check an FAQ... Can somebody point me to one (pun not intended)?
> Thanks.
>
> Sodah
> E-mail: sodah5@home.com

See All About Ham Radio News Groups - From Jeffrey Herman, KH6O at URL:

ftp://rtfm.mit.edu/pub/usenet/news.answers/radio/personal-intro

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

3110. Re: Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A212650.A94188BC@ix.netcom.com>
Source record: 175716
Cross-posted to: alt.nl.radio.zendamateur.gelicentieerd,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Phil wrote:

> Hi,
>
> I'm looking for a program to use in Windows that shows all PREFIX on a
> detailed map.
> It would be great if I even can calculate worked distances and bearings.
> All info is welcome on thsi subject !
>
> Thanks and 73 de Phil
> ON4BAW

=======
Good Morning Phil from San Diego.
Not a program but detailed Prefix maps are available from VK2CA at URL:
http://www.vk2ca.com/amateur.html

Several Distance/Bearing programs at URL:
http://www.ac6v.com/page5.html#BEAR

Prefix Info is at URL:
http://www.ac6v.com/pagev.html#PR

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 870,000 hits on the counter
"Round up the usual jammers" - Claude Rains in the movie "Casablanker"

3111. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A212860.DFCE9599@IEEE.org>
Source record: 175717
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Paul Keinanen wrote:
> As far as I can figure out, there has never been any slashed zero
> characters in any computer character sets.

If I remember correctly, the ASR-33 had a slash through the zero.
--
http://www.mindspring.com/~w6rca

3112. F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: w0tok <w0tok@email.msn.com>
Message-ID: <e4bpr37VAHA.278@cpmsnbbsa07>
Source record: 175718

I have over 30 antenna related books for sale. For a list sent as an MS Word attachment just ask, for the list mailed to your address, give me your name and address. Paul Washa, W0TOK Mound, MN

3113. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: DeeJayDubya <davidw@copper.net>
Message-ID: <tNaU5.2135$LQ3.3301@newsfeed.slurp.net>
Source record: 175719

Put the list up here, pls.

73, Dave, K3BHJ

3114. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001126113257.07605.00002101@ng-fy1.aol.com>
Source record: 175720

>From: Jim Pennino jimp@mail.specsol.com

>AOL may have told him to knock off the posts with the changed subject
>line and no new content

It is quite clear that AOL does not take its terms of service seriously at all.
The fact that he has been allowed to disrupt this newsgroup for weeks now
reposting messages. changing the thread names to the names of the original
poster is clear evidence that AOL gives it lip service, not real service.

73,
Ed Hare, W1RFI

3115. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8vre8o$108$1@slb6.atl.mindspring.net>
Source record: 175721

I know they are aware of the situation.

"W1RFI" <w1rfi@aol.com> wrote in message
news:20001126113257.07605.00002101@ng-fy1.aol.com...
> >From: Jim Pennino jimp@mail.specsol.com
>
> >AOL may have told him to knock off the posts with the changed subject
> >line and no new content
>
> It is quite clear that AOL does not take its terms of service seriously at
all.
> The fact that he has been allowed to disrupt this newsgroup for weeks now
> reposting messages. changing the thread names to the names of the original
> poster is clear evidence that AOL gives it lip service, not real service.
>
> 73,
> Ed Hare, W1RFI

3116. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126114016.24700.00001871@ng-cd1.aol.com>
Source record: 175722

>I have over 30 antenna related books for sale. For a list
>sent as an MS Word attachment just ask, for the list mailed
>to your address, give me your name and address. Paul Washa,
>W0TOK Mound, MN

Paul,

I would find it helpful if you posted the list. I am always interested in antenna books to add to our library.

I get so much e-mail from hams that much of it gets filtered out; better to put on this NG.

Best of luck selling the collection, and I hope I can help on this:-)

Thanks!

Chip N1IR

3117. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Quequeg@quahog.com
Message-ID: <slrn922je4.3f4.Quequeg@daystar.capecod.net>
Source record: 175723

On Sun, 26 Nov 2000 09:35:37 -0600, w0tok <w0tok@email.msn.com> wrote:
>I have over 30 antenna related books for sale. For a list
>sent as an MS Word attachment just ask, for the list mailed
>to your address, give me your name and address. Paul Washa,
>W0TOK Mound, MN
>
>

Why not post the list here? You should understand that folks should be
very wary of receiving a M$ Worm document.

Q
--
"Dead Whale or a Stove Boat"
<---------[[[[[[[[[[[[[[[[[[

3118. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126115719.24700.00001877@ng-cd1.aol.com>
Source record: 175724

>
>I know they are aware of the situation.
>
>
>"W1RFI" <w1rfi@aol.com> wrote in message
>news:20001126113257.07605.00002101@ng-fy1.aol.com...
>> >From: Jim Pennino jimp@mail.specsol.com
>>
>> >AOL may have told him to knock off the posts with the changed subject
>> >line and no new content
>>
>> It is quite clear that AOL does not take its terms of service seriously at
>all.
>> The fact that he has been allowed to disrupt this newsgroup for weeks now
>> reposting messages. changing the thread names to the names of the original
>> poster is clear evidence that AOL gives it lip service, not real service.
>>
>> 73,
>> Ed Hare, W1RFI

The situation is that I publicly requested the cessation of my listing as a 'thread topic'. Being archived in such a manner is a focussed intent to libel me and thwart my professional and personal efforts, and damage my reputation. The evidence for this--and the damage--is extant and easily proven in a court of law.

Listing me as a 'thread topic' led to an incredible series of prevarications and fabrications with the sole imtent of libeling me. That I HAVE been libeled is my position and that of my attorney.

Those who continue to invoke me in this context are libeling me with malicious intent. My person is NOT a subject of the rec.radio.amateur.antenna NG and my public request for cessation must be honored.

I am not a public figure; the abuse goes on whether I post or not (that is, without ANY provocation from me whatsoever); and I will NO LONGER tolerate ANY abuse from anyone here or elsewhere.

Speculation has been introduced that I am operating under the direction of counsel. I will confirm this.

Now stop talking about ME and discuss antennas.

Thank you for your assistance.

Nathan Cohen, Ph.D.

3119. Here's how to ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: DeeJayDubya <davidw@copper.net>
Message-ID: <jobU5.2269$LQ3.3245@newsfeed.slurp.net>
Source record: 175725

.. interpret deja's database (archive) reports:

Greetings!

Thank you for contacting Customer Support.

Deja.com uses a feature within the database search referred to as the "lazy eval" search. This type of search will pull up an estimated number of hits in a shorter amount of time than the same search for an exact number of hits. You would still receive the same number of hits, regardless as to whether an exact search was conducted or a lazy eval search, but with lazy eval, the hit list was being reported in larger ESTIMATED hits in order to quicken the search time.

As you continue your search through the given hitlists, the approximation will become more accurate, and at times will completely end-though it still indicates that there are still an estimated number of articles left.

Choosing a higher number of hits per page (50 or 100) will give you a more accurate list from the start- though you must scroll through further to get the exact number.

We apologize for any confusion or inconvenience this may cause.

In addition, be aware that search results by author are often skewed by crossposting. Also, a general search using your handle will include results which merely contain that handle, such as a reply to one of your posts. The easiest way to find your postings is to go to the power search page (http://www.deja.com/home_ps.shtml) and type your full posting email address (cloacus_maximus@manurespreader.com) in the "Author" field. This will bring up a more
specific listing of your posting history.

If you have any further comments or questions, please don't hesitate to contact us at your convenience.

Deja.com, Inc.

How to Work With the Usenet Community:
http://www.deja.com/help/discussions/primer_howto.epl

3120. Re: MAJOR SOLAR EVENT (G-3 Level)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: duh me <datbob@braindead.com>
Message-ID: <3A214583.D0057963@braindead.com>
Source record: 175726
Cross-posted to: alt.astronomy,alt.astronomy.solar,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

Nevil wrote:

> Saturday, November 25 2:05 PM SGT
>
> Strong solar storms could wreak havoc in Northern Latitudes
> WASHINGTON, Nov 25 (AFP) -
>
> Across the United States this weekend, fire alarms and anti-theft devices
> may be triggered for no reason, pictures on television screens may flicker
> and fade to black, and entire communities could be plunged into sudden
> darkness.
> Such unusual goings-on things could result from what scientists describe as
> a wave of major geomagnetic storms expected to strike beginning late
> Saturday and last for several days.
>
> In an alert issued Friday, the US government's Space Environment Center said
> "a major solar flare from a large, active sunspot group" was observed on the
> Sun from Boulder, Colorado, last Thursday, at 8:13 am local time (1513 GMT),
> likely producing "additional major events."
>
> The solar radiation storms and strong geomagnetic storms categorized by the
> center as a "G3 Event", officials said.
> Under such storms "power system voltage corrections may be required, false
> alarms triggered on some protection devices, surface charging may occur on
> satellite components, drag may increase on low-Earth-orbit satellites, and
> corrections may be needed for orientation problems," the center pointed out.
>
> The list of possible calamities doesn't end there, however. The storm wave
> could cause interruptions in navigation satellite communications and become
> a real headache for high-frequency ham radio operators, according to the
> center.
> "In the worst case scenario, power can be lost," Norman Cohen, a space
> environment forecaster with the National Oceanic and Atmospheric
> Administration, told AFP. He said failures of power grids were more likely
> to occur "at higher latitudes in both hemispheres," but the geomagnetic
> storms -- to continue for at least several days -- would affect the whole
> planet.
>
> "It will be global event. And we won't know the magnitude until it actually
> starts," Cohen stressed.
> He said the flare observed on the surface of the Sun on Thursday has spawned
> a large cloud of plasma, which is heading towards the Earth. "From its
> appearance, we have been able to determine that it was Earth-directed,"

> Cohen explained. "It will be a major event." The magnitude of the storms
> was expected to reach six or seven on a scale of nine, according to the
> forecaster.
>
> As a result, orbiting satellites may experience "some orientation problems"
> and "will need correction from ground control," Cohen said. That may affect
> some communications, but television networks and cellular phones should be
> working normally, said the forecaster. If interruptions were to occur, they
> should be brief. Power grids, however, may be worst-equipped to withstand
> the geomagnetic onslaught from space. In 1989, most of the power grid in the
> Canadian province of Quebec went down for an expended period of time due to
> such a storm, Cohen reminded.
>
> On the bright side, night-time skywatchers in areas far beyond the Arctic
> could be treated to a spectacle they have never seen before. Aurora
> Borealis, otherwise known as Northern Lights, could be seen in North America
> as far south as the US states of Oregon and Illinois, the center said. "Most
> of Europe will be able to see it too," added Cohen.
>
> He said in Illinois and Oregon, the aurora will probably be visible starting
> at around midnight Saturday. In Europe, it is most likely to be detected on
> Sunday and following days after dark.

i was fortunate to be looking when the blast went at around 1600 yesterday.....
there were two reversed treble clefts in the southern area of 9236? that
blueshifted more intensly than any i had seen prior. simultaneously a vertical
and horizontal prominence formation appeared and went away in about 15 min.

cs

3121. DK3 Screwdriver UNUN?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: "William R. Moore" <wr.moore@worldnet.att.net>
Message-ID: <ObcU5.6451$FT.380569@bgtnsc04-news.ops.worldnet.att.net>
Source record: 175727

I have obtained a DK3 screwdriver that has never been used. I am constructing the UnUn matching transformer that is specified in Johnson's notes. I have 2 questions.

The notes (Figure 10) call out the number of turns explicitly only once and that number is unreadable on my copy. The diagrams look like there should be 14 turns. Is that correct?

In winding the bifilar turns, should the wires be twisted or wound in parallel?

Tnx es 73,
Randy, KS4L

Randy Moore Huntsville, AL

3122. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2164CF.72F13CF7@IEEE.org>
Source record: 175728

w0tok wrote:
> I have over 30 antenna related books for sale. For a list
> sent as an MS Word attachment just ask, for the list mailed
> to your address, give me your name and address. Paul Washa,
> W0TOK Mound, MN

Why not post the list on rec.radio.swap?
--
http://www.mindspring.com/~w6rca

3123. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001126144033.28483.00001491@ng-cr1.aol.com>
Source record: 175729

>KB9WFK@mindspring.com

>I know they are aware of the situation.

They may be aware of the situation, but if history is any guide, they will not take an y action. AOL allowed disruptive behavior to continue for years on the Ham Radio discussion board, with the net effect that there are now only a handful of posts per week. Most reasonable people decided that the board was a complete waste of time.

73,
Ed Hare, W1RFI

3124. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001126144203.28483.00001492@ng-cr1.aol.com>
Source record: 175730

>From: fractenna@aol.com (Fractenna)

>Being archived in such a manner is a focussed intent to libel
>me and thwart my professional and personal efforts, and damage my reputation.

Are you telling us that when you changed the thread name to the names of people
who posted, you libeled them?

>The evidence for this--and the damage--is extant and easily proven in a court
>of law.

I see...

73,
Ed Hare, W1RFI

3125. M Squared 6 Meter Loop New

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Chuck Costa <cvcosta@home.com>
Message-ID: <vMdU5.472089$i5.8262798@news1.frmt1.sfba.home.com>
Source record: 175731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

M 2 Six meter loop with mast mounting bracket. Only used a week. $75 shipped

--
Chuck Costa - K6CVC
k6cvc@home.com

3126. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn922q11.42c.X@animas.frontier.net>
Source record: 175732
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
On Sat, 25 Nov 2000 23:18:44 -0500, Dwight Stewart scribbled:
>Jynx wrote:
>>
>> Dwight Stewart scribbled:
>> >
>> > Doesn't almost every font have a slashed
>> > zero ( ï¿½ ) as one of the characters? I
>> > just checked a few of my fonts and all of
>> > the ones I checked did.
>>
>> Ya, but...
>>
>> Just because _you_ can type a slashed zero
>> with your font, and just because _you_ can
>> see it's rendering on _your_ screen, means
>> *nothing* for the hundreds of thousands of
>> usenet users out here.
>
> Is there anybody out there who cannot see the slashed zero in the
>parenthesis above, or in the parenthesis here ( ï¿½ )?

What I see is an equal sign ("=") with a vertical bar ("|").
It be one of the "IBM Graphical Characters" for drawing boxes: x'D8'.

>I was under the
>impression that this character was included in standard ASCII,

Standard ASCII !!! LOL !! At best ASCII is 'standard' up through
x'7F' -- and is wide open for (re)intrepretation from x'80' - x'FF'.

Jonesy

--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK
```

3127. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126151841.24720.00002015@ng-fl1.aol.com>
Source record: 175733

>w0tok wrote:
>> I have over 30 antenna related books for sale. For a list
>> sent as an MS Word attachment just ask, for the list mailed
>> to your address, give me your name and address. Paul Washa,
>> W0TOK Mound, MN
>
>Why not post the list on rec.radio.swap?
>--
>http://www.mindspring.com/~w6rca
>

First of all, I don't want to swap Cecil. I, at least, want to buy. Second of all, I am interested in antennas, so such a list would make sense HERE to myself and many others.

Perhaps a cross listing might be useful though.

73
Chip N1IR

3128. Re: DK3 Screwdriver UNUN?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A21608A.4514@bellsouth.net>
Source record: 175734

Hi Randy,

IMHO the UNUNs that go with many of the screwdrivers don't work very well, especially on bands such as 10 meters. If you have this problem, you might just want to wind a coil and parallel it with the bottom of the antenna (feedpoint). Find resonance on 75 meters, and it will work (usually) on all bands. I have run into one or two that had to be tapped in 2 places, in which case one can use a simple relay to switch between the two.

73

Jerry
K4KWH

3129. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A217698.3FAD787D@ix.netcom.com>
Source record: 175735
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jynx wrote:

> On Sat, 25 Nov 2000 23:18:44 -0500, Dwight Stewart scribbled:
> >Jynx wrote:
> >>
> >> Dwight Stewart scribbled:
> >> >
> >> > Doesn't almost every font have a slashed
> >> > zero (ï¿½) as one of the characters? I
> >> > just checked a few of my fonts and all of
> >> > the ones I checked did.
> >>
> >> Ya, but...
> >>
> >> Just because _you_ can type a slashed zero
> >> with your font, and just because _you_ can
> >> see it's rendering on _your_ screen, means
> >> *nothing* for the hundreds of thousands of
> >> usenet users out here.
> >>
> > Is there anybody out there who cannot see the slashed zero in the
> >parenthesis above, or in the parenthesis here (ï¿½)?
>
> What I see is an equal sign ("=") with a vertical bar ("|").
> It be one of the "IBM Graphical Characters" for drawing boxes: x'D8'.
>
> >I was under the
> >impression that this character was included in standard ASCII,
>
> Standard ASCII !!! LOL !! At best ASCII is 'standard' up through
> x'7F' -- and is wide open for (re)intrepretation from x'80' - x'FF'.
>

==========

I see the zeroes, I see the zeroes, good lord all critty, I see the
zeroes!!!
Here is mine -- no typing, just copy and paste em. ï¿½ ï¿½ ï¿½

--
73 from Rod in Oceanside, CA
AC6V Ham And DX Guide
http://www.ac6v.com/
Over 900,000 hits on the counter

DX Movie Of The Week: "Pileup On The Orient Express"

3130. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Steve Moll <stevemo@winternet.com>
Message-ID: <3A217B9B.DA5DD6A4@winternet.com>
Source record: 175736
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It's too simple. Try alt+0+2+1+6 !!!!!!!! Like this ï¿½
SteveM

3131. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Steve Moll <stevemo@winternet.com>
Message-ID: <3A217BE0.3B89CB9E@winternet.com>
Source record: 175737
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It's too simple. Hold down "alt", then type 0216. Like this ï¿½
SteveM

3132. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <plt22tcojae6q3vsf2sf7o5asd574u86i7@4ax.com>
Source record: 175738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On 26 Nov 2000 19:44:34 GMT, X@Y.Z.net (Jynx) wrote:

>What I see is an equal sign ("=") with a vertical bar ("|").
>It be one of the "IBM Graphical Characters" for drawing boxes: x'D8'.

According to the news headers, you are using linux and slrn and your character set is declared as iso-8859-1 and the original message also contained an explicit code page declaration of 8859-1. How on earth did you manage to display the original text in MS-DOS (OEM) US code page 437 :-). There is definitely some problems with your configuration.

Paul

3133. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A21837D.F2A9BBC9@IEEE.org>
Source record: 175739

Fractenna wrote:
>
> >Why not post the list on rec.radio.swap?
>
> First of all, I don't want to swap Cecil. I, at least, want to buy. Second of
> all, I am interested in antennas, so such a list would make sense HERE to
> myself and many others.

But it violates the newsgroup guidelines, Chip. rec.radio.swap is
specifically for buying, selling, and trading.
--
http://www.mindspring.com/~w6rca

3134. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001126170425.01132.00001251@ng-cv1.aol.com>
Source record: 175740

>Mr. Trask continues these attacks for no other reason than obsessed and
focused
intent to defame my reputation and tarnish my ability to practice and make
progress in my profession.<

Did Mr. Kaufmann really direct you to write this libelous attribution? Or did
Chris just get your goat?

Rick K1BQT

3135. Re: This thread is closed. AKA AOL

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: dixiewafflehouse@my-deja.com
Message-ID: <8vs3daind1@nnrp1.deja.com>
Source record: 175741

In article <20001126144033.28483.00001491@ng-cr1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >KB9WFK@mindspring.com
>
> >I know they are aware of the situation.
>
> They may be aware of the situation, but if history is any guide, they
will not
> take an y action. AOL allowed disruptive behavior to continue for
years on the
> Ham Radio discussion board, with the net effect that there are now
only a
> handful of posts per week. Most reasonable people decided that the
board was a
> complete waste of time.
>
> 73,
> Ed Hare, W1RFI
I know I shouldn't do this but here goes. Frankly Ed part of the problem on the AOL message boards can be pointed to you, and you very well know this fact. You consistently baited the various trolls on and on in a sort of tit for tat game. Quite frankly I was quite relieved when you got your panties in a twist and left the message board. Do you know why? Because like a lid on the air if you ignore them they GO AWAY. When you stopped replying so did the resident lid. I see you have substituted your AOL hobby for this NG well, so be it. But do not feign innocence in this whole debacle.
Your manner in which you operate is much like a person who screams their house is on fire and instead of putting out the fire they yell some more allowing the flames to consume the house.
Here is a hint if you do not agree with someone and it breaks down to personnel attacks IGNORE them. This may take more self control than you have demonstrated but do try. Perhaps the use of filters on the NG may help, I am sure you can manage to operate them.

Once again for you to act innocence is quite funny. It may fool a few on this NG but I had an eyeful of your mode of operation. So peddle that junk elsewhere.

Well keep throwing kerosene on the fire Ed.

Sent via Deja.com http://www.deja.com/
Before you buy.

3136. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126173520.06844.00001650@ng-mj1.aol.com>
Source record: 175742

>
>Fractenna wrote:
>>
>> >Why not post the list on rec.radio.swap?
>>
>> First of all, I don't want to swap Cecil. I, at least, want to buy. Second
>of
>> all, I am interested in antennas, so such a list would make sense HERE to
>> myself and many others.
>
>But it violates the newsgroup guidelines, Chip. rec.radio.swap is
>specifically for buying, selling, and trading.
>--
>http://www.mindspring.com/~w6rca
>

Fine;

I disagree with said rule. It is thus up to the individual whether to post it
or not.

If not posted here, then I cannot be a buyer as I will not be aware.

73
Chip N1IR

3137. NW club invitation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Neil Wiger <neilwiger@neilwiger.com>
Message-ID: <8lgU5.740$Hr3.263107@news.uswest.net>
Source record: 175743

Hello NG,

Invitations to join the November Whiskey 11 meter SSB/AM DX Club to all.

Get your NW# here: http://neilwiger.com/membership.html

Main site:
http://neilwiger.com

Yahoo! club, here:
http://clubs.yahoo.com/clubs/novemberwhiskeydxclub

enough for now, 73s,
Neil NW000
Minnesota

--
November Whiskey SSB/AM DX Club

http://novemberwhiskey.cjb.net

3138. Re: This thread is closed. AKA AOL

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: dixiewafflehouse@my-deja.com
Message-ID: <8vs4rb$j1q$1@nnrp1.deja.com>
Source record: 175744

In article <20001126144033.28483.00001491@ng-cr1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >KB9WFK@mindspring.com
>
> >I know they are aware of the situation.
>
> They may be aware of the situation, but if history is any guide, they
will not
> take an y action. AOL allowed disruptive behavior to continue for
years on the
> Ham Radio discussion board, with the net effect that there are now
only a
> handful of posts per week. Most reasonable people decided that the
board was a
> complete waste of time.
>
> 73,
> Ed Hare, W1RFI
I know I shouldn't do this but here goes. Frankly Ed part of the problem on the AOL message boards can be pointed to you, and you very well know this fact. You consistently baited the various trolls on and on in a sort of tit for tat game. Quite frankly I was quite relieved when you got your panties in a twist and left the message board. Do you know why? Because like a lid on the air if you ignore them they GO AWAY. When you stopped replying so did the resident lid. I see you have substituted your AOL hobby for this NG well, so be it. But do not feign innocence in this whole debacle.
Your manner in which you operate is much like a person who screams their house is on fire and instead of putting out the fire they yell some more allowing the flames to consume the house.
Here is a hint if you do not agree with someone and it breaks down to personnel attacks IGNORE them. This may take more self control than you have demonstrated but do try. Perhaps the use of filters on the NG may help, I am sure you can manage to operate them.

Once again for you to act innocence is quite funny. It may fool a few on this NG but I had an eyeful of your mode of operation. So peddle that junk elsewhere.

Well keep throwing kerosene on the fire Ed.

Sent via Deja.com http://www.deja.com/
Before you buy.

3139. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A21917A.9050603@hiwaay.net>
Source record: 175745

Chip You know you dont want the books- you know it all already, so any references are superfluous.

Hope this helps.- Bill

Fractenna wrote:

> Fine;
>
> I disagree with said rule. It is thus up to the individual whether to post it
> or not.
>
> If not posted here, then I cannot be a buyer as I will not be aware.
>
> 73
> Chip N1IR

3140. Re: 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <pZgU5.8581$nh5.720964@newsread1.prod.itd.earthlink.net>
Source record: 175746

> "Dave" <DaveA204@mailops.com> wrote in message
news:3a1f10b1_1@excalibur.gbmtech.net...
> Anyone ever did this or know someone who has?
> I would appreciate any information on this. I no longer
> need the Moonraker 4 so its either sell it or convert it...
>
> thanks
> Dave

Modification to 6 meters should be no problem. Modification should consist
of
shortening each of the elements and then adjusting the distance between
them.
Most antenna books will have the correct dimensions for everything. The
moonraker
is a great source of parts for creating what ever you want.

You may, however ,want to hold on to it for a while, without modification. I
heard that the Moonraker 4 is being discontinued and, in a little while,
they
might be worth something.

--
Martin Meserve, K7MEM
martin.e.meserve at lmco.com

3141. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001126182617.24633.00001792@ng-cd1.aol.com>
Source record: 175747

>
>Chip You know you dont want the books- you know it all already, so any
>references are superfluous.
>
>Hope this helps.- Bill
>
>Fractenna wrote:
>
>
>> Fine;
>>
>> I disagree with said rule. It is thus up to the individual whether to post
>it
>> or not.
>>
>> If not posted here, then I cannot be a buyer as I will not be aware.
>>
>> 73
>> Chip N1IR
>
>

Bill--

Please tell me how you can be so sure. I seem to recall buying over a dozen items from people who are on this NG. These include:

slotted line; antenna books; smith charts; terminating resistor; antennas; impedance bridge; and others.

So, what is it in my history that allows you to make such an inaccurate and factually unjustified assertion as the above?

73
Chip N1IR

3142. Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Jim Warner <jpwarner1@gte.net>
Message-ID: <01c05801$7c2cdb60$9ade1b3f@jpwarner>
Source record: 175748

While installing my 100' Rohn tower this autumn,
my neighbor down the road was passing by. While
gauking up at me planting the second TH-7 in the
clamps he asked "Is all your big arials gonna steal
all the signal from mine?"
WA9Z

3143. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A21A046.302A0D2C@bellatlantic.net>
Source record: 175749

You'll need an antenna about 2 Km up above sea level to
"look over" the curve of the earth at a station 250 Km away, for
reliable reception. Actually, the combined height of thje transmitting
and the receiving antennas comes into play - 1 Km high at each
end should do it. And - that assumes no intervening mountain
ranges - the two antennas must be able to "see" each other.
A high gain antenna cannot make up for the height problem, but
would be needed in any case to compensate for path attenuation.

Chickenhawk wrote:

> Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
> to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
> would be greatly Appreciated
> Thanks In advance
> 73's

3144. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <6c9sv8.a0o.ln@mail.specsol.com>
Source record: 175750
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In rec.radio.amateur.antenna Cecil <Cecil.A.Moore@ieee.org> wrote:
> Paul Keinanen wrote:
>> As far as I can figure out, there has never been any slashed zero
>> characters in any computer character sets.

> If I remember correctly, the ASR-33 had a slash through the zero.
> --
> http://www.mindspring.com/~w6rca

Yep, so did the -35 series and probably others. My first "home computer"
had a KSR-35 as a console. Jeez that dates me...

Jim Pennino

3145. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A21B982.C46E1166@IEEE.org>
Source record: 175751

Fractenna wrote:
> >But it violates the newsgroup guidelines ...

> I disagree with said rule.

One of the things wrong with this newsgroup is people not following the guidelines. The ad hominem attacks upon you are also against the guidelines. Guideline violators decrease the usefulness of the newsgroup for everybody, including themselves.

For the record: Chip and I were friends before we encountered each other on this newsgroup and this is a simple disagreement between friends.
--
http://www.mindspring.com/~w6rca

3146. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8vsfrhrkt1@slb7.atl.mindspring.net>
Source record: 175752
Cross-posted to: alabama.birmingham.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

This makes me curious. In the US, is it legal to operate a CB that has been converted to 10 meter Ham operation, assuming of course you are a legally licensed ham with privileges on 10m? I'm not sure how this would be different from building your own radio from scratch, which is legal.

If it is illegal, I'm wondering how other countries view this kind of thing.

Just curious,

Robert / KG4FGN

"Richard Arnold" <k8rja@flashcom.net> wrote in message
news:t1ll4sbvktqp29@corp.supernews.com...
> Try this page: http--www.geocities: http://www.geocities.com/justradios/
>
> --
> Dick
> k8rja@flashcom.net
> "VK4LAJ" <vk4laj.SPAM.JAM@loaded-dog.com> wrote in message
> news:3a1a327f@grissom...
> > Hi and thanks for reading this post
> >
> > I recently acquired a General Electric 40ch CB radio Model A3-5825B
(twin
> > board model) with the view of putting it on 10m.
> >
> > Has anyone got the schematic diagram for this radio as I don't have one
> and
> > the rig has been tampered with by someone. Currently the lights come on
> but
> > there is no-one at home (no RX/TX). It appears that components have been
> > added and subtracted but I don't know what the correct ones should be.
> >
> > Any help would be appreciated. Scanned schematics are OK but please
email
> me
> > direct and don't forget to remove the SPAMJAM
> >
> > Thanks in advance
> >
> > --
> > 73
> > Adam VK4LAJ
> > E-mail: - SPAMJAMvk4laj@loaded-dog.com

> > WWW: - http://www.loaded-dog.com
> > Brisbane Australia
> > CQ Zone 29/ 30
> > Point your beam at: -27.39S Lat. - 153.03E long
> > Maiden Head: - QG62mo
> > Height ASL: - 52m
> >
> > My wife says I never listen to her...
> > at least that's what I thin she said?
> >
> >
>
>

3147. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8vsfrjrkt2@slb7.atl.mindspring.net>
Source record: 175753
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:kmo12t87pmv9fp1d2pq272trn5fhs0mdjr@4ax.com...
> On Sun, 26 Nov 2000 00:10:17 -0800, ryeburn@sfu.caz (David or Jo Anne
> Ryeburn) wrote:
>
> As far as I can figure out, there has never been any slashed zero
> characters in any computer character sets.

Never say never. Almost all of the older home PCs had the slashed zero. My trs-80 does. I just fired up my Commodore 64 and my 128, both of them have the zero slashed (heck they even have the zero slashed on the keyboard).

A slashed zero font with it really being the zero and not a special character is a cool addition. Being Monospace helps, there aren't that many monospace character sets out there that are easy to read.

Robert / KG4FGN

3148. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A21C253.4000504@hiwaay.net>
Source record: 175754

Chip- simple- from your own past postings, we have been assured that you know when people like Dr. Kraus, Dr. Best, Dr. Maxwell, and other very knowledgeable people are in error. You have told the whole world this. You can only adopt this position if you 'know it all'. I therefore fail to see your need for these, or any other, books. I doubt that there is a single book on the list that even recognizes that Nathan Cohen, PhD even exists. You have set up this background, you will live with it, maybe even in court. (your choice).

I REALLY hope this helps.-Bill-W4BSG

Fractenna wrote:

>
> Please tell me how you can be so sure. I seem to recall buying over a dozen
> items from people who are on this NG. These include:
>
> slotted line; antenna books; smith charts; terminating resistor; antennas;
> impedance bridge; and others.
>
> So, what is it in my history that allows you to make such an inaccurate and
> factually unjustified assertion as the above?
>
> 73
> Chip N1IR

3149. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <GNjU5.2940$LQ3.4219@newsfeed.slurp.net>
Source record: 175755
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> Almost all of the older home PCs had the slashed zero.

Many early PCs displayed the ASCII zero with a slash on the screen.
The ASCII character however was 30 hex, the same character that
displays a non-slashed zero on most fonts. 30 hex is and always has
been the *only* valid ASCII code for zero. It is up to the receiving
terminal design to determine if the displayed zero character has a
slash or not. Any other character will fail in software analysis even
though it may "look" like a zero on the screen. The only proper way to
display a slashed zero is to have the receiving machine display a
special slashed zero font in response to receiving a 30 hex or to have
the receiving software send a slash zero "look alike" to the screen in
response to receiving a 30 hex.

3150. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Brad Thompson <brad.thompson@valley.net>
Message-ID: <3A21C4EA.54F1EF29@valley.net>
Source record: 175756
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jim Pennino wrote:

> In rec.radio.amateur.antenna Cecil <Cecil.A.Moore@ieee.org> wrote:
> > Paul Keinanen wrote:
> >> As far as I can figure out, there has never been any slashed zero
> >> characters in any computer character sets.
>
> > If I remember correctly, the ASR-33 had a slash through the zero.
> > --
> > http://www.mindspring.com/~w6rca
>
> Yep, so did the -35 series and probably others. My first "home computer"
> had a KSR-35 as a console. Jeez that dates me...

Hello--
Also, IIRC many of the late-1970s-vintage "dumb terminals" (e.g., Televideo 910, ADM xx, etc.) either included a permanent slashed zero in their character-display ROMs or had a switchable option to display either a slashed zero (or one with a dot in the center?). Can anyone confirm this?

73--
Brad AA1IP

3151. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bill Meacham <exray@coqui.net>
Message-ID: <3A21D33E.425F75B5@coqui.net>
Source record: 175757
Cross-posted to: alabama.birmingham.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

KG4FGN wrote:
>
> This makes me curious. In the US, is it legal to operate a CB that has been
> converted to 10 meter Ham operation, assuming of course you are a legally
> licensed ham with privileges on 10m? I'm not sure how this would be
> different from building your own radio from scratch, which is legal.
>
> If it is illegal, I'm wondering how other countries view this kind of thing.
>
> Just curious,
>
> Robert / KG4FGN
>
Yes its perfectly legal, but not vice-versa.
--
-Bill Meacham
Vieques, PR

3152. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <3A212CF2.1180F7B4@tpi.net>
Source record: 175758

W0TOK,
Send list to address , use attach
ray,w6fya

w0tok wrote:

> I have over 30 antenna related books for sale. For a list
> sent as an MS Word attachment just ask, for the list mailed
> to your address, give me your name and address. Paul Washa,
> W0TOK Mound, MN

3153. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <jVlU5.13687$l95.768007@nntp1.onemain.com>
Source record: 175759

After, I get the extra certification I would like to start
> designing and building RF circuits. Could anyone recommend these or other
books taht
> talks about RF design for a person with an extra cert?
>

Tweak, I get the feeling that you are looking at the amateur Extra class
license as if it were an endorsement for a job........ It's NOT.

Pat WB7FFI.....busy refreshing myself with the regs and 'tronics for
my extra class...

3154. Re: Call for an autotuner smackdown

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <A9mU5.10679$Oc5.509321@nntp2.onemain.com>
Source record: 175760

Well for what it's worth I have an EDX-2 tuner that I use with my DX-70T. I had it out on my 10 AC in central Oregon.....(high desert) with 6 radials underneath it tied to the pipe it was mounted on. I had 50 ft of random wire connected to the EDX-2......it worked very well. I had 3 thunder cells pass with 6 or 7 miles of me.......no problems. As near as I can tell when the power is removed from the tuner a relay brings the antenna to ground.......... Just my observations.

Pat WB7FFI

3155. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A21F5B3.1090505@hiwaay.net>
Source record: 175761

Robert Burns said something like:

"Oh wad some power the giftie gie us
To see oursels as others see us!
It wad frae monie a blunder free us,
An' foolish notion."

What we see of your actions, and what you claim, are two different things.

Too bad.

Bill

Fractenna wrote:

>> Chip- simple- from your own past postings, we have been assured that you
>> know when people like Dr. Kraus, Dr. Best, Dr. Maxwell, and other very
>> knowledgeable people are in error.
>
>
> No; that is hardly the case. Please do not spread such malicious and false
> statements.
>
>
>> You have told the whole world this.
>
>
> All I have done, as you say, is state as a matter of fact that Steve Best has
> been wrong in some of his statements. That is the ONLy thing you have said that
> is true.
>
>
>
>> You can only adopt this position if you 'know it all'. I therefore fail
>> to see your need for these, or any other, books.
>
>
> That is a very sad characterization. Not only is it obvuioulsy false, but it
> projects intent to make me something I am not.
>
>
> I doubt that there is a
>
>> single book on the list that even recognizes that Nathan Cohen, PhD even
>> exists.
>

>
> Huh? How is this relevant??
>
>
> You have set up this background, you will live with it, maybe
>
>> even in court. (your choice).
>>
>> I REALLY hope this helps.-Bill-W4BSG
>>
>>
>> Fractenna wrote:
>>
>>
>>> Please tell me how you can be so sure. I seem to recall buying over a dozen
>>> items from people who are on this NG. These include:
>>>
>>> slotted line; antenna books; smith charts; terminating resistor; antennas;
>>> impedance bridge; and others.
>>>
>>> So, what is it in my history that allows you to make such an inaccurate and
>>> factually unjustified assertion as the above?
>>>
>>> 73
>>> Chip N1IR
>>
>>
>
> The point is that there is nothing in my 'buying' history that supports your
> statement; indeed it contradicts it. Therefore one may assume, a priori that I
> may have an interest in the titles for sale.
>
> Do you really feel that you NEED to argue about this? No--retract that: I don't
> want to know your feelings on this.
>
> Look Bill, I just want to find out if this guy has some books that would be of
> use to me and/or others I work with. It's really not some complex psychological
> issue,peppered with false statements presented as personal attacks.
>
> Can you just keep me out of it? The focus is books.
>
> Thanks!
>
> 73
> Chip N1IR

3156. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:06:07 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <LW7yYEAvPFI6Ewh7@g3ohx.demon.co.uk>
Source record: 175697

In article <8vn7f9$2rcg$1@corolla.OntheNet.com.au>, Chickenhawk
<chickenhawk@softhome.net> writes
>Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
>to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
>would be greatly Appreciated
>Thanks In advance
>73's
>
>
I don't want to be a pessimist, but I'm afraid that they will be pretty
large plans (ie, large antenna!). Reliable reception of FM radio
frequencies at that sort of distance will be really difficult, even with
a large, high-gain antenna. Even if you do put up an antenna of
fantastic gain, the problem is that you are likely to pull in all the
stations 'down the beam' of the antenna, to a distance of over 2000
miles. I don't think that there is a satisfactory solution.

Ian.

3157. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 00:56:42 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A206025.20FA61EF@bellatlantic.net>
Source record: 175698

I demonstrated a gaping hole in your logic with no need
to consider your criteria. As you mentioned: "Only a single
counter-example is needed to disprove an hypothesis." Your
hypothesis is that there is no such thing as reflected power.
TDR disproves it.

Apparently, you have not used TDR, so I'll explain:
TDR = Time Domain Reflectrometry. You place a single
pulse on a transmission line. You observe the pulse at the
point that the pulse generator is connected to the line, using
an oscilloscope. When the line is terminated in its characteristic
impedance, you scope displays a single pulse. Open the line
at the far end, and your scope displays the initial pulse and
the reflected pulse. The time between pulses can be used to
compute velocity factor or electrical length or physical length,
depending on what factors are already known. The technique
is used to diagnose where a fault is (physically) in a line.

TDR demonstrates, beyond argument, that power on a line can be
reflected by a mismatch. Any mathematical, logical or empirical
agruments to the contrary must therefore be flawed. QED

Keith Dysart wrote:

> In article <3A1D2F5D.9DBA503B@bellatlantic.net>,
> <ehsjr@bellatlantic.net> wrote:
> >I don't know why people get sucked in to thinking there
> >is no such thing as reflected power.
> >
> >Anyone who has ever done any TDR work knows that to be false.
>
> I proposed 5 criteria that reflected power should meet and used two
> counter-examples to demonstrate that so-called 'reflected power' did not
> meet these criteria.
>
> If you can demonstrate any flaws in my criteria or logic I will happily
> reconsider my position.
>
> Remember though, that providing examples which are consistent with an
> hypothesis do not prove the hypothesis, no matter how many examples are
> available. Only a single counter-example is needed to disprove an
> hypothesis.
>
> I believe I have provided that counter-example.
>

> ...Keith

3158. Re: newbie question (help ALL)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 01:11:26 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A206397.7B0338D0@bellatlantic.net>
Source record: 175699

Ok.
First, take your TV to a friend's house, where his TV receives
UHF ok. Test it there on his antenna to ensure your TV receives
UHF ok there.

Next: do your nearby (within 1 mile) neighbors receive UHF ok?
If not, you may not be in range of a UHF station.

If your TV is ok, and if your neighbors receive UHF ok,
then either your connections are wrong (at either the antenna
or the tvf, or both) or your downlead "system" is bad.
By "system" I mean cable, connectors, splitters etc.

There is nothing else possible. If your tv works properly,
and if your nearby neighbors TVs receive UHF, I would
say it is time for you to get a professional in there.

~J~ wrote:

> Still need assistance....

3159. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 02:27:43 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A207518.D32DB9AE@att.net>
Source record: 175700

I once heard Collins Radio's chief antenna engineer make the remark that
"reflected power is just a mathematical convenience."

Never quite knew what to make of that, since "something" other than a
"convenience" is moving the reflected power meter needle. <:}

He wasn't there all that long . . .

To put too fine a point on it, TDR demonstrates that measurable
reflections take place on a transmission line. We measure these,
usually, as voltages. It remains to demonstrate that reflected voltage
"signals" convey "power."

(Just being picky . . .)

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

ehsjr@bellatlantic.net wrote:
>
> I demonstrated a gaping hole in your logic with no need
> to consider your criteria. As you mentioned: "Only a single
> counter-example is needed to disprove an hypothesis." Your
> hypothesis is that there is no such thing as reflected power.
> TDR disproves it.
>
> Apparently, you have not used TDR, so I'll explain:
> TDR = Time Domain Reflectrometry. You place a single
> pulse on a transmission line. You observe the pulse at the
> point that the pulse generator is connected to the line, using
> an oscilloscope. When the line is terminated in its characteristic
> impedance, you scope displays a single pulse. Open the line
> at the far end, and your scope displays the initial pulse and
> the reflected pulse. The time between pulses can be used to
> compute velocity factor or electrical length or physical length,
> depending on what factors are already known. The technique
> is used to diagnose where a fault is (physically) in a line.
>
> TDR demonstrates, beyond argument, that power on a line can be
> reflected by a mismatch. Any mathematical, logical or empirical
> agruments to the contrary must therefore be flawed. QED

3160. Re: HyGain V2R vhf gp?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 06:08:02 UTC
From: Jim Sellon <jimsellon@home.com>
Message-ID: <6N1U5.239159$g6.110347970@news2.rdc2.tx.home.com>
Source record: 175701

The manual "talks" dimension A and dimension B.

Dimension A is the length that the topmost tube sticks out of the next tube down which in turn attaches to the top of the matching coil.

Dimension B is the distance from the bottom of the matching coil body to the very top of the bracket that holds the first set of decoupling radials.

The dimensions come from charts with one exception. They explicitly specify the dimensions for 146 Mhz. Dim. A = 22.5" and Dim. B = 32".

For other frequencies, you can figure it out from the table below. The change appears to be very linear.

Dim. A Dim. B
140 Mhz 25" 34.5"
145 Mhz 23" 32.5"
150 Mhz 21" 30.5"

If you remember, the very top of the bottom radial bracket is supposed to be even with the very bottom of the tips of the upper radials.

Mine has lived through many, many years of Colorado weather. The wind gets very severe here with over 100 MPH gusts being routine, and occasional 130+ gusts. The antenna bows, but never permanently deforms. It survived a lightning strike back in June too.

Good luck.....

oh3mep <pkeskinen@yahoo.com> wrote in message
news:3A1BE397.B699AB65@yahoo.com...
> Hello,
> does anyone own the gp mentioned in subject? I've lost the
> manual and need some help with it. I'd like to tune it for abt.
> 165 MHz so could someone please tell me the total lenght
> and distance from feed to the upper "ground set".
>
> Tnx in advance,
>
> pete
> oh0mep, oh3mep
> pkeskinen@yahoo.com
>

3161. Re: Why did Rohn discontinue the foldovers?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 06:36:16 UTC
From: Leonard <xxlouis@mail.snider.net>
Message-ID: <qna12tc6ssv1phbkmfkmbuonp0g13e8lr8@4ax.com>
Source record: 175702

My 1989 Rohn catalog does not specify what size the hinge bolts are.
The fold over section is listed as a HS25FO Hinge section with bolts
and nuts. The boom section has six 5/16 x 1" bolts and two 3/8 x 4"
bolts at the "A" clamp. The larger tower section bolts are grade 5,
5/16 x 1 1/2" NF bolts. The larger bolts on the 45 G are grade 5,
7/16 x 2 1/2 NC bolts.

On Thu, 23 Nov 2000 01:48:56 GMT, n7ws@azstarnet.com (Wes Stewart)
wrote:

>On Sun, 19 Nov 2000 21:57:30 -0500, "Peter Bertini" <commquart@erols.com> wrote:
>
>>Anyone have information on why Rohn discontinued the FK series?
>>
>>Was it a lack of sales, or safety related issues?
>>
>>I called Rohn the other day looking for info on my FK25 foldover section,
>>and the person I spoke to didn't know they ever made a foldover kit for the
>>25G or 45G series!
>>
>>I need info on the hinge bolts used in the FK25, size, specs, etc. so I can
>>replace
>>the old ones in the used section I just picked up with proper new ones.
>>
>>
>>Pete
>
>I climbed my Rohn 45 foldover today and checked the hinge bolts. They are 1/2"
>grade 5 with double nuts for locking. Don't know whether your '25 uses the same
>size, but I would go with the largest size you can get through the holes.
>
>Wes
>
>
>>
>>

3162. FAQ for this group?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-26 07:44:13 UTC
From: Sodah <sodah5@home.com>
Message-ID: <hb3U5.704539$8u4.11215909@news1.rdc1.bc.home.com>
Source record: 175703

I have a question about FM antennae, etc, but before asking the group I'd like to check an FAQ... Can somebody point me to one (pun not intended)? Thanks.

Sodah
E-mail: sodah5@home.com

3163. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A230D22.5964BC63@dvol.com>
Source record: 175569

Fractenna wrote:

> I disagree with said rule. It is thus up to the individual whether to post it
> or not.

>
> If not posted here, then I cannot be a buyer as I will not be aware.

>
That figgers.
>
.antennas being the entire focus of your pitiful life. The rest of us cruise
.swap like we brush our teeth every morning and move on. Not that you would have
a clue of course . . You're a great example of a 1x2 who never connected with ham
radio.

>
>
> 73
> Chip N1IR

>
w3rv

3164. need Yaesu rotor part

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Jim <n4al@arrl.net>
Message-ID: <3A230DA0.CCAC0B9@arrl.net>
Source record: 175570

I have a Yaesu G800 rotor that is missing the six pin connector to the rotor cable. Yaesu parts has them but they are very expensive. The part number is S8000534.

Anyone have one that you will part with for a reasonable price? Thanks!

Jim N4AL

3165. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A230DF5.3507398A@dvol.com>
Source record: 175571

W1RFI wrote:

> I think my Extra helped me get my job. :-)

>
SPARE me!
>

>
>
> 73,
> Ed Hare, W1RFI

>
w3rv

3166. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: dbanka <dbanka@hotmail.com>
Message-ID: <3A231148.9FEA9F0E@hotmail.com>
Source record: 175572

Mike donot use a antana tunner on a vertical that has capasiters or traps or coils it will burn theme out and you will halve a usless antanna sugest the gap titan or the eagle by gap antanas

KC1DI wrote:

> "W2MDM" <mdemeo@frontiernet.net> wrote in message
> news:3a1dd51d.2489366@news.frontiernet.net...
> > I have purchased an Alinco DX70 TH HF radio and would like to use it in a
> base
> > configuration. I am leaning towards an all band vertical antenna due to
> space
> > considerations and am a little confused as to what to use. I would like
> to cover 10
> > meters thru 80 meters. Which antenna is best? The Hustler model says it
> needs radials if
> > mounted elevated and yet I do not see them listed in the description.
> Also, what is a
> > counterpoise? I see some antennas need one.
> >
> > Please excuse my dumb questions. I am new to HF.
> >
> > Thanks
> > Mike
> > Standard Broadcast
> > W2MDM
> Ok Mike,
> Gotta get my two cents worth in also.. I would as Rick has sugested that you
> start with something cheap if possible put up a dipole feed it with open
> wire line.. find an MFJ 901b tuner or similar unit to feed it with until you
> get the feel of the bands.. then make your Choice.. as a generl (I mean
> general rule) A vertical will work better on the lower bands IE 80/40/30
> meters. but there are no Shortcuts.. Verticals without radials will work
> but not as well as with them.. that's the short answer.. You need to
> determine your main interest before you decide which way to go..
> For 75/80 and forty meter ragchews.. a low dipole is almost always better
> than the vertical , but if you want to work Dx the the vertical is better on
> those bands (assuming you have a low noise RX antenna.)
>
> If I had only one antenna that I could use and wanted multi band performance
> from a Vertical I would choose one of the Butternut models.
> They have extensively tested and written their results for all to read.. (no
> magic Just plain proof). you can read about it at
> http://www.bencher.com/pdf_download.html#vert_ant
>

> look under Tech notes. you'll need a PDF reader such as Acrobat which if
> you don't already have it can be down loaded free.
> There are 4 Articles you need to read.. "Dirty Little Secrets 1&2 ,Ground
> Radial systems and Why Radials?"
>
> Also W4Rnl did a good paper on verticals at
> http://www.cebik.com/radio.html
>
> Remember that any wire will radiate some RF in some direction.. the Trick
> is to radiate the most RF in the direction you want at the moment you want..
> and in this no antenna system is perfect. all are a compromise of one sort
> or other.. but there is alot of miss understanding on this issue !
>
> Hope to hear you on the air.. Soon Mike
> God Bless, happy hamming 73 Dave KC1DI

3167. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <kn8vv8.io2.ln@mail.specsol.com>
Source record: 175573

Tweak <mazhar@nmt.edu> wrote:
> Thanks to everyone who replied to this post. I found your replies quite
> useful. I've decided on a set of books to study for the tech, general and
> extra exam. After, I get the extra certification I would like to start
> designing and building RF circuits. I've found two books (one which is
> quite old) on rf design. Could anyone recommend these or other books taht
> talks about RF design for a person with an extra cert?

<snip>

Though not just about RF, anyone doing circuit design should have a copy of
"The Art of Electronics" by Horowitz and Hill and pay special attention to
the sections titled "Bad circuits".

Jim Pennino

3168. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A232064.DA287E58@nettally.com>
Source record: 175574

I don't know if this has been discussed but how about a diversity receiver configuration with two antennas and two receivers and some logic circuitry to switch the audio. Perhaps the stereo subcarrier- blend circuitry could be used to detect a fade and direct the diversity logic. Of course I am assuming that co-channel interference is not an issue,

Ian Jackson wrote:

> Under 'lift' and sporadic-E conditions, he could easily pull in stations
> well in excess of 250km, but still rarely hear the station he wants. As
> you say, Bob, you are unlikely to get more than 50 or 60 miles (say 85
> to 100km), and I presume that you also mean under 'flat' conditions. You
> can probably NEVER get 250 km under really flat conditions, regardless
> of the gain of the antenna.
>
> The situation is somewhat similar to the reception in the Irish Republic
> of TV transmissions from 'over the water' in the UK. At UHF, one
> receiving site (which fed a cable TV system) got pretty consistent, good
> signals at a distance of about 120 miles (although with occasional deep
> fading into the noise). However, as the UK UHF TV network spread,
> problems of co-channel interference began to cause problems. They get
> the signals by other means these days.
>
> Ian.

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

Pursuant to U.S. Code, title 47, Chapter 5, Subchapter II,
"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

3169. A VERY SIMPLE 2M/70cm Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <vyGU5.5166$HA4.92584@newscontent-01.sprint.ca>
Source record: 175575

Get a set of TV rabbit ears. Connect 50 ohm coax. Hotizontally extend the antennas in a dipole fashion. Adjust both sides equally at the desired frequency of operation until a low SWR is found. You can mark there positions so you can quickly move from 2m to 70cm. Work great as a backpacking antenna or home. Total cost of antenna $1-$2 for a use pair of ears.

73's
Rob
VE3RPF

3170. Re: DK3 Screwdriver UNUN?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <%zGU5.5172$HA4.92403@newscontent-01.sprint.ca>
Source record: 175576

Parrallel and 14 is correct!
William R. Moore <wr.moore@worldnet.att.net> wrote in message
news:ObcU5.6451$FT.380569@bgtnsc04-news.ops.worldnet.att.net...
> I have obtained a DK3 screwdriver that has never been used. I am
> constructing the UnUn matching transformer that is specified in Johnson's
> notes. I have 2 questions.
>
> The notes (Figure 10) call out the number of turns explicitly only once
and
> that number is unreadable on my copy. The diagrams look like there should
> be 14 turns. Is that correct?
>
> In winding the bifilar turns, should the wires be twisted or wound in
> parallel?
>
> Tnx es 73,
> Randy, KS4L
>
> Randy Moore Huntsville, AL
>
>

3171. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A23412D.32EA@wt.net>
Source record: 175577

dbanka wrote:
>
> Mike donot use a antana tunner on a vertical that has capasiters or traps or
> coils it will burn theme out and you will halve a usless antanna sugest the
> gap titan or the eagle by gap antanas
>
> KC1DI wrote:

Afraid thats not true. There is no difference how you feed it, tuner or no tuner. The antenna can't tell the difference. All it sees is rf. How it got there, it couldn't care. The reason some of these antennas burn up with a tuner is with the tuner inline you are getting full power out of the radio. This extra output is what smokes the cheap antennas, not the tuner. If you ran the same higher power from a rig that didn't need the tuner, it would smoke the antenna also if the antenna was low duty rated. The best thing to do is get an antenna that can handle power. I'm not crazy about GAP's as they use a piece of coax as a resister to increase bandwidth. Thats like hooking a dummy load in with your antenna to share the rf. Myself, my vote is as most the others. I'd go the butternut with radials. Or better yet, make it yourself. Thats what I do. They want too much cashflow for the common vertical antennas on the market. MK
--
http://web.wt.net/~nm5k

3172. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <8vt56aacm1@slb6.atl.mindspring.net>
Source record: 175625

>> Fine;
>>
>> I disagree with said rule. It is thus up to the individual whether to post it
>> or not.

KOOL! Chip has declared ANARCHY!! By your own rules there aren't any. I disagree that insulting you is bad so it must be up to the individual. To quote someone else on here, " Your village called and they want their idiot back."

3173. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: David <rangin@hotmail.com>
Message-ID: <8vt56d$fs7$1@ftp.curtin.edu.au>
Source record: 175626

"Jim Warner" <jpwarner1@gte.net> wrote in message
news:01c05801$7c2cdb60$9ade1b3f@jpwarner...
> While installing my 100' Rohn tower this autumn,
> my neighbor down the road was passing by. While
> gauking up at me planting the second TH-7 in the
> clamps he asked "Is all your big arials gonna steal
> all the signal from mine?"
> WA9Z

This is a not-so-stupid question I have often idly pondered myself. My reasoning is as follows. An antenna placed in an electric field and terminated so that it extracts power from the field would be expected to make that field non-uniform, more so in the close vicinity of the antenna. If this happens over a volume much larger than that physically taken up by the antenna then power is being "stolen" from other areas in the field and the neighbour gets less signal.
Using the reciprocity theorem for antennas: just as a transmitting antenna creates an electrical field strength over a volume of space, I can't see why an identical terminated receiving antenna shouldn't reduce the field strength of any external incident wave in the same way over a similar volume.
Anyone wanna comment (or is this just obvious and I don't need to devote my last few grey cells to it)?

David

3174. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001127075012.28490.00001651@ng-cr1.aol.com>
Source record: 175627

>From: "John P. Franklin" jpfrankl@teleport.com

>Tweak, I get the feeling that you are looking at the amateur Extra class
>license as if it were an endorsement for a job........ It's NOT.

I think my Extra helped me get my job. :-)

73,
Ed Hare, W1RFI

3175. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <8vtn6s$1vd$1@www1.kis.keele.ac.uk>
Source record: 175628

Chickenhawk <chickenhawk@softhome.net> wrote:
> Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
> to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
> would be greatly Appreciated

Probably easier and cheaper to buy one. More elements the better!

Leigh....

--
+ + + + + Leigh Preece + + Keele University, Staffordshire, UK + + + + +
+ + Email - Internet: leigh@media.keele.ac.uk + +
>> M5GWH << UK >> IO83VA <<
+ + A sideways glance at Broadcasting - http://www.transdiffusion.org + +

3176. Re: need plans for 160 receive loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011271415590.9750-100000@unics>
Source record: 175629

On Fri, 24 Nov 2000, Tom W8JI wrote:

> Yes indeed Ralf, it is always a mixture at any distance in any
> antenna we can build!

Correct, in order to get some analytic expressions I assumed a infinitesimal electrical dipole and calculated the field. All is based on what is called a vector potential A proportional J/(4 pi r)*exp(ikr), where A and J are vectors. The H field is proportional to rot H, meaning basically a single derivative of A with respect to space, meaning a linear combination of a 1/r and a 1/r^2 term. The E field is proportional to rot (rot A) meaning something like a double derivative of A with respect to space meaning a lnear combination of a 1/r^3, two 1/r^2 and a 1/r term. For large distances the 1/r^3 and 1/r^2 terms go to zero and only the 1/r term survives (this is actually the far field). So you see that both expressions are equivalent in this case.

Close to the antenna the leading term is the 1/r^3 term for E and the 1/r^2 for H meaning there is always a distance where the E term is larger than the H term (I think these things were mixed in one of my earlier postings).

> So now you see the truth under the popular myth. We don't know the
> field impedance of the noise, we most likely have no idea what it is
> unless it is the far field, and in that case it would make no
> difference what antenna we used. Only a response null in the direction
> of the noise compared to the response to the desired signal would
> reduce the noise.
>
> A magnetic loop isn't "magnetic only", it can't possibly be if it
> actually couples to space,

Correct, dH/dt always means dE/dt. Anyway I continued to make some simulations using NEC2d at the weekend, since the magnetic field distribution I reported on Friday looked strange to me. I calculated the near fields of a short dipole (20 mtrs long) at 1 MHz at points at distances between 3 mtrs and 100 mtrs away from the antenna. For d = 80 mtrs and plus I observed a transition to the 1/r bahaviour as expected. Scaled to same far field value the E rises faster than the H (on a double log plot). In opposition to my FRiday posting a believe the values obtained with NEC2d, since they look very close to what I obtained in a homework in my lecture course on electrodynamics. I don't konw if I chose a segmentation which was not fine enough on Friday or if the integration routine of the MININEC based program has an error.

In a next step I calculated the response of a magentic and elctric antenna to this field. The configs were similar to those I reported on Friday. The response of the magnetic antenna was defined as the current on one segment (always the same of course), the response of the short electric antenna was defined by assuming the antenna terminated by a 1 MOhm resistor and measuring the voltage across this resistor (modelling an active antenna, because this is what I was interested in actually). Two different magloops were taken, both with a square geometrical shape: One has 50 cm side length, the other 2 mtrs.

In a config close to config 1 from Friday I obtained:
1. For a distance of 10 mtrs the S/N of both loops exceeds the S/N on the electric antenna by 12.9 dB which the tendency of slightly increasing for even smaller distances.

2. The 50 cm loop is a _perfect_ detector for the magnetic field component at all distances checked.

3. The 2 mtr loop is almost perfect as a H detector but does not work properly 3 mtrs away from the tx antenna.

Config 2 is as follows:
all antenna wires are in one plane, the probes are shifted by 10 mtrs away from the symmetry plane of the tx antenna.

1. The 2 mtrs loop is still almost perfect for the H field (I did not model the 50 cm loop.

2. By moving the probes away from the tx antenna axis I could change from a 14 dB better S/N on the electric probe to a 13 dB better on the magnetic probe.

3. By turning the probes I could change a lot.

The last two points confirm what you were saying although the do not confirm the equivalence of H and E field (wihich they can't as I showed before).

> All the people saying closed loops are quieter because they are
> "magnetic" loops are just "repeating things" that they hear, and those
> things are not correct.

Actually I do not remember if I said 'they are quieter' or if 'they might be quieter', anyway I did not repeat any myth here.
My argumentation was based on the different behaviour of E and H close to antenna and this is accepted since the times of H. Hertz (although this alone does not make it through). Anything written here follows from assuming Maxwell as 'first priciples' and using vector anylysis plus superposition principles. I admid that just looking on the magnitude of fields oversimplifiees the things (this is actually the mistake I made), since the different terms from above have different directions.

I pointed out before that I do not think that E is bad and H is good.

> If the noise is induction field coupled, certainly the "mode"
> of the antenna can make a difference. The actual effect that makes an
> antenna quieter in most cases is simply the directivity, unless the
> noise is being generated in or very near the antenna. And if the noise
> is being created in or very near the antenna, we really don't know
> whether a loop or a probe will be quieter until we try it.

I described a configuration above were both antennas have there main lobe directing to the tx antenna and the loop is better by 14 dB and plus for distances of ten mtrs and less.

> Neat, isn't it? This loop-thing has to be one of the most entrenched
> myths circulating.
>
I do not believe in myhts, I believe in physics. I admid that it would have been better to put the numbers into NEC2d earlier. But there are people around in the U.S. who discuss result before they have the numbers, too (sorry, Florida) ;-)

I'm going to put a little article on my simulation on my webpage. I started to write a summary already and I can send it to anyone interested by e-mail (sorry no Winword, only PS or PDF possible); since my main attention is on my Ph. D. thesis which nothing to do with this kind of stuff this could take a few days.

Thanks for discussion anyway, seems that even 'exact science' offers enough room for interpretation

Vy 73

Ralf

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==========

Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(when will history notice this ?)
==========

3177. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011271516550.9750-100000@unics>
Source record: 175630

On 27 Nov 2000, Bill Nelson wrote:

> You cannot get a good indication of maximum radiated power by measuring
> in the near field - or by measuring the rf currents with an inline meter.

Isn't the near field proportional to square root(power) ?

Assuming a 'perfect' field strength meter and all near field coming from
the antenna, It does not matter if you use near or far field as long as
you do not change anything else.

Vy 73

Ralf

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(When will history notice this ?)
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3178. Re: Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Larry Gauthier <larryg_AT_ismi.net>
Message-ID: <3a226e80$1@news.ismi.net>
Source record: 175631
Cross-posted to: alt.nl.radio.zendamateur.gelicentieerd,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Phil,

Some logging software gives you that information as you enter the call
prefix of the station you are working, or the DX spot you want to work.
DX4WIN, for example, lists the direction and distance to the remote station,
and also includes a 'globe view" of the short- and long-path routes from
your QTH to the other station.

<Standard Disclaimer: no ties to DX4Win, just a happy customer>

-larry
K8UT
"Phil" <philvdk@pandora.be> wrote in message
news:504U5.18727$zF6.158702@afrodite.telenet-ops.be...
> Hi,
>
> I'm looking for a program to use in Windows that shows all PREFIX on a
> detailed map.
> It would be great if I even can calculate worked distances and bearings.
> All info is welcome on thsi subject !
>
> Thanks and 73 de Phil
> ON4BAW
>
>

3179. Re: Call for an autotuner smackdown

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011271527420.9750-100000@unics>
Source record: 175632

On Fri, 24 Nov 2000, Unclaimed Mysteries wrote:

> I have an Alinco DX70TH so naturally I'm keeping an eye on that one. Also
> curious about Smartuner, LDG, etc. They seem like a good idea for a
> versatile mobile/portable/limited-space system, but even I know you don't
> get something for nothing.
>
> Main concerns: effectiveness, ruggedness, lightning vulnerability,
> compatibility.
>
> Corry
> --
Hi Corry,

I use a Smartuner. Until now I did not find an antenna that it could not
tune, althogh sometimes things 'depend on history':
If I want to tune on band A, it sometimes makes a difference if I just
worked on band B or band C.

The large coils in the smartuner are toroids, I estimate the Q not higher
than 300 (probably less?). Putting this in to a network analysis program I
could find situations where you can loose 90 percent of your power.

If you want it to tune a mobile on the low bands it is best to put as much
L as possible into the whip instead of using the Smartuner's internal L.

At the moment I use a 20 mtr peice of wire 4 metres up and have no
efficiency problems. Worked ZL on 30 with 8 watts, Cambuchea and Viet Nam
on 20 (pile up, 8 watts) etc. Whole Europe with 2 watts on 40 is no
problem (all from northern germany). 80 mtrs could be better (I think
it's the height of the antenna)
while 160 mtrs is a dummy load (mainly to the height?).

I decided to buy the Smartuner because it is 'brand independent', so that
I don't have to buy another tuner when changing from Yaesu to something
else.

Hope that helps

Vy 73

Ralf

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(When will history notice this ?)
==========

3180. WTB Isotron 40 M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: w8irq@aol.com
Message-ID: <20001127094606.09889.00001950@ng-cu1.aol.com>
Source record: 175633

I would like to purchase a pre-owned Isotron 40M antenna. Let me know what you have, as to condx and price. Nick , W8IRQ

3181. What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011271548440.9750-100000@unics>
Source record: 175634

Hi all,

a friend of minr lost a remote controlled model airplane a few weeks ago. The frequency he used for the remote control is close to 35 MHz. Because all electrical circuitry was working he asked me to find out, what might be the reason, IE if there was any interference possible. Apart from the 3 rd harmonic of Radio Jordan I found some american accent radio traffic between 35 and 42 MHz. Since it sounded like american CB stations here in europe (you hear tens of stations at a time), I was not able to find out what it was. Could anyone tell me what kind of service allocated there ?

Vy 73

Ralf

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3182. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <vLuU5.7496$FT.444727@bgtnsc04-news.ops.worldnet.att.net>
Source record: 175635

"Keith Dysart" <dysart@nortel.ca> wrote in message
news:8vis99$4f4$1@bcarh8ab.ca.nortel.com...
> Allow me to provide the simple analysis that caused me to conclude
> that there is no such THING as reflected power.
>
> It seemed to me that any acceptable explanation of where 'reflected
> power' goes should work:
>
> a. at a frequency of 0 hertz.
> b. with the transmission line open-circuited.
> c. with the transmission line short-circuited.
> d. with any generator. In particular, it should work if the
> generator is replaced with:
> d1. its Thevenin equivalent circuit.
> d2. its Norton equivalent circuit.
>
> Since these boundary conditions lead to fairly simple arithmetic,
> it can all be done in your head.
>
> Let us start with a transmission line (TL) of impedance 50 Ohms,
> length t (the time for one way propagation along the line) and a
> generator with an output impedance of 50 Ohms.
> Leave the right end of the TL open-circuit.
> Set the generator to 50 V (into 50 Ohms) and attach it to the left
> end of the TL.
> One Amp begins to flow into the TL.

As Bill mentioned, this requires the generator voltage to be 100 V.

> This charge propagates down the TL creating a voltage step of 50 V.
> To the right of the voltage step, no current is flowing and the
> voltage is zero; to the left of the voltage step, 1 A is flowing
> and the voltage is 50 V.
> At time t, the voltage step reaches the end of the TL and the current
> can flow no further since the TL is open-circuit.
> But charge is still arriving so a voltage step from 50 to 100 V occurs
> which propagates back along the line.
> To the right of this step, the voltage is 100 V and no current is flowing;
> while to the left of the step, the voltage is still 50 V and 1 A is still
> flowing.

Actually, the total voltage at the open-circuit is 100 V which is comprised
of a forward traveling voltage of 50 V and a rearward traveling voltage of
50 V. The rearward traveling voltage is 50 V not 100 V. There is a forward
traveling current of 1 A and a rearward traveling current of 1 A. The

rearward traveling power is therefore 50 W. The forward traveling power is 50 W. The 100 V that you discuss is not a "traveling voltage", it is a total voltage comprised of two traveling voltages - one in the forward direction and one in the rearward direction. The same thing occurs with current. The zero current you discuss is not a traveling current, it is a total or net current comprised of two traveling currents- one in the forward direction and one in the rearward direction.

> At time 2*t, this voltage step has propagated all the way back to the start
> of the TL.
>
> While the line was charging, the generator was providing 50V * 1A -> 50 Watts
> into the line. This continued for 2 * t seconds.
>
> Now the TL is fully charged to 100 V and no current is flowing anywhere in
> the line.
> The generator is no longer adding energy to the TL.
> The energy delivered to charge the TL is stored in the capacitance of the TL.
> Since the current is zero everywhere in the TL, there cannot be energy flow
> anywhere in the TL so the power must be zero.
>

You are confusing delivered or net power with forward and rearward traveling power. If the generator is still energized with a source voltage of 100 V, then it is still supplying energy to the line in the form of a forward traveling wave. At the same time, there is a rearward traveling wave with the same amount of energy. The net energy flow or delivery to the line is zero. These concepts would be more evident if we were discussing a transmission line with loss. In this case we would also see how real reflected power is.

> And yet believers in reflected power would like me to accept that there is
> 50 W of forward power and 50 W of reflected power for a net 0.
> But I can easily see that there is no power flowing in this TL, anywhere.
> It is only a charged capacitor.
> As for the 50 forward and reverse, one could just as easily argue that it
> is a megawatt forward and reverse. It yields the same result.
>
> So I conclude there is no such thing as 'reflected power' because it does
> not explain the 0 frequency situation and therefore the question 'Where
> does the reflected power go?' is meaningless.
>
> To carry the study a bit further we can ask what is happening in the
> generator after time 2 * t.
> If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> If we assume Norton, it is dissipating 200 W.
> Dissipation in generators depends more on generator design than 'reflected

> power'. Any argument that 'reflected power' is dissipated in the generator
> can easily be shown to be false by substituting Norton for Thevenin or
vice
> versa.

To understand what happens with the Thevenin generator we need to perform all of the analysis in terms of voltage and current. Doing so, we will see exactly what happens with the "reflected power". Trying to analyze or discuss wave behavior, wave travel, wave reflection, wave cancellation, etc, with power is invalid and does not yield a correct understanding of the transmission line problem.

Consider your Thevenin circuit example. At time T=0, the generator sees a total impedance of 100 ohms and delivers 50 V to the internal source impedance and 50 V to the transmission line as a forward traveling voltage. At time T=2t, the generator voltage is still 100 V and it still delivers 50 V to the internal source impedance and to the transmission line. However, at time T=2t there is now a rearward traveling reflected voltage of 50 V arriving back at the line input. At the line input, the total voltage is equal to 100 V. The rearward traveling reflected voltage of 50 V is also delivered across the internal impedance. Since it is traveling in the opposite direction of the source voltage, the total voltage developed across the internal impedance is equal to 0 V (50 - 50). Draw the Thevenin circuit and all of the voltage polarities and this becomes obvious. As a result, there is no internal power dissipation occurring in the generator and no net power delivery to the transmission line. Yet, there is real power flow (really voltage and current) in the transmission line. The fact that the reflected power (voltage and current) is real and does exist is what causes all of this to happen. If the transmission line were infinitely long and the reflections never returned to the generator, the internal power dissipation across the source impedance would always be 50 W. It is only the presence of the reflections arriving back at the generator that causes the internal power dissipation to become 0 W.

>
> For a short-circuited TL after 2 * t:
> - the voltage will be 0 V everywhere
> - the current will be 2 A
> - this still leads to 0 W
> - the energy is stored in the inductance of the TL
> - Thevenin will dissipate 200 W
> - Norton will dissipate 0 W
>
> The so called 'reflected power' is the same but the dissipations are all
> different.
>
> Some might argue that it is the 0 frequency case that is special and that
> 'reflected power' makes sense for non-zero frequency.
>

It makes exactly the same sence as non-zero frequnency so long as the
correct relationships for voltage and current are established everywhere in
the system.

> Let us consider an open-circuited TL of several wavelength driven by a
> matched generator.
> After time 2 * t there is a standing wave on the line.
> At the end of the line the current must be zero since it is open-circuit.
> Every 0.5 wavelength back from the end the current is 0.
> 0.25 wavelengths from the end the voltage is 0.
> Every 0.5 wavelength back from there, the voltage is 0.
> We know that power is voltage times current.
> Since every quarter wavelength back from the end, either the voltage or
> the current is always 0, the power must be 0, so there is no energy
> flowing across these points.
> If there is no energy flowing, there can not be any 'reflected power'
> flowing unless 'reflected power' is not actually a flow of energy and
> therefore not a power.
>

Again there is a confusion between traveling power and net or delivered
power. There is energy flowing across these points in the form of a forward
traveling wave and a rearward traveling wave. The net energy flow or
delivery is zero because two waves with real energy exist - one traveling in
the forward direction and one traveling in the rearward direction.

> And this is the answer. 'Reflected power' results from a computation
> that yields a dimension of power but does not result in anything that
> is real. This mathematical convenience does have value though, because
> when it is combined with another computation yielding a non-existent
> 'forward power', one can compute SWR and net delivered power.
>
> This is an example of analysis where the intermediate results have no
> physical meaning but the final result is useful. Remembering the type
> of circuit analysis (I can not remember the name) where all voltage
> sources are set to zero and then one-by-one they are set to their
> desired value and the resulting currents are computed. Later all the
> computed currents are summed to find the real currents. While the
> intermediate computations yield values with dimensions of current,
> these currents do not physically exist. A simple example will suffice.
>
> Consider two 10 VDC sources whose negatives are grounded and whose
> positives are connected with a 10 Ohm resistor. Analysis yields 1 Amp
> flowing clockwise and 1 Amp flowing counter-clockwise for a net of
> 0 A in the resistor. The final answer is correct; the intermediate
> answers do not represent currents which are flowing.
>
> To make this very clear, replace the 10 Ohm resistor with a zero Ohm
> resistor. Result: infinite current clockwise, infinite counter-clockwise,
> but the net is still correct at 0.
>
> Never assume that intermediate results, no matter how useful to solving

> the problem, represent real things.
>
> ...Keith
>

3183. Re: dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A2279A1.41C67EA6@rupert.tds-az.lmco.com>
Source record: 175636

Kirby Cave wrote:
>
> many thanks to Jim, Dale and Martin for their suggestions.
> i'm not married to that balun, mostly it represented a
> convenient, weatherproof center insulator. think i'll rig
> up a couple of capacitance hats today and see what happens,
> otherwise install a plain center insulator and remove the balun.
>

As a matter of course, I use a balun on all my center fed antennas.
Like you, it is mostly a convenient weather proof center insulator.
However, I haven't had a balun cause me any problems.

> trying to avoid a 15 meter trap cause eventually i planned
> to add 40 meter coax traps and additional wire to the ends
> for 80. thought 2 traps per leg would cause too much sag.
>

I use coax traps wound on PVC couplings and find that they
are very light. They don't add very much to the sag. My
antenna has 3 traps per leg with no sag problem, but then
I also have a center support.

I limited my antenna to 40, 20, 15, and 10 Meters due to
bandwidth problems on 80 Meters. The 80 Meter band is kind
of wide and trap antennas tend to be a little narrow banded.
If you have a small section of 80 Meters in mind for operation,
then there isn't much of a problem. As a guess, I would think
you will only get about 100 KHz of bandwidth.

When you work with traps, you will need some test equipment.
A Grid Dip Meter seems to be almost essential. The trap should
be adjusted for resonance before installing in the antenna.
Once the trap is installed, you can not get a good reading
on it any more. And, due to the shortening effect of the traps,
it is a good idea to have a antenna analyzer to find out where
the resonances have moved to. After that, adjustment is pretty
simple.

At one time I used an end fed wire that was about 96 feet
long with 5 or 6 burried radials. It operated as a 3/8
wavelength radiator on 80 Meters and 3/4 wavelength on
40 Meters. On 40 Meters it needed a 4:1 "unun" and on
80 Meters it required a 150 pF variable capacitor in series
with the radiator. On 80 Meters, the bandwidth was not very
wide but it was easy to adjust for 1.1:1 SWR anywhere in

the band.

This end fed wire also operated on 15 Meters with a SWR under
2:1, across the entire band.

Wider bandwidth antennas for 80 Meters are possible.
I have also, at one time, constructed a coaxial antenna
that would give about 350 KHz of bandwidth on 80 Meters.
It's a rework of a Off Center Fed antenna but built with
coax. Coaxial antenna don't tend to be very efficient, but
it does work. The same antenna also covers about 500 KHz on
40 Meters.

I made a scaled down version for 40/15 that also works well.

> btw, rig is ten tec triton iv. now the days when i would
> tune my dx100 into a light bulb, and didn't know (or care)
> what the swr was, look nice and uncomplicated...

I still run all of my Heath gear and still, sometimes, ignore
the SWR and just load and operate. I've never blown up a
final yet, and I still get contacts.

Well, just some more ideas.

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

3184. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <KdvU5.7529$FT.447610@bgtnsc04-news.ops.worldnet.att.net>
Source record: 175637

"Keith Dysart" <dysart@nortel.ca> wrote in message
news:8vis99$4f4$1@bcarh8ab.ca.nortel.com...
>>
> <snip>
> To carry the study a bit further we can ask what is happening in the
> generator after time 2 * t.
> If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> If we assume Norton, it is dissipating 200 W.
> Dissipation in generators depends more on generator design than 'reflected
> power'. Any argument that 'reflected power' is dissipated in the generator
> can easily be shown to be false by substituting Norton for Thevenin or
vice
> versa.
>
> For a short-circuited TL after 2 * t:
> - the voltage will be 0 V everywhere
> - the current will be 2 A
> - this still leads to 0 W
> - the energy is stored in the inductance of the TL
> - Thevenin will dissipate 200 W
> - Norton will dissipate 0 W
>
> The so called 'reflected power' is the same but the dissipations are all
> different.
>
> Some might argue that it is the 0 frequency case that is special and that
> 'reflected power' makes sense for non-zero frequency.
>
> <snip>
>
> ...Keith
>

Hi Keith:

All of the exact same concepts discussed in my previous post also apply to the situation with a Norton equivalent circuit. In this case, we first need to correctly define the Norton circuit. It must be a circuit which delivers a *forward* current of 1 A to the transmission line. Let's assume that the Norton circuit is a current source of 2 A and a parallel impedance of 50 ohms.

At time T=0, the current source sees a total impedance of 25 ohms and it delivers a forward traveling current of 1 A to the transmission line and 1 A to the internal source impedance. The total voltage across the internal

impedance is 50 V and the forward traveling voltage in the transmission line is 50 V.

The 1 A of current arrives at the open circuit termination and a reflected current of 1 A is created and travels rearward towards the Norton generator. At time T=2t, the Norton current source is still delivering 1 A to the internal impedance and 1 A to the transmission line. However, there is a rearward traveling current of 1 A arriving back at the transmission line input. The total or net current delivered to the transmission line is 0 A (I+ - I-). The total current developed in the internal source impedance is now 2 A. 1 A from the source and 1 A from the reflected wave.

If you draw the steady state Norton circuit, transmission line and all currents you would see a 2 A source delivering 1 A to the source impedance and 1 A to the TL. There would also be 1 A returned from the TL, it is delivered to the internal source impedance.

Perhaps the most significant concept in all of this is understanding what reflected power means to the transmitter or the source. We cannot look at the problem in terms of power delivery. For example, if 50 watts of reflected power arrives back at a matched source, this does not mean that the source must dissipate or absorb this 50 watts of power. We must not approach the analysis with a thought process that requires us to account for 50 watts of "additional" internal power dissipation. It does not happen this way. All that we need to consider is how voltages and currents combine in the source and in the transmission line. The steady state voltages and currents developed within the source are a function of the source voltage or current and the reflected voltage and current arriving back at the source. The steady state voltage and current developed in the source are a net combination of the two. The internal power dissipation occurring within the source is a function of how the voltages and currents develop.

In the Thevenin and Norton circuits, we see two different internal power dissipation but both are correct given the defined source parameters and the reflected voltage and current. Both examples are consistent with circuit theory and transmission line theory. Both correctly describe the affect of the wave reflections in the transmission line. The fact that the "power dissipation" in each example is different in meaningless in terms of understanding wave behavior in transmission lines.

Steve VE9SRB

3185. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a2288c2.6632182@news1.pei.sympatico.ca>
Source record: 175638
Cross-posted to: alabama.birmingham.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Bill Meacham <exray@coqui.net> wrote:

>KG4FGN wrote:
>>
>> This makes me curious. In the US, is it legal to operate a CB that has been
>> converted to 10 meter Ham operation, assuming of course you are a legally
>> licensed ham with privileges on 10m? I'm not sure how this would be
>> different from building your own radio from scratch, which is legal.
>>
>> If it is illegal, I'm wondering how other countries view this kind of thing.
>>
>> Just curious,
>>
>> Robert / KG4FGN
>>
>Yes its perfectly legal, but not vice-versa.
>--
>-Bill Meacham
>Vieques, PR

Perfectly legal in Canada as well...

--
Gord Beaman
PEI Canada.

3186. Site Update at - www.ab7sl.com -

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <HOvU5.11205$nh5.926921@newsread1.prod.itd.earthlink.net>
Source record: 175639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Check it out.....

1.Check out the all new LOGO on the homepage...
2.New question and answer added to the FAQ Page

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages

Downloadable IOTA List
Live DX Cluster Telnet Links
Online DX Logbook
http://www.ab7sl.com

3187. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: David Ackrill <Nospam@thanks.com>
Message-ID: <3a228e73_2@news1.vip.uk.com>
Source record: 175640
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Gord Beaman wrote in message <3a2288c2.6632182@news1.pei.sympatico.ca>...
>Bill Meacham <exray@coqui.net> wrote:
>
>>KG4FGN wrote:
>>>
>>> This makes me curious. In the US, is it legal to operate a CB that has
been
>>> converted to 10 meter Ham operation, assuming of course you are a
legally
>>> licensed ham with privileges on 10m? I'm not sure how this would be
>>> different from building your own radio from scratch, which is legal.
>>>
>>> If it is illegal, I'm wondering how other countries view this kind of
thing.
>>>
>>> Just curious,
>>>
>>> Robert / KG4FGN
>>>
>>Yes its perfectly legal, but not vice-versa.
>>--
>>-Bill Meacham
>>Vieques, PR
>
>Perfectly legal in Canada as well...

(Cross posting limited to just the Usenet groups that I am subscribed to.
;-))

It used to be illegal, in the UK, to import or own single band 10m gear.
The excuse given was that this was to stop people importing 10m gear and
then modify it for use on 11m.

It was also illegal to buy an illegal, in the UK, 11m rig and to modify it
for 10m. it was, however, OK to buy a legal, in the UK, 11m rig and modify
it for 10m use.

The importation and ownership of single band gear for the 10m band, by
licenced radio amateurs, is now legal once again in the UK. I'm not sure
about the modification of illegal 11m gear to 10m though.

de Dave (G0DJA)

3188. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vu4bu$622$1@iac5.navix.net>
Source record: 175641
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ann Arbor terminals had a slashed zero as did all of our competitors. The
IBM 3270 and compatibles had a dot in the center. The early computers did
not have video displays, they used ASR33's and other Teletype Corporation
products as I/O. The early computers that used Video terminals carried over
the slash zero as they were called "glass TTY's".

"Brad Thompson" <brad.thompson@valley.net> wrote in message --
> Also, IIRC many of the late-1970s-vintage "dumb terminals" (e.g.,
Televideo
> 910, ADM xx, etc.) either included a permanent slashed zero in their
> character-display ROMs or had a switchable option to display either a
> slashed zero (or one with a dot in the center?). Can anyone confirm this?
>
> 73--
> Brad AA1IP
>

3189. Re: RF volt meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A22984E.34473B2@bellatlantic.net>
Source record: 175642

See the RF Sniffer article by Rich Littlefield in Nov. (?) 2000
QST - it may suit your needs, or at least give you some ideas.

PDRUNEN wrote:

> Hi Group,
>
> Anyone know of a cheap RF voltmeter device that can be connected
> between a VOM and circuit? I need to be able to read rf down to -30dbm.
>
> Thanks,
>
> Paul
> KJ4UO

3190. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g4ouu00.pminews@ca.news.verio.net>
Source record: 175643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 26 Nov 2000 16:20:22 -0800, Jim Pennino wrote:

>> If I remember correctly, the ASR-33 had a slash through the zero.
>
>Yep, so did the -35 series and probably others. My first "home computer"
>had a KSR-35 as a console. Jeez that dates me...

Almost as much as we Model 15 freaks....I don't remember what
model "TeleType" my father had in his office at the NY
Mercantile Exchange but it was in 1947.....and there was a live
"operator" on the other end of the line to chat with while
waiting for real traffic.

73 de Phil Kane - K2ASP

3191. Re: RF volt meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A229F06.167EB0E7@rupert.tds-az.lmco.com>
Source record: 175644

PDRUNEN wrote:
>
> Hi Group,
>
> Anyone know of a cheap RF voltmeter device that can be connected
> between a VOM and circuit? I need to be able to read rf down
> to -30dbm.
>
> Thanks,
>
> Paul
> KJ4UO

In the "Test Equipment" section of any ARRL Handbook, for the last 20 years or so, is a description of a RF Probe that is ment to be used ahead of a VOM/VTVM. It only consists of a diode, capacitor, and a resistor. They are pretty simple but I wouldn't count on them being very accurate, if that's what your are looking for. Maybe if you had something to calibrate it against, and used a high impedance voltmeter (DVM, VTVM, FET VM, etc.) you could get a reasonable calibration. And, depending on what frequencies it is needed for, construction quality will come into play. The higher the required frequency, the more sensitive it is going to be to layout.

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

3192. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: stanb@dial.pipex.com
Message-ID: <20001127180822183731 8@usercd66.uk.uudial.com>
Source record: 175645
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Brad Thompson <brad.thompson@valley.net> wrote:

> Jim Pennino wrote:
>
> > In rec.radio.amateur.antenna Cecil <Cecil.A.Moore@ieee.org> wrote:
> > > Paul Keinanen wrote:
> > >> As far as I can figure out, there has never been any slashed zero
> > >> characters in any computer character sets.
> > >
> > > If I remember correctly, the ASR-33 had a slash through the zero.
> > > --
> > > http://www.mindspring.com/~w6rca
> >
> > Yep, so did the -35 series and probably others. My first "home computer"
> > had a KSR-35 as a console. Jeez that dates me...
>
> Hello--
> Also, IIRC many of the late-1970s-vintage "dumb terminals" (e.g., Televideo
> 910, ADM xx, etc.) either included a permanent slashed zero in their
> character-display ROMs or had a switchable option to display either a
> slashed zero (or one with a dot in the center?). Can anyone confirm this?
>

My old Qume QVT-103 has a permanent slash-zero - the terminal is still
in use with a PDP-11 emulator running on a 486!
--
Stan Barr stanb@dial.pipex.com

The future was never like this!

3193. Re: A New In-Line HF Return Loss (SWR) & Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8vuark$5t1$1@nnrp1.deja.com>
Source record: 175646

Although I haven't totally digested Paul's article, it's for sure well written with lots of work behind it and looks like a really significant contribution. Thanks VERY much, Paul! Are you planning to get it published in a journal, too?

Cheers,
Tom

In article <3A1BBD45.63302AF1@att.net>,
Paul Kiciak <pkiciak@att.net> wrote:
> I've just put a new website together that describes a design for a
> return loss and power meter. Using this meter, you can measure up to
30
> dB of return loss, which is equivalent to a 1.07:1 SWR, with as little
> as 1 milliwatt of forward power or as much as 300 watts. And it will
> also display forward power from 10 milliwatts to 300 watts.
>
> If you're interested, go to:
>
> http://home.att.net/~n2pk/
>
> All comments or questions, sent to this ID or n2pk@att.net, would be
> appreciated.
>
> 73,
> Paul, N2PK
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3194. proximity to powerline/interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: replytousenet@usenet.com
Message-ID: <3a22a76e.9552708@news.state.mn.us>
Source record: 175647

I've got about 100' of horizontal tree free run to put a wire antenna.

(likely a carolina windom variant 80-10 meters)

However, this would mean putting the antenna parallel to my
150amp overhead power feed from the power pole at a distance
of about 10 (closest) to about 30 feet (farthest).

This feed has an uninsulated ground wire and 2 insulated 120VAC
lines, wrapped into one cable.

What amount of interference is to be expected with this configuration?
Will filters reduce/solve interference problems. Any rules as to how
close you can get to such a power line feed?

MUCH THANKS for any ideas....

3195. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vua47$8cp$1@iac5.navix.net>
Source record: 175648

Left out of your careful thought is the re-radiation of the antenna that is
the thief. :>)
"David" <rangin@hotmail.com> wrote in message
news:8vt56d$fs7$1@ftp.curtin.edu.au...
>
> This is a not-so-stupid question I have often idly pondered myself. My
> reasoning is as follows. An antenna placed in an electric field and
> terminated so that it extracts power from the field would be expected to
> make that field non-uniform, more so in the close vicinity of the antenna.
> If this happens over a volume much larger than that physically taken up by
> the antenna then power is being "stolen" from other areas in the field and
> the neighbour gets less signal.
> Using the reciprocity theorem for antennas: just as a transmitting
antenna
> creates an electrical field strength over a volume of space, I can't see
> why an identical terminated receiving antenna shouldn't reduce the field
> strength of any external incident wave in the same way over a similar
> volume.
> Anyone wanna comment (or is this just obvious and I don't need to devote
my
> last few grey cells to it)?
>
> David
>
>

3196. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vuab5$8ec$1@iac5.navix.net>
Source record: 175649
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Both examples use the extended ASCII character sets associated with your particular code page. A true slash zero will display with the normal ASCII zero in the 128 character code set (030)

"Paul Keinanen" <keinanen@sci.fi> wrote in message >
> On a Windows machine hold down "alt" key and type 0248, like this ø
>
> ... and you have a "lower case slashed zero".
>
>

3197. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <8vuamh$8jk$1@iac5.navix.net>
Source record: 175650

I find myself in total agreement with Chip on this one. If it is about antennas it should be allowed. The sale of antenna books etc reaches a more focused audience here than in a for sale conference that many of us do not even subscribe to.

If someone were to list a radio or a power supply for example, those objecting would be on firmer ground. Worrying about antenna books on an antenna conference is really "picking fly deification out of the pepper".

"Fractenna" <fractenna@aol.com> wrote in message
news:20001127003307.07641.00001769@ng-fy1.aol.com...
> >Fractenna wrote:
> >> >But it violates the newsgroup guidelines ...
> >
> >> I disagree with said rule.
> >
> >One of the things wrong with this newsgroup is people not following
> >the guidelines. The ad hominem attacks upon you are also against the
> >guidelines. Guideline violators decrease the usefulness of the
> >newsgroup for everybody, including themselves.
> >
> >For the record: Chip and I were friends before we encountered each
> >other on this newsgroup and this is a simple disagreement between
> >friends.
> >--
> >http://www.mindspring.com/~w6rca
> >
>
>
> I agree on the last:-)
>
> My point is that although I disagreewith the 'for sale' rule, I hold it
up to
> the individual to decide. I see no one harmed by breaking it.
>
> It's up to him--as I said.
>
> 73
> Chip N1IR

3198. wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Skipp wants a max con box <skipp@pilot.ucdavis.edu>
Message-ID: <8vuba6fvk2@mark.ucdavis.edu>
Source record: 175651

Hello there,

I'm looking for a Max-con antenna box/tuner. If you have one or the instructions manual for one, I'd like to buy the box and/or a copy of the paperwork. The box is a wire antenna interface unit that's often called a tuner box or similar. I know they were made in the 80's or early 90's.

thanks, email me if you can help.

skipp@pilot.ucdavis.edu

3199. Re: wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <EDyU5.4$d5.134321@news.ntplx.net>
Source record: 175652

Skipp wants a max con box <skipp@pilot.ucdavis.edu> wrote:

> I'm looking for a Max-con antenna box/tuner. If you have one or the
> instructions manual for one, I'd like to buy the box and/or a copy of the
> paperwork. The box is a wire antenna interface unit that's often called a
> tuner box or similar. I know they were made in the 80's or early 90's.

If you are referring to the Maxcom "automatic antenna tuner," you may want to know before you obtain one that the one that was Product Reviewed by ARRL contained only a resistive network inside that ensured that no matter what impedance was present on the output terminals, the SWR at the input would be 2:1 or better. It also had a printed circuit board inside that was found to be scrap board cut to fit the space, not actually connected to anything.

There is nothing inherently wrong with the technique; the military uses is to help ensure that no matter what antenna they cobble together, their transmitters will see a reasonable load. The efficiency can be as good as 50%, and as low as a few percent or so.

ARRL members can view the Product Review (November 84) at:

http://www.arrl.org/members-only/prodrev/pdf/pr8411.pdf

73,
Ed Hare, W1RFI

3200. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a80a376.2841553598@news.seanet.com>
Source record: 175653

On Sun, 26 Nov 2000 23:48:35 -0600, Bill Aycock <baycock@hiwaay.net>
wrote:

>Robert Burns said something like:
>
>"Oh wad some power the giftie gie us
>To see oursels as others see us!
>It wad frae monie a blunder free us,
>An' foolish notion."
>
>What we see of your actions, and what you claim, are two different things.
>
>Too bad.
>
>Bill
>

Hi Bill,

More to the matter (from Burns):
> Wee, sleeket, cowran, tim'rous Beastie,
> what a panic's in thy breastie!
> Thou need na start awa sae hasty,
> Wi' bickering brattle!
> I wad be laith to ruin an' chase thee,
> Wi' murderin pattle!
...
> But, Mousie, thou art no thy-lane,
> In proving foresight may be vain:
> The best laid claims o' Mice an' Men,
> Gang aft agley,
> An' lea'e us nought but grief an' pain,
> For promis'd joy!

With more bite from a period nearly 200 years before:
> The Lie
> by Sir Walter Ralegh
>
> Go, Soul, the body's guest,
> Upon a thankless arrant:
> Fear not to touch the best;
> The truth shall be thy warrant:
> Go, since I needs must die,
> And give the world the lie.
...

> Tell men of high condition,
> That manage the estate,
> Their purpose is ambition,
> Their practice only hate:
> And if they once reply,
> Then give them all the lie.
...
> Tell arts they have no soundness,
> But vary by esteeming;
> Tell schools they want profoundness,
> And stand too much on seeming:
> If arts and schools reply,
> Give arts and schools the lie.
...
> So when thou hast, as I
> Commanded thee, done blabbing
> - Although to give the lie
> Deserves no less than stabbing -
> Stab at thee he that will,
> No stab the soul can kill.

In consideration of the last quote, posters should be careful of their comments in response.

73's
Richard Clark, KB7QHC

3201. Re: proximity to powerline/interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <hWyU5.5$d5.135544@news.ntplx.net>
Source record: 175654

nuncatime <replytousenet@usenet.com> wrote:

> However, this would mean putting the antenna parallel to my
> 150amp overhead power feed from the power pole at a distance
> of about 10 (closest) to about 30 feet (farthest).

> This feed has an uninsulated ground wire and 2 insulated 120VAC
> lines, wrapped into one cable.

> What amount of interference is to be expected with this configuration?
> Will filters reduce/solve interference problems. Any rules as to how
> close you can get to such a power line feed?

The amount of interference you can expect can range from almost none to unbearable. If there are no power-line problems, or nearby neighbors with noisy devcies, what you propose can work out well. If there are power line problems or other neighborhood noisy devices, the RF noise can be on the power lines and will couple into the feed to your house. In that case, the proximity of the antenna to the line will probably give you trouble.

It sounds like the antenna will be relatively easy to install, so I suggest you try it and find out whether you will have a problem. If you do, using a narrow filter on CW may help, but on SSB, filtering won't really remove much of the noise. Some DSP filters have "denoising" algorithms, which may help, but these generally work by improving a marginal signal to noise ratio, not by reducing noise. For example, if you have a 10 dB S/N ratio on a signal, it can improve it to 20 dB, making it sound more pleasant, but if the signal is buried in the noise, it will stay buried, even with denoising DSP.

The type of filter that can help in some circumstances is a "noise cancelling" type of filter. This device works by combining out of phase the noise picked up by a sense antenna (located to pick up more noise than signal) with the signal from your main antenna (hopefully designed to pick up more signal than noise.)

The ARRL has a web page on power-line interference at http://www.arrl.org/tis/info/rfi-elect.html. The URL has links to the Product Reviews for noise cancelling filters.

I will add that I would be equally concerned about the safety aspects of locating an antenna that close to your service feed. Do ensure that if the antenna ever comes loose, it cannot fall onto the line.

73,
Ed Hare, W1RFI

> MUCH THANKS for any ideas....
>
>
>
>

3202. 80m twin feeder antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <8vta99$pu8$1@www1.kis.keele.ac.uk>
Source record: 175655

Hello.

I'm restricted on space at my QTH (as a lot of people are!) and have a doublet that works happily between 40 and 10m as well as a vertical for same. Workable space is approx 70ft from chimney to end of yard with height restrictions due to overhead phone lines.

I recall seeing a website or article that made a 80m band aerial using twin feeder but can't find it now. I think it was similar to an antenna being marketed here in the UK called an 80 plus 2 (80/40/20m) which is a sort of 50ft doublet-ey (!) thing or similar - but definately used twin feeder along its length - obviously to get enough wire out for 80m coverage. Something similar appeared in RadCom Technical Topics, but again the copy is eluding me - meaning its probably a very old but simple design.

(I was advised to run a long loop with a 300 or 450ohm balun but feel this needs height, which I sadly lack - would it work lower to the ground?)

Any suggestions, etc, more than welcome.

Leigh....M5GWH

--
+ + + + + Leigh Preece + + Keele University, Staffordshire, UK + + + + +
+ + Email - Internet: leigh@media.keele.ac.uk + +
>> M5GWH << UK >> IO83VA <<
+ + A sideways glance at Broadcasting - http://www.transdiffusion.org + +

3203. Re: 80m twin feeder antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A22F68E.AD523D95@qth.com>
Source record: 175656
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Hi Leigh, my 80 meter loop (sorta !! it goes everywhere) is only about 6 feet above my house and works fine.. There is a dipole called "Kansas" dipole that is made of ladder line with a third wire tied in the middle of it, that is great on 40 and decent on 80...as I recall it is only 60 feet total length...so it makes a good inverted vee or flat top in 60 or so feet...The loop works better even at a lower height tho, I would think about 16 feet or 5-6 meters would be the lowest you could use it at...it does load other bands well, and if you feed it (loop) with ladder line , especially at 1/4 wave to 40 meters, the put a 4:1 balun it, its good everywhere...73 best of luck...Murray PS...THE G5RV fits your description of short all band I think, are you familiar with it? M

Leigh Preece= wrote:

> Hello.
>
> I'm restricted on space at my QTH (as a lot of people are!) and have a
> doublet that works happily between 40 and 10m as well as a vertical for
> same. Workable space is approx 70ft from chimney to end of yard with height
> restrictions due to overhead phone lines.
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> I recall seeing a website or article that made a 80m band aerial using twin
> feeder but can't find it now. I think it was similar to an antenna being
> marketed here in the UK called an 80 plus 2 (80/40/20m) which is a sort of
> 50ft doublet-ey (!) thing or similar - but definately used twin feeder along
> its length - obviously to get enough wire out for 80m coverage. Something
> similar appeared in RadCom Technical Topics, but again the copy is eluding
> me - meaning its probably a very old but simple design.
>
> (I was advised to run a long loop with a 300 or 450ohm balun but feel this
> needs height, which I sadly lack - would it work lower to the ground?)
>
> Any suggestions, etc, more than welcome.
>
> Leigh....M5GWH
>
> --
> + + + + + Leigh Preece + + Keele University, Staffordshire, UK + + + + +
> + + Email - Internet: leigh@media.keele.ac.uk + +
> >> M5GWH << UK >> IO83VA <<
> + + A sideways glance at Broadcasting - http://www.transdiffusion.org + +

[One or more binary attachments are retained only in the source text.]

3204. Re: 80m twin feeder antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A22F7E1.512EF115@qth.com>
Source record: 175657
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Hi Leigh, my 80 meter loop (sorta !! it goes everywhere) is only about 6 feet above my house and works fine.. There is a dipole called "Kansas" dipole that is made of ladder line with a third wire tied in the middle of it, that is great on 40 and decent on 80...as I recall it is only 60 feet total length...so it makes a good inverted vee or flat top in 60 or so feet...The loop works better even at a lower height tho, I would think about 16 feet or 5-6 meters would be the lowest you could use it at...it does load other bands well, and if you feed it (loop) with ladder line , especially at 1/4 wave to 40 meters, the put a 4:1 balun it, its good everywhere...73 best of luck...Murray PS...THE G5RV fits your description of short all band I think, are you familiar with it? M

Leigh Preece= wrote:

> Hello.
>
> I'm restricted on space at my QTH (as a lot of people are!) and have a
> doublet that works happily between 40 and 10m as well as a vertical for
> same. Workable space is approx 70ft from chimney to end of yard with height
> restrictions due to overhead phone lines.
>
> I recall seeing a website or article that made a 80m band aerial using twin
> feeder but can't find it now. I think it was similar to an antenna being
> marketed here in the UK called an 80 plus 2 (80/40/20m) which is a sort of
> 50ft doublet-ey (!) thing or similar - but definately used twin feeder along
> its length - obviously to get enough wire out for 80m coverage. Something
> similar appeared in RadCom Technical Topics, but again the copy is eluding
> me - meaning its probably a very old but simple design.
>
> (I was advised to run a long loop with a 300 or 450ohm balun but feel this
> needs height, which I sadly lack - would it work lower to the ground?)
>
> Any suggestions, etc, more than welcome.
>
> Leigh....M5GWH
>
> --
> + + + + + Leigh Preece + + Keele University, Staffordshire, UK + + + + +
> + + Email - Internet: leigh@media.keele.ac.uk + +
> >> M5GWH << UK >> IO83VA <<
> + + A sideways glance at Broadcasting - http://www.transdiffusion.org + +

[One or more binary attachments are retained only in the source text.]

3205. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: xpyttl <xpyttl@earthling.net>
Message-ID: <n%AU5.118815$hD4.29326569@news1.rdc1.mi.home.com>
Source record: 175658
Cross-posted to: alabama.birmingham.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

"KG4FGN" <kg4fgn@mindspring.com> wrote in message
news:8vsfrhrkt1@slb7.atl.mindspring.net...
> This makes me curious. In the US, is it legal to operate a CB that has
been
> converted to 10 meter Ham operation, assuming of course you are a legally
> licensed ham with privileges on 10m? I'm not sure how this would be
> different from building your own radio from scratch, which is legal.

Amateurs have a very privileged status in the U.S. Every other service may only operate type accepted equipment. We can operate any piece of junk that we can buy, build, modify or cobble together, as long as it meets the technical standards of the service. As technically skilled operators, we are expected to understand that our equipment does meet those standards.

The only limitation applies to external power amplifiers below 144, and specifically between 24 and 35MHz, where there are some restrictions on what we can build/cobble together.

didleydadidah

3206. G5RV 300 Twin or 450 Ladder ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: "Andrew J. O'Brien" <obrienaj@netsync.net>
Message-ID: <t25nn8c4d3caf5@corp.supernews.com>
Source record: 175659

I have a G5RV Junior which works well and was thinking about putting up a second one, this time the full G5RV. I have some spare 450 ladder line but see in some articles that 300 ohm twin lead should be used. I found this reference to 300 Ohm performance

MHz Twinlead/Coax Junction Impedance 50 ohm Coax SWR
3.8 14.6 + j2.9 3.44
7.2 27.9 - j54.8 4.3
10.125 31.6 + j274 50
14.2 103 - j49 2.6
18.14 44.3 - j290 40
21.3 24.2 + j80.7 7.8
24.95 79.3 + j41.5 2.2
28.4 3049 + j655 64

Anyone know how it compares with 450 ladder line ?

Andy KB2EOQ
]

3207. Re: RF volt meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8vunjp$6so$1@bob.news.rcn.net>
Source record: 175660

I've seen Boonton 92 series RF Millivoltmeters being sold on eBay for
give-away prices. Just make sure the unit works and has a good probe.

Peter

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20001126215823.17287.00002291@ng-cg1.aol.com...
> Hi Group,
>
> Anyone know of a cheap RF voltmeter device that can be connected
> between a VOM and circuit? I need to be able to read rf down to -30dbm.
>
> Thanks,
>
> Paul
> KJ4UO

3208. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A22E465.AF749AE9@eznec.com>
Source record: 175661

The FCC shows this range as being "private land mobile". A quick search
of licensees here in Oregon shows a lot of transmitters licensed by
McDonalds, Taco Bell, and similar companies, with a few assignments to
local governments. You should be able to get better information by
asking on rec.radio.scanner.

Roy Lewallen, W7EL

"R.Wilhelm" wrote:
>
> Hi all,
>
> a friend of minr lost a remote controlled model airplane a few weeks ago.
> The frequency he used for the remote control is close to 35 MHz. Because
> all electrical circuitry was working he asked me to find out, what might
> be the reason, IE if there was any interference possible. Apart from the 3
> rd harmonic of Radio Jordan I found some american accent radio traffic
> between 35 and 42 MHz. Since it sounded like american CB stations here in
> europe (you hear tens of stations at a time), I was not able to find out
> what it was. Could anyone tell me what kind of service allocated there ?
>
> Vy 73
>
> Ralf
>
> DL 6 OAP
>
> ===
> Ralf Wilhelm
> Inst. f. Quantenoptik
> Universitï¿½t Hannover
>
> Welfengarten 1
>
> 30167 Hannover
>
> Tel: +49 511 762 2232
> ===
> Hannover, Germany, where mankind's first motorized flight took place:
> Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
> (When will history notice this ?)
> ===

3209. Re: wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: burke_br@freemark.com
Message-ID: <3a22e40b.1075233@news.surfree.com>
Source record: 175662

On 27 Nov 2000 19:05:42 GMT, Skipp wants a max con box
<skipp@pilot.ucdavis.edu> wrote:

>
>Hello there,
>
>I'm looking for a Max-con antenna box/tuner. If you have one or the
>instructions manual for one, I'd like to buy the box and/or a copy of the
>paperwork. The box is a wire antenna interface unit that's often called a
>tuner box or similar. I know they were made in the 80's or early 90's.
>
>thanks, email me if you can help.
>
>skipp@pilot.ucdavis.edu

If you're referring to the Maxcom "Automatic Antenna Matcher" - it is
nothing more than a dummy load onto which you hang wire.

If I were you, I wouldn't waste my time on it.

Regards,

Bruce

"An elected despotism is not the government we fought for." --Thomas
Jefferson

3210. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <w+L8SEAv0tI6EwFc@g3ohx.demon.co.uk>
Source record: 175663

In article <3a21cec1$2$efzvgf$mr2ice@news>, rsmits@home.com writes
>In <LW7yYEAvPFI6Ewh7@g3ohx.demon.co.uk>, on 11/26/2000
> at 12:06 AM, Ian Jackson <ianjackson@g3ohx.demon.co.uk> said:
>
>>In article <8vn7f9$2rcg$1@corolla.OntheNet.com.au>, Chickenhawk
>><chickenhawk@softhome.net> writes
>>>Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
>>>to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
>>>would be greatly Appreciated
>>>Thanks In advance
>>>73's
>>>
>>>
>>I don't want to be a pessimist, but I'm afraid that they will be pretty
>>large plans (ie, large antenna!). Reliable reception of FM radio
>>frequencies at that sort of distance will be really difficult, even with
>>a large, high-gain antenna. Even if you do put up an antenna of fantastic
>>gain, the problem is that you are likely to pull in all the stations
>>'down the beam' of the antenna, to a distance of over 2000 miles. I don't
>>think that there is a satisfactory solution.
>
>While I agree he will have difficulty unless both he and the transmitting
>station are on large mountaintops, he's talking about a distance of about
>210 miles, not 2000. There are commercially available high gain FM
>antennas, at least in North America. I bought one in Canada for about a
>hundred dollars a decade ago, but line of sight at ground level is
>generally about 40 miles only. You'd be lucky to get much more than 50 or
>60 miles unless one end or both had significant elevation.
>
>Bob, VE7HS, Ladysmith BC

Under 'lift' and sporadic-E conditions, he could easily pull in stations well in excess of 250km, but still rarely hear the station he wants. As you say, Bob, you are unlikely to get more than 50 or 60 miles (say 85 to 100km), and I presume that you also mean under 'flat' conditions. You can probably NEVER get 250 km under really flat conditions, regardless of the gain of the antenna.

The situation is somewhat similar to the reception in the Irish Republic of TV transmissions from 'over the water' in the UK. At UHF, one receiving site (which fed a cable TV system) got pretty consistent, good signals at a distance of about 120 miles (although with occasional deep fading into the noise). However, as the UK UHF TV network spread, problems of co-channel interference began to cause problems. They get the signals by other means these days.

Ian.

3211. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <sNOLOJA4ruI6EwVA@g3ohx.demon.co.uk>
Source record: 175664
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <8vuab5$8ec$1@iac5.navix.net>, Fred Hambrecht
<Fred@w4jle.com> writes
>Both examples use the extended ASCII character sets associated with your
>particular code page. A true slash zero will display with the normal ASCII
>zero in the 128 character code set (030)
>
>"Paul Keinanen" <keinanen@sci.fi> wrote in message >
>> On a Windows machine hold down "alt" key and type 0248, like this ï¿½
>>
>> ... and you have a "lower case slashed zero".
>>
>>
>
>
On my machine you get a 'ï¿½' like this...
Turn on the 'num lock'.
While holding down 'alt' type 0, then 2, then 1, then 6 ON THE NUMERIC
KEYBOARD (or whatever you call it - you know what I mean - the one which
has the 'home', 'pg up', 'end' etc). After you have typed the '6',
release the 'alt' key.. and up pops the 'ï¿½'.

Note: the 'top row' numbers DO NOT work.

Cecil (W6RCA) did post (some time ago) a list of the interesting
characters which he had found between 'alt0130' and 'alt0255', although
I find that mine seem to start at 'alt0161' (I only get 'ï¿½' before
that). 'Alt0181' is a useful one - it's 'ï¿½'.

There are two problems...
1. I believe that everybody may not receive the 'correct' character -
eg, the 'alt0181' should be a Greek 'mu' - who didn't get this?
2. I haven't worked out how to do this on a laptop where there is no
numeric keyboard.

ï¿½ï¿½ï¿½ï¿½ï¿½ ï¿½ï¿½w!

Ian.

3212. Need Avanti PDL-II Documentation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: me <me@me.com>
Message-ID: <8vuos2$3pf$1@gaddy.interpath.net>
Source record: 175665

Greetings,

I have recently accquired an old Avanti PDL-II 2 element cubical quad antenna (which I assume was originally used on 11m). I'd like to reassemble it for use on 10m. Unfortunatly, it came with no instructions and missing the hardware and apparently a few other pieces. If anyone has a copy they could spare (or would be willing to make and send me a copy) it would be invaluable. Please drop me an email and let me know what you have.

73 de bill, w4whw
bweinel_nospam_@hotmail.com

PS: remove the "_nospam_" in the above address to email me. Thanks and 73.

3213. slashed zeros ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: DeeJayDubya <davidw@copper.net>
Message-ID: <tuCU5.184$Vr5.157@newsfeed.slurp.net>
Source record: 175666

.. are the ones that try to get between the right coast and Europe or the left coast and Asia at an inopportune time.

73, Dave, K3BHJ

3214. Re: G5RV 300 Twin or 450 Ladder ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A22F791.F10CDD1F@IEEE.org>
Source record: 175667

"Andrew J. O'Brien" wrote:
> Anyone know how it compares with 450 ladder line ?

Since a lot of "450 ohm" ladder line is as close to 300 ohms as
it is to 450 ohms, it shouldn't make a lot of difference. Make the
"450 ohm" series section transformer about 10% longer (about 31 feet)
than the "300 ohm" series section transformer .
--
http://www.mindspring.com/~w6rca

3215. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a230b43_3@news3.prserv.net>
Source record: 175668

Approximately every other megacycle (sorry, I'm old) is allocated to the
government in the US. The alternate megacycles are land mobile, but there
are some 330 watt (RF output + maybe a 6dB gain antenna) paging frequencies
in there, and some are around 35 MHz, IIRC. Police Call from RatShack has
some rudimentary information on services and licensees.

--
Crazy George
Roy Lewallen <w7el@eznec.com> wrote in message
news:3A22E465.AF749AE9@eznec.com...
> The FCC shows this range as being "private land mobile". A quick search
> of licensees here in Oregon shows a lot of transmitters licensed by
> McDonalds, Taco Bell, and similar companies, with a few assignments to
> local governments. You should be able to get better information by
> asking on rec.radio.scanner.
>
> Roy Lewallen, W7EL
>
> "R.Wilhelm" wrote:
> >
> > Hi all,
> >
> > a friend of minr lost a remote controlled model airplane a few weeks
ago.
> > The frequency he used for the remote control is close to 35 MHz. Because
> > all electrical circuitry was working he asked me to find out, what might
> > be the reason, IE if there was any interference possible. Apart from the
3
> > rd harmonic of Radio Jordan I found some american accent radio traffic
> > between 35 and 42 MHz. Since it sounded like american CB stations here
in
> > europe (you hear tens of stations at a time), I was not able to find out
> > what it was. Could anyone tell me what kind of service allocated there ?
> >
> > Vy 73
> >
> > Ralf
> >
> > DL 6 OAP
> >
> >
==========
=
> > Ralf Wilhelm

> > Inst. f. Quantenoptik
> > Universitï¿½t Hannover
> >
> > Welfengarten 1
> >
> > 30167 Hannover
> >
> > Tel: +49 511 762 2232
> >
==========
=
> > Hannover, Germany, where mankind's first motorized flight took place:
> > Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
> > (When will history notice this ?)
> >
==========
=

3216. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 00:27:18 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A21AA0D.2529C4DA@bellatlantic.net>
Source record: 175762

"George, W5YR" wrote:

> To put too fine a point on it, TDR demonstrates that measurable
> reflections take place on a transmission line. We measure these,
> usually, as voltages. It remains to demonstrate that reflected voltage
> "signals" convey "power."
>
> (Just being picky . . .)

No - it doesn't remain to be demonstrated. It IS demonstrated.
The reflected pulse performs work for a specific duration. That
is power. The work it performs causes the scope waveform to
change from a flat line - 0 vdc to a level relative to the magnitude
of the pulse, for the duration of the pulse.

You are confusing a *measurement* of power with a demonstration
of power. TDR does not measure reflected power, but it most certainly
demonstrates that there is reflected power. There is sufficient power in
the reflection to cause the vertical deflection circuitry in the scope to
move the beam.

Furthermore, TDR is a practical application, not a theoretical
discussion. In theory, one can postulate an infinite impedance.
One could then discuss a voltage pulse across an infinite impedance
as not being a demonstration of power.

But the TDR is applied to an actual circuit, in which there must
impedance. If you have a real impedance and a voltage across it,
current will flow and power will be consumed.
Our voltage - the reflected pulse - across an impedance
must result in current flow - and thus, power. The 'scope presents
an impedance to the pulse and thus consumes power. It demonstrates
that power exists by vertical deflection.

3217. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 01:32:18 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <GLkhOoUI+StVv5AjbT8sKSHbJm3N@4ax.com>
Source record: 175763

"w0tok" <w0tok@email.msn.com> wrote:

>I have over 30 antenna related books for sale. For a list
>sent as an MS Word attachment just ask, for the list mailed
>to your address, give me your name and address. Paul Washa,
>W0TOK Mound, MN
>

Why does it have to come as a MS Word attachment? Why can't you put
the list in an e-mail message, or post the list here on the newsgroup?

(MS Word attachments are frequently used by hackers to destroy
computer systems.)

Bob
k5qwg

3218. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 02:12:38 UTC
From: Siggy <reashore@home.com>
Message-ID: <qqjU5.88198$4U6.3411783@news1.rdc2.on.home.com>
Source record: 175764

We did "steal" all the signal on one occassion: As the detachment commander of an AN/VRC-142
HF Radio teletype detachment with the Canadian Forces Signal Branch I was deployed to a small town south of Winnipeg Manitoba. We were working off whip (16') @ 400 watts with a AN/GRC-106A.

Everytime were went on transmit, we blew the entire town off the local television station; needless to say we were not to popular, as we stole thier tv signal. <Grin>

Siggy

"Jim Warner" <jpwarner1@gte.net> wrote in message news:01c05801$7c2cdb60$9ade1b3f@jpwarner...
> While installing my 100' Rohn tower this autumn,
> my neighbor down the road was passing by. While
> gauking up at me planting the second TH-7 in the
> clamps he asked "Is all your big arials gonna steal
> all the signal from mine?"
> WA9Z
>
>

3219. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 02:26:50 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vsgpa$i1f$10@bashir.peak.org>
Source record: 175765

Cecil <Cecil.A.Moore@ieee.org> wrote:
: Bill Nelson wrote:
:> A signal strength meter in the far field is then used to peak radiated
:> power.

: I can see how that would work with vertical antennas, Bill, but
: what about horizontal antennas?

Sure. The polarity does not matter.

You cannot get a good indication of maximum radiated power by measuring
in the near field - or by measuring the rf currents with an inline meter.

The former will produce all sorts of strange results - and the latter
will only tell you how much power is coupled into the antenna, not whether
it is radiated or lost as heat.

I suspect that you are concerned about the earth conducted portion of
the signal. It complicates matters, but the earth conducted and space
wave portions will rise as the antenna is peaked for maximum radiated
signal.

--
Bill Nelson (billn@peak.org)

3220. Where to locate what value of loading coil ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 02:49:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vsiepddf1@plutonium.btinternet.com>
Source record: 175766

NOW AVAILABLE, Program "LOADCOIL.exe"

COIL LOADED VERTICAL OR SLANTING ANTENNAS

This program does a job similar to program Vertload. In some respects it is a more accurate model. It is easier to use - input data is entered in a more logical form and requires less thinking about. Assistance with coil design and performance prediction are the principal features.

In particular, coil height is entered as a percentage of overall antenna height and there are facilities to 'slide' the coil up and down the antenna when searching for the height of maximum efficiency. Overall height, coil length, coil diameter and frequency can also be continuously and rapidly varied in fine incrememts via the keyboard.

Output data is in a more interesting form. The effects of the coil's self-capacitance on self-resonant frequency and on Q when the coil is mounted too high up the antenna are also shown.

The program covers a wide range of antenna proportions, from VHF via 10 to 160 metres, vehicle mounted or at base stations. Anywhere where a vertical or slanting (or perhaps even an inverted L antenna) is appreciably shorter than 1/4 wavelength and performance would benefit from insertion of a loading coil somewhere along its length.

A detailed description of how the location of the coil affects operation is included. Data is provided to assist users to crudely estimate input resistance of a set of buried radials.

One small binary file: 52 kilobytes. Download from website below in a few seconds.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

3221. RF volt meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 02:58:23 UTC
From: pdrunen@aol.com
Message-ID: <20001126215823.17287.00002291@ng-cg1.aol.com>
Source record: 175767

Hi Group,

Anyone know of a cheap RF voltmeter device that can be connected
between a VOM and circuit? I need to be able to read rf down to -30dbm.

Thanks,

Paul
KJ4UO

3222. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 03:02:03 UTC
From: rsmits@home.com
Message-ID: <3a21cec1$2$efzvgf$mr2ice@news>
Source record: 175768

In <LW7yYEAvPFI6Ewh7@g3ohx.demon.co.uk>, on 11/26/2000
at 12:06 AM, Ian Jackson <ianjackson@g3ohx.demon.co.uk> said:

>In article <8vn7f9$2rcg$1@corolla.OntheNet.com.au>, Chickenhawk
><chickenhawk@softhome.net> writes
>>Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
>>to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
>>would be greatly Appreciated
>>Thanks In advance
>>73's
>>
>>
>I don't want to be a pessimist, but I'm afraid that they will be pretty
>large plans (ie, large antenna!). Reliable reception of FM radio
>frequencies at that sort of distance will be really difficult, even with
>a large, high-gain antenna. Even if you do put up an antenna of fantastic
>gain, the problem is that you are likely to pull in all the stations
>'down the beam' of the antenna, to a distance of over 2000 miles. I don't
>think that there is a satisfactory solution.

While I agree he will have difficulty unless both he and the transmitting
station are on large mountaintops, he's talking about a distance of about
210 miles, not 2000. There are commercially available high gain FM
antennas, at least in North America. I bought one in Canada for about a
hundred dollars a decade ago, but line of sight at ground level is
generally about 40 miles only. You'd be lucky to get much more than 50 or
60 miles unless one end or both had significant elevation.

Bob, VE7HS, Ladysmith BC

". . . Microsoft doesn't add value to a word-processor. They just keep changing the
operating system underneath it. It's like changing the color of your walls. It forces you
to change your furniture." --IBM Corporation

--
---
rsmits@home.com

3223. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 03:10:38 UTC
From: rsmits@home.com
Message-ID: <3a21d0c4$3$efzvgf$mr2ice@news>
Source record: 175619
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In <6c9sv8.a0o.ln@mail.specsol.com>, on 11/26/2000
at 04:20 PM, Jim Pennino <jimp@mail.specsol.com> said:

>Yep, so did the -35 series and probably others. My first "home computer"
>had a KSR-35 as a console. Jeez that dates me...

I know how you feel, Jim. My first computer came with the optional 4K
memory. Stndard was 1K, and programs were entered by toggling switches one
bit at a time.

Bob, VE7HS

Breaking Windows isn't just for kids anymore.

--
---
rsmits@home.com

3224. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 05:30:42 UTC
From: fractenna@aol.com
Message-ID: <20001127003042.07641.00001768@ng-fy1.aol.com>
Source record: 175620

>Chip- simple- from your own past postings, we have been assured that you
>know when people like Dr. Kraus, Dr. Best, Dr. Maxwell, and other very
>knowledgeable people are in error.

No; that is hardly the case. Please do not spread such malicious and false
statements.

> You have told the whole world this.

All I have done, as you say, is state as a matter of fact that Steve Best has
been wrong in some of his statements. That is the ONLy thing you have said that
is true.

>You can only adopt this position if you 'know it all'. I therefore fail
>to see your need for these, or any other, books.

That is a very sad characterization. Not only is it obvuioulsy false, but it
projects intent to make me something I am not.

I doubt that there is a
>single book on the list that even recognizes that Nathan Cohen, PhD even
>exists.

Huh? How is this relevant??

You have set up this background, you will live with it, maybe
>even in court. (your choice).
>
>I REALLY hope this helps.-Bill-W4BSG
>
>
>Fractenna wrote:
>
>>
>> Please tell me how you can be so sure. I seem to recall buying over a dozen
>> items from people who are on this NG. These include:
>>
>> slotted line; antenna books; smith charts; terminating resistor; antennas;
>> impedance bridge; and others.
>>
>> So, what is it in my history that allows you to make such an inaccurate and
>> factually unjustified assertion as the above?
>>
>> 73
>> Chip N1IR
>
>

The point is that there is nothing in my 'buying' history that supports your statement; indeed it contradicts it. Therefore one may assume, a priori that I may have an interest in the titles for sale.

Do you really feel that you NEED to argue about this? No--retract that: I don't want to know your feelings on this.

Look Bill, I just want to find out if this guy has some books that would be of use to me and/or others I work with. It's really not some complex psychological issue,peppered with false statements presented as personal attacks.

Can you just keep me out of it? The focus is books.

Thanks!

73
Chip N1IR

3225. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 05:33:07 UTC
From: fractenna@aol.com
Message-ID: <20001127003307.07641.00001769@ng-fy1.aol.com>
Source record: 175621

>Fractenna wrote:
>> >But it violates the newsgroup guidelines ...
>
>> I disagree with said rule.
>
>One of the things wrong with this newsgroup is people not following
>the guidelines. The ad hominem attacks upon you are also against the
>guidelines. Guideline violators decrease the usefulness of the
>newsgroup for everybody, including themselves.
>
>For the record: Chip and I were friends before we encountered each
>other on this newsgroup and this is a simple disagreement between
>friends.
>--
>http://www.mindspring.com/~w6rca
>

I agree on the last:-)

My point is that although I disagreewith the 'for sale' rule, I hold it up to the individual to decide. I see no one harmed by breaking it.

It's up to him--as I said.

73
Chip N1IR

3226. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 07:08:40 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <lc042tge1ia4b1k0ihcfn25f8av59c6hkq@4ax.com>
Source record: 175622
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 26 Nov 2000 09:12:32 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Paul Keinanen wrote:
>> As far as I can figure out, there has never been any slashed zero
>> characters in any computer character sets.

>If I remember correctly, the ASR-33 had a slash through the zero.

Today we would call it a font or glyph variation. It was printed, when
0x30 was sent to the terminal (or 0xB0 if odd parity was used). There
was not a separate character code for slashed zero.

The print cylinder (or whatever it was called on ASR-33) did not
contain _both_ the ordinary zero and the slashed zero.

Thus, the slashed zero did not appear in the character set as a
separate entity but rather as a glyph variation. The same applies to
the early home computer character generators with _only_ the slashed
zero (but not ordinary zero) in the character set that others have
commented in this thread.

Today, would you considered a zero printed in italics to be a
different character when printed in boldface :-).

Paul

3227. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 07:08:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ns142touhhn83a8q3o6f527ldkrbhrot4a@4ax.com>
Source record: 175623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 26 Nov 2000 15:07:39 -0600, Steve Moll <stevemo@winternet.com>
wrote:

>It's too simple. Hold down "alt", then type 0216. Like this ï¿½

On a Windows machine hold down "alt" key and type 0248, like this ï¿½

... and you have a "lower case slashed zero".

I just wonder why you all are so interested in writing Norwegian or
Danish characters :-), unless you speak either language. Those
characters are useless for numeric entry into any programs requiring
numeric input, such as spreadsheets.

Paul

3228. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-27 07:18:11 UTC
From: kh2d@my-deja.com
Message-ID: <3a220a91.17248333@news.guam.net>
Source record: 175624
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Mon, 27 Nov 2000 09:08:41 +0200, Paul Keinanen <keinanen@sci.fi>
wrote:

>I just wonder why you all are so interested in writing Norwegian or
>Danish characters :-), unless you speak either language. Those
>characters are useless for numeric entry into any programs requiring
>numeric input, such as spreadsheets.
>
>Paul

It's also useless as a discussion subject in a DX newsgroup.

73, Jim KH2D

3229. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <ujs72t87m6j9g1s24pn9en4038tg5jgtgh@4ax.com>
Source record: 175519

On Tue, 28 Nov 2000 17:27:44 +0800, "David" <rangin@hotmail.com>
wrote:

>I have no doubt that some energy may be re-radiated from the receiving
>antenna but as sure as (Vsquared/R x time) is energy, SOME energy is gonna
>be removed from the field by each antenna in it, if there is the smallest
>bit of R in the receiver input.

Quite correct, but if you think about it, every conductor in the area
is going to pick up and re-radiate some of the energy, even the
random-length, non-resonant piece of iron pipe or whatever. Their
total contribution to "absorbing" power is far greater than that of
any lone antenna.

73, Bill W7TI

3230. Re: Where to locate what value of loading coil ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <2rs72tgm3s3r7ngnr5ht6bi5m0jnrt91h5@4ax.com>
Source record: 175520

On Mon, 27 Nov 2000 02:49:01 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>NOW AVAILABLE, Program "LOADCOIL.exe"
>COIL LOADED VERTICAL OR SLANTING ANTENNAS
>This program does a job similar to program Vertload.

Reg, you are a genuine treasure. We homebrewers and fiddle-arounders
would be much the poorer with out you. Many thanks for your fine
programs!!

73, Bill W7TI

3231. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a83e326.2923393717@news.seanet.com>
Source record: 175521

On Tue, 28 Nov 2000 05:27:56 GMT, "George, W5YR" <w5yr@att.net> wrote:

>Your "analysis" leads me to ponder just how many TV antennas can be used
>before all the power radiated by the TV station is "used up."
>
>Similarly, it leads me to ponder how it is that thousands of receiving
>stations can hear a weak little QRP signal without using it all up.
>
>Hmmmm . . .
>
>72/73, George W5YR

Hi George,

If you want to look at the "efficiency" of broadcasting consider the
following scenario.

Give every man, woman, and child in this world a receiver and antenna
(some several billion at last count).

Give every receiver a budget of your total power emitted such that
they get 10 dB over S-9.

Now transmit your 100 Watts.

Now supposing every receiver did in fact exhibit a 10 over S-9, you
have lost approximately 98 Watts to heat, or the infinite black of
outerspace.

Thus at 2% efficiency your have provided near broadcast quality signal
levels to every living soul on the entire planet for a 100 Watt
investment. Some may argue that this "lost" signal may fall on ground
that is not monitored - fine, give every living soul 2 receivers and
two antennas. Now the efficiency is up to 4%. Give every living soul
10 rigs and antennas and efficiency will rise to the astounding figure
of 20%.

Needless to say, most of the planet has absolutely no interest in what
you have to offer, so efficiency will plummet. Which is to say that
our newsgroup's penchant for waxing poetical about the mystery of the
dissipation of energy (or non-dissipation) is something less a mystery
than a fact that all energy is eventually dissipated EVEN IF NEVER IN
THE FORM OF HEAT.

73's
Richard Clark, KB7QHC

3232. Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: jcm <jcmenard@wanadoo.fr>
Message-ID: <900vdv$fp0$1@wanadoo.fr>
Source record: 175522

I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's (G4ZU) Jungle Job design.
It works reasonably well but I would try to optimize it and model it with EZNEC but I don't know what diameter to enter for the segments of the radiator which is made of 1.5mm copper wire inside tapered phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the tip.
Has somebody some experience with this problem ?
Thank you in advance.

J.C MENARD - F8ND

3233. Re: It's OK for Nathan Cohen but not you

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805B47F77@www.indianarep.com>
Source record: 175523

Do we have to keep fanning the flames?????

Gerald Schmitt <kk5yyNOSPAM@arrl.net> wrote in message
news:3a23c26e.118240247@nntp.mindspring.com...
>
> Nathan the twerp can use folks name as a subject line just don't
> use his. Your word for the day is hipocrite. Oh and I don't care
> if you use my name as a subject line.
>
> ROTFLMAO
>
> You are such a putz Nathan
>
> By the way, What was it that "hate did"?
>
> I hope this helps

3234. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <3a24044a.677319932@news.galilei.com>
Source record: 175524

Hi George

I think you will appreciate this aside.

My son is an engineer at one of the big three.
In a conference where solar energy cars were being discussed, one of the engineers actually brought up a topic much similar.
If all the cars were run on solar power, rays that would be striking the earths surface for warming would be used up to power the cars and the planet would start to cool down and we would go into another ice age.
Nothing was said about the heat generated by the motors on the cars though.
We all got a good laugh at it!
Wonder which college he graduated from?

TTUL
Gary

3235. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805B4A344@www.indianarep.com>
Source record: 175525

But the signal is not being "absorbed" (like a sponge with water), the
electric field is spread out all over the ether (love that word, excuse me).
So YOUR antenna is intercepting the electric field where IT is, and MY
antenna is intercepting the electric field where IT is, and so on. We are
"touching" different portions of the field and therefore you should not be
able to "suck away" all the energy from me -we "touch" it at (essentially)
the same instant in time.

Now, if the RF had weight and everyone on the US side received the signal,
it might tip over and not even reach into europe - but - hey, forget I said
that before we go down that path. It's all hypothetical so we can make up
any outcome we like - kind of like Gore/Bush in some ways. But I digress...

Bill Turner <w7ti@jps.net> wrote in message
news:6fs72tkvqvulr8u511bv7ru2qcilis19ci@4ax.com...
> On Mon, 27 Nov 2000 16:15:04 +0800, "David" <rangin@hotmail.com>
> wrote:
>
> >This is a not-so-stupid question I have often idly pondered myself. My
> >reasoning is as follows. An antenna placed in an electric field and
> >terminated so that it extracts power from the field would be expected to
> >make that field non-uniform, more so in the close vicinity of the
antenna.
> --
> IF it's a yagi, as the original questioner posited, the bandwidth of
> the power absorption would be fairly narrow, and if the coax were
> unterminated, the absorption would be near nil. It's a good question,
> though.
>
> 73, Bill W7TI

3236. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A24126A.C304D67F@eznec.com>
Source record: 175526

The radiator diameter should be modeled as 1.5 mm. However, the fishing poles will make the electrical length of the wires slightly longer. Standard insulation makes a difference of roughly 3%, so I'd expect the loose-fitting fiberglass to make a considerably smaller difference. I'd make the model wires about 1% longer than the real antenna wires, as a guess. EZNEC has no way to account for the effect of the nearby dielectric other than your manually lengthening the model wires, and even a small error in parasitic element calculation can make a big difference in the pattern of a small beam. So you should expect to have to do some minor adjusting of the real antenna after analyzing with EZNEC.

I assume you're using the demo version, since my data base doesn't show that you've purchased the full version. Additional error will likely be introduced due to the limited number of segments available in the demo version.

Roy Lewallen, W7EL

jcm wrote:
>
> I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's
> (G4ZU) Jungle Job design.
> It works reasonably well but I would try to optimize it and model it with
> EZNEC but I don't know what diameter to enter for the segments of the
> radiator which is made of 1.5mm copper wire inside tapered
> phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the tip.
> Has somebody some experience with this problem ?
> Thank you in advance.
>
> J.C MENARD - F8ND

3237. Re: Help schematic needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a24167d.19203120@news1.pei.sympatico.ca>
Source record: 175527
Cross-posted to: alabama.birmingham.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

"xpyttl" <xpyttl@earthling.net> wrote:
--cut--
>
>The only limitation applies to external power amplifiers below 144, and
>specifically between 24 and 35MHz, where there are some restrictions on
>what we can build/cobble together.
>
>didleydadidah
>
>
>
Really!...not in Canada, one can guess why the restriction though...I think it's the Clipperton linear amp that has a choke in the final to prevent transmission around 10 meters somewheres (maybe the whole band?...)

--
Gord Beaman
PEI Canada.

3238. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <5i782t0nv075bu9b5sjg106cjuh6ur3495@4ax.com>
Source record: 175528

On Tue, 28 Nov 2000 14:32:10 -0500, "jimmy john" <jj@sandwitch.org>
wrote:

>But the signal is not being "absorbed" (like a sponge with water), the
>electric field is spread out all over the ether (love that word, excuse me).
>So YOUR antenna is intercepting the electric field where IT is, and MY
>antenna is intercepting the electric field where IT is, and so on.

In physics classes, there is a well known demonstration of the
propagation of waves around obstacles using water and a rock. As the
wavefront passes the obstacle, there is a refractive effect which
"fills in" the shadow of the rock and after some distance, the
original waveform is re-created. The "filled-in" area has less power
present than the original wavefront would have contained had the rock
not been present. If my antenna is in front of yours and absorbs some
of the power present, your antenna will receive less.

In the real world, I'd guess the difference would be so small as to be
immeasurable, but still non-zero. Isn't hypothetics fun? :-)

73, Bill W7TI

3239. Re: wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A24284C.B29FFED1@worldnet.att.net>
Source record: 175529

Sometime in the 70's or so there was a box marketed as an antenna tuner when actually all it was was a sealed (solid epoxy) box containing a number of resistors.
Granted it presented a low VSWR to the transmitter but didn't radiate too much RF either. I think it was named Max Com. QST did an evaluation on it.

I hope this is what you are not looking forward to finding. If so then buyer beware.

73's...Dick K7RNZ

t

Bruce Burke wrote:

> On 27 Nov 2000 19:05:42 GMT, Skipp wants a max con box
> <skipp@pilot.ucdavis.edu> wrote:
>
> >
> >Hello there,
> >
> >I'm looking for a Max-con antenna box/tuner. If you have one or the
> >instructions manual for one, I'd like to buy the box and/or a copy of the
> >paperwork. The box is a wire antenna interface unit that's often called a
> >tuner box or similar. I know they were made in the 80's or early 90's.
> >
> >thanks, email me if you can help.
> >
> >skipp@pilot.ucdavis.edu
>
> If you're referring to the Maxcom "Automatic Antenna Matcher" - it is
> nothing more than a dummy load onto which you hang wire.
>
> If I were you, I wouldn't waste my time on it.
>
> Regards,
>
> Bruce
>
> "An elected despotism is not the government we fought for." --Thomas
> Jefferson

3240. Re: wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A24286C.93DF8EAA@worldnet.att.net>
Source record: 175530

Sometime in the 70's or so there was a box marketed as an antenna tuner when actually all it was was a sealed (solid epoxy) box containing a number of resistors.
Granted it presented a low VSWR to the transmitter but didn't radiate too much RF either. I think it was named Max Com. QST did an evaluation on it.

I hope this is what you are not looking forward to finding. If so then buyer beware.

73's...Dick K7RNZ

>
>
> Bruce Burke wrote:
>
>> On 27 Nov 2000 19:05:42 GMT, Skipp wants a max con box
>> <skipp@pilot.ucdavis.edu> wrote:
>>
>> >
>> >Hello there,
>> >
>> >I'm looking for a Max-con antenna box/tuner. If you have one or the
>> >instructions manual for one, I'd like to buy the box and/or a copy of the
>> >paperwork. The box is a wire antenna interface unit that's often called a
>>
>> >tuner box or similar. I know they were made in the 80's or early 90's.
>> >
>> >thanks, email me if you can help.
>> >
>> >skipp@pilot.ucdavis.edu
>>
>> If you're referring to the Maxcom "Automatic Antenna Matcher" - it is
>> nothing more than a dummy load onto which you hang wire.
>>
>> If I were you, I wouldn't waste my time on it.
>>
>> Regards,
>>
>> Bruce
>>
>> "An elected despotism is not the government we fought for." --Thomas
>> Jefferson
>

3241. Re: wtb Max-con attenna box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A24287F.ABA9294A@worldnet.att.net>
Source record: 175531

Sometime in the 70's or so there was a box marketed as an antenna tuner when actually all it was was a sealed (solid epoxy) box containing a number of resistors.
Granted it presented a low VSWR to the transmitter but didn't radiate too much RF either. I think it was named Max Com. QST did an evaluation on it.

I hope this is what you are not looking forward to finding. If so then buyer beware.

73's...Dick K7RNZ

>
>
> Bruce Burke wrote:
>
>> On 27 Nov 2000 19:05:42 GMT, Skipp wants a max con box
>> <skipp@pilot.ucdavis.edu> wrote:
>>
>> >
>> >Hello there,
>> >
>> >I'm looking for a Max-con antenna box/tuner. If you have one or the
>> >instructions manual for one, I'd like to buy the box and/or a copy of the
>> >paperwork. The box is a wire antenna interface unit that's often called a
>>
>> >tuner box or similar. I know they were made in the 80's or early 90's.
>> >
>> >thanks, email me if you can help.
>> >
>> >skipp@pilot.ucdavis.edu
>>
>> If you're referring to the Maxcom "Automatic Antenna Matcher" - it is
>> nothing more than a dummy load onto which you hang wire.
>>
>> If I were you, I wouldn't waste my time on it.
>>
>> Regards,
>>
>> Bruce
>>
>> "An elected despotism is not the government we fought for." --Thomas
>> Jefferson
>

3242. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A242DBB.C2790AEA@dvol.com>
Source record: 175532

Jim Glover wrote:

> : Certainly the bevy of hams that
> : find me an unsolicited pen pal will stop. I think that is a healthy move for
> : them.
>
> Replying to Usenet posts in private email is a perfectly legitimate
> form of participation in a newsgroup. It is particularly recommended
> in instances in which a response is not likely to be interesting to
> the newsgroup as a whole, and even more so as a courtesy to everyone
> concerned when disagreeing with a point made by the original poster
> (except for points central to the newsgroup's theme).
>
> Almost everyone I know of considers participation in newsgroups via
> private email to the poster, when appropriate, to be not only wise,
> but even...healthy.
>
> Anyone who voluntarily posts to a newsgroup should not be at all
> surprised if they receive private email as a result. The only two
> ways to avoid it (that I know of) are to post anonymously (not
> recommended as accepted netiquette in most cases) or not post at
> all.
>
> --Jim WB5UDE

>
110% agreed.
>
w3rv

3243. Re: FT100 in Honda Civic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Mike Barrett <zootv@mgfairfax.rr.com>
Message-ID: <3A242B6D.4F750B77@mgfairfax.rr.com>
Source record: 175533

I have mine installed with the body of the radio under the seat and the head mounted on a styrofoam block that slides into the factory pocket. For an antenna I use a High Sierra HS-1500 mounted on a trailer hitch. No damage to the interior, and now the car has a trailer hitch just made for a bike rack if i decide to sell the car. Car is a Mazda 626 sedan.
Mike

3244. Re: RF volt meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A24304E.C5E740AB@bellatlantic.net>
Source record: 175534

Correction - Rick's circuit is in the August issue,
not November.

ehsjr@bellatlantic.net wrote:

> See the RF Sniffer article by Rich Littlefield in Nov. (?) 2000
> QST - it may suit your needs, or at least give you some ideas.
>
> PDRUNEN wrote:
>
> > Hi Group,
> >
> > Anyone know of a cheap RF voltmeter device that can be connected
> > between a VOM and circuit? I need to be able to read rf down to -30dbm.
> >
> > Thanks,
> >
> > Paul
> > KJ4UO

3245. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001128181150.09859.00002482@ng-cu1.aol.com>
Source record: 175535

>Rick Littlefield <k1bqt@aol.com> wrote:

Mr. Trask continues these attacks...<

I'm sure everyone caught it, but just for the record, I didn't write that heroic bit of prose. N1IR did.

Thanks

Rick K1BQT

3246. Re: It's OK for Nathan Cohen but not you

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A243C7D.F910CD4@dvol.com>
Source record: 175536

jimmy john wrote:

> Do we have to keep fanning the flames?????

>
Common sense indicates certainly not. But then again this is USENET.
>
w3rv

3247. Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <901mbo$348$1@slb6.atl.mindspring.net>
Source record: 175537

OK, I'm hoping someone else out here has tried this idea and can give me some pointers.

We've all heard the Darwin Award about the Lawnchair guy who hooked some balloons to a lawn chair and wound up floating to 12,000 feet. (If you haven't read this hilarious story, go to www.darwinawards.com, click on honorable mentions, vintage years, and click on Lawn Chair Larry).

So I was chuckling with my wife over the turkey holidays, remembering some of the Darwin stuff. It got me to thinking though, if it worked with an idiot, it would probably work OK for an antenna. So I'm thinking, if I built an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and hung it off the bottom of a weather balloon, and fed it with some light weight coax, I could run it up to 100 or 150 feet and maybe do some interesting dx type work on 2 meter. Might also make an interesting addition to field day.

So what I really need to know is:

1) Where the heck to I get a weather balloon or other similar balloon that would hold the weight of antenna and coax?

2) I'm thinking of getting a canister of helium to fill it with. Any other suggestions? I thought about using a hot air system, but the mechanics would be a bit harder to work out.

3) Any other tips or things I should look for? I want to learn from other people's experience.

If you think I'm nuts, my wife agrees with you. But what the heck, a guy has to have fun...

Robert / KG4FGN

"My wife said if I don't give up ham radio she'd leave me...OVER"

3248. WTB: 1.2ghz vertical, comercial grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Ed Mellnik <ema@teleport.com>
Message-ID: <34ZU5.32$ie4.7060@nntp3.onemain.com>
Source record: 175538

Our ATV club needs a 1.2 high gain vertical colinear antenna for our
repeater.
The diamonds and Comets just are not heavy duty enough for the wind we get.
Ed

3249. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <MqZU5.85$g76.6136@nntp2.onemain.com>
Source record: 175539
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Peter Freeman" <Peter.Freeman@sci.monash.edu.au> wrote in message
news:3A244857.88EB8132@sci.monash.edu.au...
> The other option is to bring up the Character Map application (in
> Accessories). You can then search for the character you want. Click on
the
> character, then click on Select, then Copy. The character is now on the
> clipboard, and you can paste into your main application. Slower, but
works
> fine.
>
> Peter
> VK3KAI
>

As in my callsign N&#65533;BK. Thank you Peter

3250. Re: Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <44_U5.2765$tj4.7607@tor-nn1.netcom.ca>
Source record: 175540
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

See DXMon by VE3SUN...

Gives you a great circle map, distance, bearings etc!!

Best of all it is FREEWARE!! No need to buy expensive logging software!

(see http://www.benlo.com/dxmon.html)

Rob

"Phil" <philvdk@pandora.be> wrote in message
news:504U5.18727$zF6.158702@afrodite.telenet-ops.be...
> Hi,
>
> I'm looking for a program to use in Windows that shows all PREFIX on a
> detailed map.
> It would be great if I even can calculate worked distances and bearings.
> All info is welcome on thsi subject !
>
> Thanks and 73 de Phil
> ON4BAW
>
>

3251. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <901sml$9r5$1@slb0.atl.mindspring.net>
Source record: 175541

Doesn't have to be a Yagi, it was just one idea I thought of. A vertical dipole or other antenna would work, it was getting it up high was what I was working on.

As for steering, it could be a problem on a windy day. I did have a yagi hanging from a tree limb for a while though, I had a pole coming off the bottom. From it came a rope that I anchored to the ground, keep the antenna in the vertical position. I tied a second rope to the back, for steering which once I pointed it in the right direction tied it off. This did a surprisingly good job of keeping the antenna oriented correctly. Sure, it wobbled just a little bit on a very windy day, but stayed pretty well put. I envisioned a similar system for the balloon, if I did wind up using a yagi on it.

As George can tell, this idea is in it's very early stages so I'm still working out the kinks. The site Chip mentioned (EOSS) is interesting, but they are going way over what I planned. They are launching an entire radio 100,000 feet in the air, I'm looking to put up an antenna 100 to 150 feet up.

I checked out Edmund, they didn't have any weather balloons but the EOSS site did have some links to balloon supply houses, I'll be checking them out when I can. Most of them though, seem to be made for carrying a large payload (45 lbs) up to 100,000 feet. I'm looking for 10 lbs or so at 150 feet.

I'll also follow up on the idea of finding where car dealers get their balloons from, they sound ideal for the job. (Another friend, KG4KCM suggested that earlier today).

Thanks for the ideas so far, if anyone has done it, would still love to hear from you!

Robert / KG4FGN

"George, W5YR" <w5yr@att.net> wrote in message
news:3A246FBE.ACABC151@att.net...
> First things first:
>
> How do you propose to keep a Yagi pointed in three dimensions to a
> desired heading?
>
> Think about it . . .
>
> I really doubt that there is anyone else with such experience to guide
> you.

3252. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A247404.1B10CE23@IEEE.org>
Source record: 175542

KG4FGN wrote:
> So I'm thinking, if I built
> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
> hung it off the bottom of a weather balloon, and fed it with some light
> weight coax, I could run it up to 100 or 150 feet and maybe do some
> interesting dx type work on 2 meter. Might also make an interesting addition
> to field day.

You could, like the other guy, float up to 12,000 ft. and work
your DX from there. :-)
--
http://www.mindspring.com/~w6rca

3253. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2kv109.8q3.ln@mail.specsol.com>
Source record: 175543

KG4FGN <kg4fgn@mindspring.com> wrote:

<snip>

> 1) Where the heck to I get a weather balloon or other similar balloon that
> would hold the weight of antenna and coax?

Fair radio has big balloons in their catalog.

> 2) I'm thinking of getting a canister of helium to fill it with. Any other
> suggestions? I thought about using a hot air system, but the mechanics would
> be a bit harder to work out.

Party supply store. But beware, even balloon grade helium in this quantity
isn't going to be cheap.

> 3) Any other tips or things I should look for? I want to learn from other
> people's experience.

Pointing a yagi would be a problem; better something like a verticle dipole.

I friend and I went through some rough calculations on what this would take
given the weight and cost of everything. We came to the conclusion if you've
got money to burn, OK, otherwise a kite would be more practical unless you
are willing to take the risks of a hydrogen balloon (more lift for the buck).

The kite could also serve as the "frame" for a wire antenna.

There was an article in QST a few months back about building your own
kite on steroids for doing such things.

Jim Pennino

3254. Re: WTB: 1.2ghz vertical, comercial grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9sv109.8q3.ln@mail.specsol.com>
Source record: 175544

Ed Mellnik <ema@teleport.com> wrote:
> Our ATV club needs a 1.2 high gain vertical colinear antenna for our
> repeater.
> The diamonds and Comets just are not heavy duty enough for the wind we get.
> Ed

Go to http://reality.sgi.com/byee_engr/slot_ant.html and see how to make
your own slot antenna out of waveguide; that should be heavy enough.

Jim Pennino

3255. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <9vc92t05bro50c3v0rteglhmieua95e4od@4ax.com>
Source record: 175545

"KG4FGN" <kg4fgn@mindspring.com>
shared these priceless pearls of wisdom:

->If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
->to have fun...

At one time we used a copper foil dipole antenna on a regular old (large) kite from the five and dime and used RG174 as the "string" as well as the feedline in rather decent winds as an emergency sailplane out-landing device for crew car communications.

It worked well with large kites and moderate winds. Things generally didn't do so well when the sun went down. YMMV.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3256. Re: Site Update at - www.ab7sl.com -

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.148d68c323e220b39896d6@news.earthlink.net>
Source record: 175593
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
In article <HOvU5.11205$nh5.926921@newsread1.prod.itd.earthlink.net>,
ctj92@earthlink.net says...
> Check it out.....
>
> http://www.k7on.com
>
>

--
http://www.k7on.com/
--
```

3257. Re: Gerald Schmtt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001128035612.17721.00000894@ng-fm1.aol.com>
Source record: 175594

>
>
>Literally thousands of disruptive posts. Hundreds of
>frivolous threats of pseudoleagal action. Countless
>cases of slander directed at folks who actually contribute
>and you don't think you have made yourself a Public Figure
>much less a legitimate target of ridicule?
>
>No Nathan it is not everyone else who is at fault here it is
>you alone who has made Nathan Cohen a subject of ridicule
>and fair game foe the lampooners.
>
>If you were to stop your posting in a few short weeks your
>memory would fade and mention of you would also. But that's
>not what you want is it Nathan you want to be the center of attention
>and on your terms no less. You remind me of a little kid who
>falls down then looks around for an audience to see if it is
>worth the effort to cry.
>
>Sorry Nathan no sympathy what happens to you is a direct
>result of your immature sociopathic behavior nd you have
>none but yourself to blame.
>
>I hope this helps.
>
>
>
>
>
>

3258. Re: FT100 in Honda Civic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: ed <ed@vuurwerk.nl>
Message-ID: <3A2377DA.26288C7E@vuurwerk.nl>
Source record: 175595

>
> I've pretty much made up my mind for the FT100 as opposed to the IC706, and
> if I can get a nice clean in-dash install with the Yaesu, even better!!!!
>
> Comments? Come one, come all!
>

Why not do my setup. A comet or so for 2/70 on top of the car and the
ATAS-100
on a little frame on the back of the car. (left side that is)

What I did is find a bumper mount spot and made a good solid plug on it.
Than drilled a smaller hole than needed and used a grinder bit to make a
flush fit for the ATAS. Now it seems to be part of the car ...

One bummer though, I got small kids and the car is a station-car, but
the
setup itself is neat. Good addition to a ford escort.

Now to get the mounting kit and find a quicker way to change the radio
fron
in the car to in the house. I'm considering a sort of additional
backplane
to make it more manouverable for 'location-swaps'

73 de PE5ED

3259. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: David <rangin@hotmail.com>
Message-ID: <8vvtqj$c10$1@ftp.curtin.edu.au>
Source record: 175596

Yep: "analysis" in quotes is exactly right. This is the time I start to think about quantifying things and doing some sums, but I can just never remember where I left my slide rule and PhD!

I have no doubt that some energy may be re-radiated from the receiving antenna but as sure as (Vsquared/R x time) is energy, SOME energy is gonna be removed from the field by each antenna in it, if there is the smallest bit of R in the receiver input.

David

"George, W5YR" <w5yr@att.net> wrote in message news:3A234253.66E45CE4@att.net...
> Your "analysis" leads me to ponder just how many TV antennas can be used
> before all the power radiated by the TV station is "used up."
>
> Similarly, it leads me to ponder how it is that thousands of receiving
> stations can hear a weak little QRP signal without using it all up.
>
> Hmmmm . . .
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
>
> David wrote:
>
> > This is a not-so-stupid question I have often idly pondered myself. My
> > reasoning is as follows. An antenna placed in an electric field and
> > terminated so that it extracts power from the field would be expected to
> > make that field non-uniform, more so in the close vicinity of the
antenna.
> > If this happens over a volume much larger than that physically taken up
by
> > the antenna then power is being "stolen" from other areas in the field
and
> > the neighbour gets less signal.
> > Using the reciprocity theorem for antennas: just as a transmitting
antenna
> > creates an electrical field strength over a volume of space, I can't
see
> > why an identical terminated receiving antenna shouldn't reduce the field
> > strength of any external incident wave in the same way over a similar

> > volume.
> > Anyone wanna comment (or is this just obvious and I don't need to devote
my
> > last few grey cells to it)?
> >
> > David

3260. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001128043352.07572.00000011@ng-fm1.aol.com>
Source record: 175597

>
>Fractenna <fractenna@aol.com> wrote:
>
>: All I have interest in this thread is in seeing some list of books for
>sale.
>
>I'd like to second that. I, too, would like to see the list posted
>here.
>
>Remember, folks... how would *you* like it if someone mentioned something
>here which you might find interesting, only to require you to go digging
>somewhere else if you want details? ...don't forget that Golden Rule!
>
>Yes...I, too, would like to see that list posted here.
>
>--Jim WB5UDE
>

As stated, that's not my concern. I am pointing out that if you send me , at fractenna@aol.com, a list of books it will likely be purged before read.

I have made efforts to keep the e-mail down on this account , generally, to those who are friends or colleagues. For example, hams that have questions on fractal antennas can (and do) what they have for two years now: post it on the fractal antenna reflector.

The harassment--both on and off NG-- has cut down dramatically! For those who continue with it, the legal system will take care of the rest, for I have asked them, then requested of them, that they desist. Certainly the bevy of hams that find me an unsolicited pen pal will stop. I think that is a healthy move for them.

73
Chip N1IR

3261. Re: A VERY SIMPLE 2M/70cm Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Mark Waldron <bogart@thepourhousedallas.com>
Message-ID: <3A23815B.FE4D2C13@thepourhousedallas.com>
Source record: 175598

Rob--

Sounds like a good suggestion for a down-and-dirty antenna for many uses, as well as ones where you're not too concerned if you don't end up coming back with it. :)

What do you feel might be a guestimate of the power handling of such an antenna?

Thanks

Robert Parker wrote:
>
> Get a set of TV rabbit ears. Connect 50 ohm coax. Hotizontally extend the
> antennas in a dipole fashion. Adjust both sides equally at the desired
> frequency of operation until a low SWR is found. You can mark there
> positions so you can quickly move from 2m to 70cm. Work great as a
> backpacking antenna or home. Total cost of antenna $1-$2 for a use pair of
> ears.
>
> 73's
> Rob
> VE3RPF

3262. Re: FT100 in Honda Civic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001128072507.25423.00001073@ng-ba1.aol.com>
Source record: 175599

>Hi to the group... I'm looking for input, advice, suggestions, comments,
>anything at all relating to installing the Yaesu FT100 in a Honda Civic.
>Mine is a 1999 Civic sedan. I've got the stock factory am/fm radio and the
>empty space beneath. Some have told me that the FT100 will fit right in that
>empty "DIN" space just fine. Has anyone done that?

I have not done that here,I have mine on a hump mount and use it base/mobile,
BUT It is possible to do that I would think(deminsions 6.3"x2.2"x8.0"). You
will need to make sure the fans ar unobstructed, for 2 reason the fist being
the most obvious and thats air flow, the second is that the fans will make
quite a bit of noise if they are blocked

I'm interested in other
>install suggestions.
>
>Also, what about antennas? The ATAS100 is a bit pricey (but then, so is the
>Outbacker) and I've read mixed reports on it. It "works great on all bands"
>all the way to "fine on HF but sucks on 2m/440". One would think that
>monoband whips ("hamstick" type, etc.) would be the best way to go, if you
>didn't mind switching antennas every time you wanted to change bands... How
>about other options, such as antennas with multiple coils such as Cushcraft
>or "Spider"-type antennas?

The ATAS 100 is a good preformer for what it is. I have had the oportunity to
use one and found it to do a pretty good antenna for 40-6 meters, and did ok on
the local repeaters on 2mtrs/70cm. For a SMALL antenna is does an excellent
job. I have always been a band hopper and think that having to stop and change
a coil or rewrap an OUTBACKER would be more trouble then its worth espcially
since the ATAS 100 is cheaper then the OUTBACKER.

>I've pretty much made up my mind for the FT100 as opposed to the IC706, and
>if I can get a nice clean in-dash install with the Yaesu, even better!!!!
>
>Comments? Come one, come all!
>
>KB6KGX
>Huntington Beach, CA (Surf City)
>
>
>
>
73 de KG4FET Sandor Proud FT 100 Owner/Operator

3263. Re: 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001128073050.25423.00001074@ng-ba1.aol.com>
Source record: 175600

>Anyone ever did this or know someone who has?=20
>I would appreciate any information on this. I no longer
>need the Moonraker 4 so its either sell it or convert it...
>
>thanks
>Dave

Dave,
I have a friend that did one. He based it measurements on the Cushcraft beams.
I believe he even used the original Gammas as well. I used the gamma from a
10/11 meter beam on a 3 element 6 mtr beam and it works great!
73 and Hope to hear you on 6 mtrs soon de KG4FET Sandor EM 90fh FT 100 6element
homebrew on 6 meters

3264. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A23AFD8.BBABE64E@dvol.com>
Source record: 175601

Fractenna wrote:

>
> As stated, that's not my concern. I am pointing out that if you send me , at
> fractenna@aol.com, a list of books it will likely be purged before read.

>
The guy has a bunch of books to sell, they're his, he sets the method by which they get sold including where or how to advertise his collection. Which he did, request the list via e-mail or fuhgeddit. He is under no compulsion whatsoever to advertise to suit your spam filters and/or preferences, your problem, not his. The world does not spin around your axle, your impresssions of yourself to the contrary.
>
w3rv

3265. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011281410250.2269-100000@unics>
Source record: 175602

On 28 Nov 2000, Bill Nelson wrote:

> Not necessarily. If the antenna was totally in free space, it would be
> true. But that will never occur - for example, the coax is there feeding
> power to the antenna. Any mount will also affect the signal measured.
>
> It gets even worse for a multiple element antenna.
>
> --
> Bill Nelson (billn@peak.org)
>

Hi Bill,

I agree there is no free space antenna. Anyway I do not understand how the mount or coaxial cable affects the power dependence of the fields radiated. If I model an antenna with NEC and put some metal structure close to it (rain gutter or so) I still would expect the fields to increase with square root of power (actually I never tried it). The mount, cable etc. will all respond
to the field, charges and currents will be induced of course but I would always expect the square root law as long as no arcing somewhere or nonlinearities (e. g. corroded junctions) occur.
If the field(s) do(es) not depend on square root of power, does that mean that
my antenna produces harmonics due its nonlinear response ?

Where is the error ?

I agree that a toroid balun is a potential source of nonlinearity.

Vy 73

Ralf

DL 6 OAP
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

3266. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001128083028.21543.00000095@ng-fl1.aol.com>
Source record: 175603

>Hi Bill,
>
>I agree there is no free space antenna. Anyway I do not understand how the
>mount or coaxial cable affects the power dependence of the fields
>radiated. If I model an antenna with NEC and put some metal structure
>close to it (rain gutter or so) I still would expect the fields to
>increase with square root of power (actually I never tried it). The mount,
>cable etc. will all respond
>to the field, charges and currents will be induced of course but I would
>always expect the square root law as long as no arcing somewhere or
>nonlinearities (e. g. corroded junctions) occur.=20
>If the field(s) do(es) not depend on square root of power, does that mean
>that
>my antenna produces harmonics due its nonlinear response ?
>
>Where is the error ?
>
>I agree that a toroid balun is a potential source of nonlinearity.
>
>Vy 73
>
>Ralf
>
>DL 6 OAP

To reasonable precision, free space antenna designs most certainly exist. If fed externally, there is some disortion from the coax. But again, the issue is the degree of precision you need.

Also,I suspect you are misunderstanding the inverse square law. This applies only in the far field. For example (not an antenna one): as you go under the surface of the earth, the gravitational force goes as 1/R, not 1/R^2. It sounds like the close by structure you describe are in the near field of your antenna.

73
Chip N1IR

3267. Newbie Antenna / Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: trout <trout@cityusa.net>
Message-ID: <0nn72t4lskseedj1hr7ng77bu3srcdq860@4ax.com>
Source record: 175604

I was informed not to use any antenna tuner on the
Cushcraft R8 because antenna tuners burn out
coils and traps. Is this true ?

3268. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011281431440.2269-100000@unics>
Source record: 175605

Hi all,

thanks to all who responded, just was to find out what it was.
The signals monitored where narrow band FM mostly, some fo them where
broadband FM.

Apart from the allocation of some military service the frequency range
35 to 35.2 is allocated to remote control. The people at this club where
just astonished to find their planes falling from sky :-(

Vy 73, tnx

Ralf

DL 6 OAP

==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========
Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

3269. Re: Newbie Antenna/ Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: "Dave (G0DJA)" <Nospam@thanks.com>
Message-ID: <3a23b8a2$1_3@news2.vip.uk.com>
Source record: 175606

-----Original Message-----
From: trout <trout@cityusa.net>
Newsgroups: rec.radio.amateur.antenna
Date: 28 November 2000 16:35
Subject: Newbie Antenna / Tuner Question

>
>
> I was informed not to use any antenna tuner on the
> Cushcraft R8 because antenna tuners burn out
> coils and traps. Is this true ?

No.

HTH de Dave (G0DJA)

Oh, you wanted more details? ;-)

The only thing which will be able to 'burn out' coils and capacitors are exceeding their electrical ratings.

So, if you pass more current through than the wire of the coil can carry, then the wire will break. Like a fuse does.
If you put too high a voltage across a capacitor, then the dielectric will break down and the capacitor will fail.

A antenna tuner is not able to do either of these things, as it is a collection of capacitors and coils which match one impedance to another.

However, if you manage, by adjusting the matching between the rig and the feedline, to pass enough energy to the antenna so that the current and/or voltage ratings of the antenna are exceeded, then you will 'burn out' the coils or capacitors. But that's a user error.

P.S - There was something strange about the original message. I could not 'Post' a reply, only send a reply to the author. Other threads in the NG did not have this problem..... I, therefore, have started a new thread to post the reply.

3270. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <900dbg$6of$1@plutonium.btinternet.com>
Source record: 175607

An antenna does not reach out and suck it all up. It takes only what energy is available from a very small volume of space roughly 1/2-wavelength in diameter. And at least half of it, usually more, is re-radiated.

To soak up much of the power from a transmitter requires it to be located at the centre of a large sphere with the surface of the sphere covered with matched dipole antennas with directors and reflectors and with no gaps in between. Even then it would be leaky.

Reg.

****
David <rangin@hotmail.com> wrote in message news:8vvtqj$c10$1@ftp.curtin.edu.au...
> Yep: "analysis" in quotes is exactly right. This is the time I start to
> think about quantifying things and doing some sums, but I can just never
> remember where I left my slide rule and PhD!
>
> I have no doubt that some energy may be re-radiated from the receiving
> antenna but as sure as (Vsquared/R x time) is energy, SOME energy is gonna
> be removed from the field by each antenna in it, if there is the smallest
> bit of R in the receiver input.
>
> David
>
> "George, W5YR" <w5yr@att.net> wrote in message
> news:3A234253.66E45CE4@att.net...
> > Your "analysis" leads me to ponder just how many TV antennas can be used
> > before all the power radiated by the TV station is "used up."
> >
> > Similarly, it leads me to ponder how it is that thousands of receiving
> > stations can hear a weak little QRP signal without using it all up.
> >
> > Hmmmm . . .

> >
> > 72/73, George W5YR - the Yellow Rose of Texas
NETXQRP 6
> > Fairview, TX 30 mi NE Dallas in Collin county
QRP-L 1373
> > Amateur Radio W5YR, in the 55th year and it just keeps
getting better!
> > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99)
IC-765 (6/90)
> >
> >
> > David wrote:
> >
> > > This is a not-so-stupid question I have often idly
pondered myself. My
> > > reasoning is as follows. An antenna placed in an
electric field and
> > > terminated so that it extracts power from the field
would be expected to
> > > make that field non-uniform, more so in the close
vicinity of the
> antenna.
> > > If this happens over a volume much larger than that
physically taken up
> by
> > > the antenna then power is being "stolen" from other
areas in the field
> and
> > > the neighbour gets less signal.
> > > Using the reciprocity theorem for antennas: just as a
transmitting
> antenna
> > > creates an electrical field strength over a volume of
space, I can't
> see
> > > why an identical terminated receiving antenna
shouldn't reduce the field
> > > strength of any external incident wave in the same way
over a similar
> > > volume.
> > > Anyone wanna comment (or is this just obvious and I
don't need to devote
> my
> > > last few grey cells to it)?
> > >
> > > David
>
>

3271. Re: Sunspot cycle question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A23B8C9.294850BC@dvol.com>
Source record: 175608

Pete Holden wrote:

> Now that we're near the top of the cycle, I'm happily working 20m well into
> the evening.

>
20 has been open virtually around the clock many days for the past two years. I worked four continents and eight countries during the Field Day outing this year with a really lame rig between midnite and sunrise local time, etc.
>

>
>
> What's it going to be like on 20m at the bottom in five or six years?

>
20 will be open but nowhere nearly as long per day as it is now. The activity will be up because the higher bands will be all but dead and folk migrate to 20 for the dx.
>

> How
> about 17, 15, 12 and 10 meters?

>
10 & 12 will behave like 6m does now for the most part, activity will be sparse on 15 although the band won't completely die and will be always worth tuning. Thus the cheap Radio Shack 10m xcvrs will disappear from the shelves again until the next high rolls around, etc.
>
Historically activity and competition have also increased significantly on the low bands during the sunspot lows. The basic message being that if you aren't equipped to get on 160/80/40/30/20 or some combination thereof plus have the ability to dredge up and handle weak signals you'll find it considerably more difficult to find qso's during the lows. "When the going gets tough the tough get going" scenario. Get some wire up, it's coming.

>
>
> Thanks, Pete KA0TZK

>
w3rv

3272. It's OK for Nathan Cohen but not you

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a23c26e.118240247@nntp.mindspring.com>
Source record: 175609

Nathan the twerp can use folks name as a subject line just don't use his. Your word for the day is hipocrite. Oh and I don't care if you use my name as a subject line.

ROTFLMAO

You are such a putz Nathan

By the way, What was it that "hate did"?

I hope this helps

3273. Re: Gerald Schmtt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a24c354.118470291@nntp.mindspring.com>
Source record: 175610

On 28 Nov 2000 08:56:12 GMT, fractenna@aol.com (Fractenna)
referring to himself plagiarized:

>>
>>
>>Literally thousands of disruptive posts. Hundreds of
>>frivolous threats of pseudoleagal action. Countless
>>cases of slander directed at folks who actually contribute
>>and you don't think you have made yourself a Public Figure
>>much less a legitimate target of ridicule?
>>
>>No Nathan it is not everyone else who is at fault here it is
>>you alone who has made Nathan Cohen a subject of ridicule
>>and fair game foe the lampooners.
>>
>>If you were to stop your posting in a few short weeks your
>>memory would fade and mention of you would also. But that's
>>not what you want is it Nathan you want to be the center of attention
>>and on your terms no less. You remind me of a little kid who
>>falls down then looks around for an audience to see if it is
>>worth the effort to cry.
>>
>>Sorry Nathan no sympathy what happens to you is a direct
>>result of your immature sociopathic behavior nd you have
>>none but yourself to blame.
>>
>>I hope this helps.
>>

Thus confirming that a 3-year old has hyjacked the Fractenna
account.

I hope this helps

3274. Re: A VERY SIMPLE 2M/70cm Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <osQjOqv1CVAJSCFoANVaw1=J0N07@4ax.com>
Source record: 175611

"Robert Parker" <rparker@sprint.ca> wrote:

>Get a set of TV rabbit ears. Connect 50 ohm coax. Hotizontally extend the
>antennas in a dipole fashion. Adjust both sides equally at the desired
>frequency of operation until a low SWR is found. You can mark there
>positions so you can quickly move from 2m to 70cm. Work great as a
>backpacking antenna or home. Total cost of antenna $1-$2 for a use pair of
>ears.
>
>73's
>Rob
>VE3RPF
>
>

Excellent idea. Basically, what you have is a hand-rotatable,
dual-band dipole :-)

Bob
k5qwg

3275. Re: Newbie Antenna / Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <900jbh$a41$1@iac5.navix.net>
Source record: 175612

This is incorrect information. If you were to assume that you had a mismatch to the antenna, the only result of a tuner would be to allow more power to be transferred to the antenna. If the antenna is operated within it's power limit the tuner has no effect.

"trout" <trout@cityusa.net> wrote in message news:0nn72t4lskseedj1hr7ng77bu3srcdq860@4ax.com...
>
>
> I was informed not to use any antenna tuner on the
> Cushcraft R8 because antenna tuners burn out
> coils and traps. Is this true ?
>
>
>
>
>

3276. Re: Gerald Schmtt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20001128110535.21573.00002038@ng-fe1.aol.com>
Source record: 175613

>
>>
>>
>>Literally thousands of disruptive posts. Hundreds of
>>frivolous threats of pseudoleagal action. Countless
>>cases of slander directed at folks who actually contribute
>>and you don't think you have made yourself a Public Figure
>>much less a legitimate target of ridicule?
>>
>>No Nathan it is not everyone else who is at fault here it is
>>you alone who has made Nathan Cohen a subject of ridicule
>>and fair game foe the lampooners.
>>
>>If you were to stop your posting in a few short weeks your
>>memory would fade and mention of you would also. But that's
>>not what you want is it Nathan you want to be the center of attention
>>and on your terms no less. You remind me of a little kid who
>>falls down then looks around for an audience to see if it is
>>worth the effort to cry.
>>
>>Sorry Nathan no sympathy what happens to you is a direct
>>result of your immature sociopathic behavior nd you have
>>none but yourself to blame.
>>
>>I hope this helps.
>>
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>
>

I will second that!

3277. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t27mc763p5knc7@corp.supernews.com>
Source record: 175614

: Certainly the bevy of hams that
: find me an unsolicited pen pal will stop. I think that is a healthy move for
: them.

Replying to Usenet posts in private email is a perfectly legitimate
form of participation in a newsgroup. It is particularly recommended
in instances in which a response is not likely to be interesting to
the newsgroup as a whole, and even more so as a courtesy to everyone
concerned when disagreeing with a point made by the original poster
(except for points central to the newsgroup's theme).

Almost everyone I know of considers participation in newsgroups via
private email to the poster, when appropriate, to be not only wise,
but even...healthy.

Anyone who voluntarily posts to a newsgroup should not be at all
surprised if they receive private email as a result. The only two
ways to avoid it (that I know of) are to post anonymously (not
recommended as accepted netiquette in most cases) or not post at
all.

--Jim WB5UDE

3278. Free delivery of amateur radio goods!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Web Williams <kr4wmNO@SPAMmindspring.com>
Message-ID: <MPG.148daa4b9993fa01989697@news.mindspring.com>
Source record: 175615
Cross-posted to: alt.ham-radio.am,alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

[This followup was posted to and a copy was sent to the cited author.]

[This followup was posted to alt.ham-radio.am and a copy was sent to the cited author.]

Well, sort of! I asked the fellow at QRZ.COM to restart the e-mail list, "HAMTRANS". Some of you (like me) may remember it. I never was able to take advantage of it, apparently because it was poorly moderated, and some W7 something-or-other ripped off a bunch of folks. Well- I'm not here to rip anyone off- and I hope there are others who, like me, enjoy buying, selling, trading, swapping, whatever, amateur-radio related items, some of which are too large, too heavy, or bulky, and it is unreasonable to ship these items. Maybe it's a small item, but perhaps you can can't afford the shipping due to fixed income, but want it, and the shipping just pushed you over the edge of being able to afford it? Well, we all need to help each other!

When you plan a trip, please try to post your itenerary to the list if you don't mind transporting an item along your drive path. If someone is buying an item, and lives along your drive path, they will contact you and ask for your assistance. In return, other list members will make offers to transport items for you sometime (we hope this is the way it's going to work).

Now- some VERY simple rules:

1. Don't expect the transporter of your item to box it up for you. Your seller should have your item ready to transport, JUST AS IF IT WERE GOING TO BE SHIPPED UPS. This will offer some protection against scratches and damage during the shipment, and will help your driver not get muck all over his/her vehicle or ruin the interior (we hope). If damage occurs to your driver's vehicle by your package, you should voluntarily pay for the damage. I sincerely hope that any damage claimed would be so obvious so as not to leave any room to debate cause and effect so as to avoid a lawsuit, but any problems are between YOU AND YOUR DRIVER.

2. Don't expect your driver to make a side-trip off of his/her anticipated drive path. Have your seller meet them along the interstate.

3. Get your seller and driver together on a sked utilizing whatever means possible so that nobody has to sit at a gas station waiting for someone to show up that never does, or is an hour or so late. If your shipper misses his drop to your driver- you may not get a second chance! If your seller fails to meet the driver on sked or can't make the drop, it's up

to *you* to make other arrangements. We in amateur radio work on an honor system. Don't screw it up for everybody!

4. Meet your driver delivering your goods to correlate with his/her drive plan. Don't make him/her go out of the way to meet you! You're the one in the shipping predicament, *NOT* your driver! If your driver is going one state away from your location, perhaps you at least got the item from the "other" coast, and YOU will have to drive to meet them!

5. Understand that this list is in no way responsible if you trust the "wrong" person. There are schmucks in every walk of life. If they rip you off, you should seek help from the police, NOT FROM THIS LIST! (Except to inform the rest of us not to trust the jerk that ripped you off!)

6. Mis-scheduling on your part does NOT constitute you being ripped off! You should be willing and able to pay shipping for your item from your drivers destination back to your location if your paths fail to cross as scheduled. And keep in mind that you will be paying for UPS (or whomever) to come out to your drivers location with a "call tag" so it doesn't inconvenience your driver by having him locate and drop your package at a UPS drop point.

7. IN BIG CAPITAL LETTERS! THIS LIST IS IN NO WAY RESPONSIBLE FOR ANYTHING RELATED TO WHAT HAPPENS TO YOU AND IN NO WAY GUARANTEES THAT YOU WILL HAVE A PLEASURABLE EXPERIENCE WITH SHIPPING A PACKAGE OR THAT YOUR PACKAGE WILL EVEN ARRIVE VIA THE HAMTRANS NETWORK!!! IF YOU RECEIVE A BOX OF BRICKS INSTEAD OF THE RADIO YOU PAID FOR, THEY WILL BE YOUR BRICKS!!! THIS LIST IS NOT YOUR PERSONAL BABYSITTER! YOU ARE PRESUMED TO BE AN ADULT AND IT IS PRESUMED THAT YOU CAN TAKE CARE OF YOUR OWN PERSONAL AFFAIRS!

8. If you are dis-satisfied, SEE RULE NUMBER 7!!!

If you find this e-mail list interesting, you may subscribe to:

HamTrans@qth.net

As I am not well-versed in e-mail lists, even though I requested the creation of the list, I believe that to subscribe, you send an e-mail to:

majordomo@qth.net

with a subject line of:

SUBSCRIBE HAMTRANS

If someone else knows better, they can correct me. If you have comments, suggestions, or whatever, please remove the NO before the @ and the SPAM after the @ in my e-mail address to reply. E-mails sent without taking care of these two minor details will be bounced. If you can't figure out how to click and use your backspace key in the address box, you probably don't need to be reading this in the first place. Comments to the newsgroup may or may not be read by me. I'm a busy person.

73 all, and I wish you each a Happy Holiday Season!

-Web Williams, KR4WM, in Myrtle Beach, SC

3279. Fracky Freaky

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20001128121018.11983.00001593@ng-ci1.aol.com>
Source record: 175616

WAHHHHHHH!!! WAHHHHHH!!!!

My name is Nathan Cohen....I am better than you.....If you don't acknowledge it
I will sue you....WAHHHH!!! WAHHHH!!!

3280. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t27sgk634fbdf9@corp.supernews.com>
Source record: 175617

Fractenna <fractenna@aol.com> wrote:

: Also,I suspect you are misunderstanding the inverse square law. This applies
: only in the far field. For example (not an antenna one): as you go under the
: surface of the earth, the gravitational force goes as 1/R, not 1/R^2. It sounds
: like the close by structure you describe are in the near field of your
: antenna.

Ah, so, we can't count on the near field varying as we might predict, with
regards to distance from the antenna.

However... can we count on the near field strength to increase in step
with increased power to the antenna?

I suspect that some of the confusion here is that some people are thinking
about the case where the goal is to "tune" an antenna in the sense of
adjusting the length, spacing and orientation of its elements, with a
goal of optimizing its radiation pattern, while other people are thinking
about the case where the goal is to "tune" the antenna *system* in the
sense of matching the feedline to the transmitter (or perhaps the
antenna...but let's keep things simple and assume that some of us are
thinking in terms of a standard tuner-in-the-shack set-up).

If no adjustments are made to the antenna--can we count on near field
strength to vary in step with the power delivered to the antenna?
Never mind whether it varies inversely proportionally to R, or R^2...
Never mind whether it varies linearly at all with respect to power
delivered to the antenna (though I suspect it probably should)...

Couldn't we at *least* count on the field strength to reach a maximum
when the power delivered to the antenna reaches a maximum, as we tune
our tuner for the best match of transmitter to transmission line?

I suspect that the only precaution we'd have to take to be able to
count on things working that way (again, assuming a standard tuner-
in-the-shack set-up) would be to take the field strength measurement
from somewhere closer to the antenna than to the shack. Otherwise,
we might be observing a peak in "RF in the shack" rather than RF out
to the antenna system. As long as we avoid that, can we count on a
maximum of field strength to coincide with a maximum of power delivered
to the antenna?

--Jim WB5UDE

3281. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <6fs72tkvqvulr8u511bv7ru2qcilis19ci@4ax.com>
Source record: 175618

On Mon, 27 Nov 2000 16:15:04 +0800, "David" <rangin@hotmail.com>
wrote:

>This is a not-so-stupid question I have often idly pondered myself. My
>reasoning is as follows. An antenna placed in an electric field and
>terminated so that it extracts power from the field would be expected to
>make that field non-uniform, more so in the close vicinity of the antenna.

IF it's a yagi, as the original questioner posited, the bandwidth of
the power absorption would be fairly narrow, and if the coax were
unterminated, the absorption would be near nil. It's a good question,
though.

73, Bill W7TI

3282. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 00:30:05 UTC
From: X@Y.Z.net
Message-ID: <slrn925v4b.ijd.X@animas.frontier.net>
Source record: 175578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Mon, 27 Nov 2000 23:15:04 +0000, Ian Jackson scribbled:

>2. I haven't worked out how to do this on a laptop where there is no
>numeric keyboard.

Go back over your laptop's docs. If there *is* a NUMLOCK key,
there's some sort of 'weird' assignment of keytops.

On mine it is the 'stagger' of

7 8 9 7 8 9
U I O for: 4 5 6
J K L 1 2 3
M 0

Not very convenient, I'll grant you!

Jonesy

--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

3283. Re: G5RV 300 Twin or 450 Ladder ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 01:03:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8vv041$e4g$1@plutonium.btinternet.com>
Source record: 175579

With a G5RV type of antenna the only noticeable difference
between a 300-ohm and a 450-ohm feedline would be a
different set of tuner settings for the various bands.

If it was possible to measure accurately enough, on the
average, there would be a fraction of a dB less loss using
the higher impedance line. In fact, a 600-ohm open wire
line would have even a slightly lower loss on the average
taking one band with another. And another set of tuner
settings of course.

Provided, of course, the feedline wire gage remains about
the same as the impedance is stepped up. If this is true
then feeder loss halves as Zo impedance doubles. But
hardley enough for the fellow to notice at the other end
unless you switch all the way from 50 to 600 ohms.

Again on the average, taking one band and one frequency with
another, the SWR's versus 50 ohms are a little lower using
450-ohm line. So go for it if you already have some.

Quality control of line impedance at the factory is rather
poor. Zo could be +/- 15% from its nominal value.
So there's not much point in being too concerned about
particular values of SWR at particular frequencies.

To answer ALL your questions on behavior and performance of
dipole antennas center-fed via ALL sorts of lines of ALL
sorts of lengths, download program VARNEY from the website
below. If your line is exactly 450 ohms it will also predict
your tuner settings. Downloads in a few seconds. Not zipped
up. Run immediately.

VARNEY's the one you want.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Andrew J. O'Brien <obrienaj@netsync.net> wrote in message
news:t25nn8c4d3caf5@corp.supernews.com...
> I have a G5RV Junior which works well and was thinking
about putting up a
> second one, this time the full G5RV. I have some spare

450 ladder line but
> see in some articles that 300 ohm twin lead should be
used. I found this
> reference to 300 Ohm performance
>
> MHz Twinlead/Coax Junction Impedance 50 ohm Coax SWR
> 3.8 14.6 + j2.9 3.44
> 7.2 27.9 - j54.8 4.3
> 10.125 31.6 + j274 50
> 14.2 103 - j49 2.6
> 18.14 44.3 - j290 40
> 21.3 24.2 + j80.7 7.8
> 24.95 79.3 + j41.5 2.2
> 28.4 3049 + j655 64
>
> Anyone know how it compares with 450 ladder line ?
>
> Andy KB2EOQ
>]
>
>
>

3284. Re: dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 01:38:51 UTC
From: wz8a@aol.commie.NOT
Message-ID: <20001127203851.20937.00002183@ng-fn1.aol.com>
Source record: 175581

>From: "Kirby Cave"
> i'm not married

I began to question the use of baluns with dipoles in the 60's when my W2AU bulun was found to be the cause of serious TVI when I operated on 10 meters. Do you really need one at all? Fairly easy to tell. Check your resonant frequency with the balun in. Take it out, an put the dipole back in the same position. Is the resonant frequency essentially the same? If yes, the balun isn't doing anything except adding some loss (and distortion, if TVI develops). If the resonant frequency became lower, the balun WAS keeping your coax from becoming part of the antenna, and it might operate better (and with less RF in the shack) if you kept the balun in. If the resonant frequency got higher, I don't know what is happening. 73, Andy
---
Now that we have an IRS Oversight
Board, what are they going to do?
If only IRS were really a "service" !! AK

3285. Sunspot cycle question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 01:39:17 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <91EU5.245615$g6.113813094@news2.rdc2.tx.home.com>
Source record: 175580

Now that we're near the top of the cycle, I'm happily working 20m well into the evening.

What's it going to be like on 20m at the bottom in five or six years? How about 17, 15, 12 and 10 meters?

Thanks, Pete KA0TZK

3286. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 02:20:44 UTC
From: fractenna@aol.com
Message-ID: <20001127212044.07818.00001921@ng-fy1.aol.com>
Source record: 175582

>
>Fractenna wrote:
>
>> I disagree with said rule. It is thus up to the individual whether to post
>it
>> or not.
>
>>
>> If not posted here, then I cannot be a buyer as I will not be aware.
>
>>
>That figgers.
>>
>.antennas being the entire focus of your pitiful life. The rest of us cruise
>.swap like we brush our teeth every morning and move on. Not that you would
>have
>a clue of course . . You're a great example of a 1x2 who never connected with
>ham
>radio.
>
>>
>>
>> 73
>> Chip N1IR
>
>>
>w3rv

Wow!

No; I have no idea what you are talking about. But it is amusing to see your speculations. Next time, however, please keep them to yourself as they have no basis in reality.

All I have interest in this thread is in seeing some list of books for sale.

That's all.

73
Chip n1IR

3287. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 02:24:15 UTC
From: w1rfi@aol.com
Message-ID: <20001127212415.22286.00001761@ng-da1.aol.com>
Source record: 175583

>From: Brian Kelly kelly@dvol.com

>W1RFI wrote:

>> I think my Extra helped me get my job. :-)

>SPARE me!

Okay, my Extra DID help me get the job, but it was the things I did after I
took the test that helps me KEEP it. :-)

73,
Ed Hare, W1RFI

3288. Re: Sunspot cycle question?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 03:17:29 UTC
From: fractenna@aol.com
Message-ID: <20001127221729.06912.00001830@ng-mj1.aol.com>
Source record: 175584

>Now that we're near the top of the cycle, I'm happily working 20m well into
>the evening.
>
>What's it going to be like on 20m at the bottom in five or six years?

Fewer openings but most consistent. Far fewer evening/morning openings

> How
>about 17

About the same as 20M.

> 15

No evening openings to speak of, few day openings.

> 12 and 10 meters?

Dead. Rare east/west; mostly north/south openings.

These are very superficial generalizations, and I confess I only have 4 cycles
(almost) to fall upon for experience. Others have more.

73
Chip N1IR

>Thanks, Pete KA0TZK
>
>
>
>
>
>
>
>

3289. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 03:36:53 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <pLFU5.277$2P3.19642@bgtnsc06-news.ops.worldnet.att.net>
Source record: 175585

Ralf,

Don't forget US Military in the band 30-88 MHz
using wide band FM. You did not say if the signals
you monitored were AM, FM, or SSB.

I do know that many US military utilize these frequencies.

Just a thought.

R.Wilhelm <nhbiwilh@rrzn-user.uni-hannover.de> wrote in message
news:Pine.GSO.4.10.10011271548440.9750-100000@unics...
Hi all,

a friend of minr lost a remote controlled model airplane a few
weeks ago.
The frequency he used for the remote control is close to 35 MHz.
Because
all electrical circuitry was working he asked me to find out,
what might
be the reason, IE if there was any interference possible. Apart
from the 3
rd harmonic of Radio Jordan I found some american accent radio
traffic
between 35 and 42 MHz. Since it sounded like american CB stations
here in
europe (you hear tens of stations at a time), I was not able to
find out
what it was. Could anyone tell me what kind of service allocated
there ?

Vy 73

Ralf

DL 6 OAP

==========
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universit&#65533;t Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========
==========
Hannover, Germany, where mankind's first motorized flight took
place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========
==========

3290. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 03:43:23 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t26aerigbroh6a@corp.supernews.com>
Source record: 175586

Fractenna <fractenna@aol.com> wrote:

: All I have interest in this thread is in seeing some list of books for sale.

I'd like to second that. I, too, would like to see the list posted
here.

Remember, folks... how would *you* like it if someone mentioned something
here which you might find interesting, only to require you to go digging
somewhere else if you want details? ...don't forget that Golden Rule!

Yes...I, too, would like to see that list posted here.

--Jim WB5UDE

3291. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 05:27:56 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A234253.66E45CE4@att.net>
Source record: 175588

Your "analysis" leads me to ponder just how many TV antennas can be used
before all the power radiated by the TV station is "used up."

Similarly, it leads me to ponder how it is that thousands of receiving
stations can hear a weak little QRP signal without using it all up.

Hmmmm . . .

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

David wrote:

> This is a not-so-stupid question I have often idly pondered myself. My
> reasoning is as follows. An antenna placed in an electric field and
> terminated so that it extracts power from the field would be expected to
> make that field non-uniform, more so in the close vicinity of the antenna.
> If this happens over a volume much larger than that physically taken up by
> the antenna then power is being "stolen" from other areas in the field and
> the neighbour gets less signal.
> Using the reciprocity theorem for antennas: just as a transmitting antenna
> creates an electrical field strength over a volume of space, I can't see
> why an identical terminated receiving antenna shouldn't reduce the field
> strength of any external incident wave in the same way over a similar
> volume.
> Anyone wanna comment (or is this just obvious and I don't need to devote my
> last few grey cells to it)?
>
> David

3292. Re: This thread is closed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 05:37:50 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <8vvgbe$f2f$1@nnrp2.phx.gblx.net>
Source record: 175587

Rick Littlefield <k1bqt@aol.com> wrote:

:
: >Mr. Trask continues these attacks for no other reason than obsessed and
: focused intent to defame my reputation and tarnish my ability to
: practice and make progress in my profession.<
:

Nobody could possibly do more damage to your reputation than you have done entirely on your own. And nobody, including myself, is holding a gun to your head and forcing you to keep from your profession, whatever that might be since you lost your "position". Perhaps you should spend less time trolling the newsgroups and mail lists.

You have left a significant trail of breadcrumbs everywhere you've gone. Nobody put them there for you. You did it entirely on your own. They are in the archives of the antenna mail list, the NEC mail list, and AntenneX for everyone to see. Publicly, in the case of the latter, and with a public statement as to the reasons for your involuntary removal, almost identical to those given for your ouster from the antenna mail list.

Odd how history keeps repeating itself wherever you go. The open harassment, refusal to engage in legitimate discussion, the threats of lawsuits. It's all become too predictable.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

3293. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 05:37:55 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8vvgbj$9m9$12@bashir.peak.org>
Source record: 175589

R.Wilhelm <nhbiwilh@rrzn-user.uni-hannover.de> wrote:
: On 27 Nov 2000, Bill Nelson wrote:

:> You cannot get a good indication of maximum radiated power by measuring
:> in the near field - or by measuring the rf currents with an inline meter.

: Isn't the near field proportional to square root(power) ?

Not necessarily. If the antenna was totally in free space, it would be
true. But that will never occur - for example, the coax is there feeding
power to the antenna. Any mount will also affect the signal measured.

It gets even worse for a multiple element antenna.

--
Bill Nelson (billn@peak.org)

3294. Nathan Cohen Public Figure Public Fool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 06:43:53 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <3a2351b3.89377196@nntp.mindspring.com>
Source record: 175590

Literally thousands of disruptive posts. Hundreds of
frivolous threats of pseudoleagal action. Countless
cases of slander directed at folks who actually contribute
and you don't think you have made yourself a Public Figure
much less a legitimate target of ridicule?

No Nathan it is not everyone else who is at fault here it is
you alone who has made Nathan Cohen a subject of ridicule
and fair game foe the lampooners.

If you were to stop your posting in a few short weeks your
memory would fade and mention of you would also. But that's
not what you want is it Nathan you want to be the center of attention
and on your terms no less. You remind me of a little kid who
falls down then looks around for an audience to see if it is
worth the effort to cry.

Sorry Nathan no sympathy what happens to you is a direct
result of your immature sociopathic behavior nd you have
none but yourself to blame.

I hope this helps.

3295. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 06:48:08 UTC
From: Aaron Jones <nomail@nomail.com>
Message-ID: <umk62tg3qvsu12hr28frs0u0r26043di73@4ax.com>
Source record: 175591
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote:
>2. I haven't worked out how to do this on a laptop where there is no
>numeric keyboard.

Most laptops do have a numeric keyboard. They are a subset on the
regular keys. To get the extended ASCII on mine you use the function
key + the alt key.

7=7 8=8 9=9
u=4 i=5 o=6
j=1 k=2 l=3

3296. FT100 in Honda Civic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-28 07:10:00 UTC
From: Mark Lassman <kb6kgx@socal.rr.com>
Message-ID: <cTIU5.13567$%P2.2510651@typhoon.we.rr.com>
Source record: 175592

Hi to the group... I'm looking for input, advice, suggestions, comments, anything at all relating to installing the Yaesu FT100 in a Honda Civic. Mine is a 1999 Civic sedan. I've got the stock factory am/fm radio and the empty space beneath. Some have told me that the FT100 will fit right in that empty "DIN" space just fine. Has anyone done that? I'm interested in other install suggestions.

Also, what about antennas? The ATAS100 is a bit pricey (but then, so is the Outbacker) and I've read mixed reports on it. It "works great on all bands" all the way to "fine on HF but sucks on 2m/440". One would think that monoband whips ("hamstick" type, etc.) would be the best way to go, if you didn't mind switching antennas every time you wanted to change bands... How about other options, such as antennas with multiple coils such as Cushcraft or "Spider"-type antennas?

I've pretty much made up my mind for the FT100 as opposed to the IC706, and if I can get a nice clean in-dash install with the Yaesu, even better!!!!

Comments? Come one, come all!

KB6KGX
Huntington Beach, CA (Surf City)

3297. 80m delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: John Harper <ae5x@optonline.net>
Message-ID: <ABcV5.354691$4d.44356788@news02.optonline.net>
Source record: 175469

Hello, I'm planning to install a delta loop for 80m (3525 khz). According to the formula 1005/Mhz, each side of the triangle should be about 95.5 feet long. I only have room & height for about 75 feet per side and plan to load the bottom side of the triangle (horizontal section) with two coils - one at each end of this section. Is there a formula to determine how much inductance each coil will need in order to bring the antenna to resonance on 3525?

Thanks and 73,
--

John Harper AE5X
Outdoor QRP: http://www.qsl.net/ae5x

3298. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <903koc$n9c$1@lily.cs.ubc.ca>
Source record: 175470

"Tom Wagner - N1MM" <tomwagner@mindspring.com> writes:
>At the risk of stating the obvious -- watch out for power lines.
>You are, after all, going to feed this with wire. You really
>don't want 220v or worse, 4000v 60Hz ac on your antenna,
>and in your shack.

Hey, that's just local residential powerlines. If you tried this in the right area, you'd be able to experiment with 230 kV, 400 kV, or even 700 kV overhead lines. With those, it wouldn't matter whether your feedline had an insulating jacket on it or not. And you would have a good shot at the Darwin Award...

Dave

3299. Re: 80m delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A255CE8.F25D24FA@ix.netcom.com>
Source record: 175471

John, try top loading the delta loop instead of using inline coils.
73, Ed - N5NUG

--

Edward A. Goodman
(214-505-6835)
(214-352-4623)
ICQ 31510047

3300. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <r3na2toov337t0j9svqprgn1p69t9h6qps@4ax.com>
Source record: 175472

On Tue, 28 Nov 2000 19:34:20 -0600, "KG4FGN" <kg4fgn@mindspring.com>
wrote:

>So what I really need to know is:
>
>1) Where the heck to I get a weather balloon or other similar balloon that
>would hold the weight of antenna and coax?

For a surplus balloon, go to Fair Radio Sales. However, I've used
them and I didn't like the way even a slight breeze would blow them
back to earth. I've enquired about a surplus advertising kitoon.
Sometimes these things are made with the wrong stuff written on them.
If you don't care what it looks like, you may find it will meet your
needs. If I remember correctly from the last time we investigated
this sort of thing, we found it cost around $250 (without helium).

>2) I'm thinking of getting a canister of helium to fill it with. Any other
>suggestions? I thought about using a hot air system, but the mechanics would
>be a bit harder to work out.

Go to a Welder's supply shop. They have helium in bulk.

>3) Any other tips or things I should look for? I want to learn from other
>people's experience.

WATCH OUT FOR STATIC CHARGES!!!! This is not the kiddie stuff you get
from walking across the carpet. This can knock you off your feet and
possibly even kill you. Use an RF choke or a high value resistor to
bleed this charge to ground.

>If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
>to have fun...

I'd suggest using a kite because that way the antenna can be fixed in
some general direction. Also, do not use the coax to keep the
kite/balloon tethered. Use good dacron kite flying line. (Available
from In To the Wind). If you're looking at kites, a large Delta can
be had for around $70. It's stable and it's a good lifter.

I can also relate that I have a Stratoscoop III kite and although it's
a very heavy lifter, it's not nearly as stable as I'd like. I prefer
my 9' delta over it for this sort of thing.

Keep the kite/balloon weight under 5 pounds or you'll need to have a
discussion with your local Flight Standards District Office before you
launch. Read Federal Aviation Regulations part 101 (it's short and
quite understandable) for more details.

That's most of it. I'm sure others can tell you anything I've left out.

Jake Brodsky, mailto:frussle@erols.com
PP ASEL IA, Cessna Cardinal N30946, Based @ FME
Amateur Radio Station AB3A

3301. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A2567E5.8A666DC6@bellatlantic.net>
Source record: 175473

You don't need a yagi - just a tuner to load up the lawn chair!

Seriously - Chip mentioned a great idea. Drag yourself down to a car dealership that flys one of those baloon advertisements, if there is one near you. Talk to them to get any practical pointers they can give you on flying the thing.

KG4FGN wrote:

> OK, I'm hoping someone else out here has tried this idea and can give me
> some pointers.
>
> We've all heard the Darwin Award about the Lawnchair guy who hooked some
> balloons to a lawn chair and wound up floating to 12,000 feet. (If you
> haven't read this hilarious story, go to www.darwinawards.com, click on
> honorable mentions, vintage years, and click on Lawn Chair Larry).
>
> So I was chuckling with my wife over the turkey holidays, remembering some
> of the Darwin stuff. It got me to thinking though, if it worked with an
> idiot, it would probably work OK for an antenna. So I'm thinking, if I built
> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
> hung it off the bottom of a weather balloon, and fed it with some light
> weight coax, I could run it up to 100 or 150 feet and maybe do some
> interesting dx type work on 2 meter. Might also make an interesting addition
> to field day.
>
> So what I really need to know is:
>
> 1) Where the heck to I get a weather balloon or other similar balloon that
> would hold the weight of antenna and coax?
>
> 2) I'm thinking of getting a canister of helium to fill it with. Any other
> suggestions? I thought about using a hot air system, but the mechanics would
> be a bit harder to work out.
>
> 3) Any other tips or things I should look for? I want to learn from other
> people's experience.
>
> If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
> to have fun...
>
> Robert / KG4FGN
>
> --
> "My wife said if I don't give up ham radio she'd leave me...OVER"

3302. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a885caf.3020042351@news.seanet.com>
Source record: 175474

On Wed, 29 Nov 2000 20:31:41 GMT, ehsjr@bellatlantic.net wrote:

>Talk to them to get any practical pointers they can give you
>on flying the thing.
>

Hi OM,

Other good pointers found here. To your point however I would add
that the balloons I have seen that manage wind well are those designs
that look like dirigibles. In other words, they exhibit some airfoil
property. I've seen these "fly" into the wind, but with stiff winds
they do a bit of thrashing (flying in a figure 8 pattern). On the
other hand, round balloons just lay right down.

73's
Richard Clark, KB7QHC

3303. Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Birken Vogt <vogt@oro.net>
Message-ID: <3A2584F7.30C970D5@oro.net>
Source record: 175475

I thought I remembered reading about a 160M antenna supported by a balloon on the one end in QST. It was a full length vertical or something like that. It was used to work some contest and it worked so well that some people were accusing the owner of using illegal power. I can't find it in the ARRL index search and was wondering if anybody knew where I had read that.

Birken KE6DLT/AG

3304. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <kXfV5.3528$Ur5.409257@monger.newsread.com>
Source record: 175476

Kites can be built that will lift one whale of a load in just a light
breeze.
I built one, using thin wall conduit for a frame. It broke a 1/4 inch rope
in a good breeze. (not a real windy day)

When I was a kid, the local JCs would have a kite building contest.
Each year they would build a monster that was flown from the back of a
pickup truck.

The line was cable and mounted to a reel on that truck.

One year the wind got to be a little more than expected and the thing
started dragging the truck across the field. Gusts were actually lifting
the rear wheels.
They finally had to cut it loose.
Admittedly this was just a 1/2 ton pickup and not one of today's monsters.

They do require lots of space away from power lines though.
The kite may be flown from one location while the station my be located
under the kite.

Just remember to give at least a half mile clearance down wind and a quarter
mile to the sides.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:2kv109.8q3.ln@mail.specsol.com...
> KG4FGN <kg4fgn@mindspring.com> wrote:
>
> <snip>
>
> > 1) Where the heck to I get a weather balloon or other similar balloon
that
> > would hold the weight of antenna and coax?
>
> Fair radio has big balloons in their catalog.
>
> > 2) I'm thinking of getting a canister of helium to fill it with. Any
other
> > suggestions? I thought about using a hot air system, but the mechanics
would
> > be a bit harder to work out.
>
> Party supply store. But beware, even balloon grade helium in this quantity

> isn't going to be cheap.
>
> > 3) Any other tips or things I should look for? I want to learn from other
> > people's experience.
>
> Pointing a yagi would be a problem; better something like a verticle dipole.
>
> I friend and I went through some rough calculations on what this would take
> given the weight and cost of everything. We came to the conclusion if you've
> got money to burn, OK, otherwise a kite would be more practical unless you
> are willing to take the risks of a hydrogen balloon (more lift for the buck).
>
> The kite could also serve as the "frame" for a wire antenna.
>
> There was an article in QST a few months back about building your own
> kite on steroids for doing such things.
>
> Jim Pennino
>
>

3305. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a898c0e.3032169168@news.seanet.com>
Source record: 175477

On Wed, 29 Nov 2000 14:36:39 -0800, Birken Vogt <vogt@oro.net> wrote:

>I thought I remembered reading about a 160M antenna supported by a
>balloon on the one end in QST. It was a full length vertical or
>something like that. It was used to work some contest and it worked so
>well that some people were accusing the owner of using illegal power. I
>can't find it in the ARRL index search and was wondering if anybody knew
>where I had read that.
>
>Birken KE6DLT/AG

Hi Berken,

The Field Day before last I witnessed one of the group launch a
halfwave vertical with a balloon. It was a standard weather balloon,
but during the evening hours when propagation was coming up and wind
going down. He used a laser based rangefinder to measure out the
length of radiator and had a monster LC circuit at the feed point to
match Z. Reports all around were impressive, he was the big gun as
far as they were concerned.

73's
Richard Clark, KB7QHC

3306. More tuner questions (with ladder line)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3a25ae54_1@news1.prserv.net>
Source record: 175478

Some weeks ago I asked questions here about connecting a dipole fed with ladder line to a simple antenna tuner (without a built-in balun). Everyone who responded suggested a "current choke" balun. I ordered toroids from Palomar and can report that the arrangement works well.
Thank you to those who responded.

I have a somewhat more ambitious design for my next antenna, taken from the August 89 issue of QST. It is a 20m loop, mounted in a diamond configuration, fed at the bottom (ladder line again), with a relay to open/close the "top" of the diamond. The goal is to use it for 30-10 meters. The QST article indicated that opening or closing the top of the loop made substantial changes in the "takeoff" angles on various bands.

An editorial footnote in the article recommended against using a current balun because the antenna impedance might be "several thousand ohms" in some combinations of frequency and open/close options. The article said little about how the ladder line should be fed. Any suggestions? I assume I could use any of the current tuners that have built-in baluns (but not of the current choke variety). Is this reasonable? I will be running 200 watts maximum. Would a 4:1 balun in "front" of my tuner do it? (This would be more convenient, allowing me to run coax for about 20 feet to get out of the house.)

I have heard similar questions from other hams, so responses on this newsgroup might be more helpful than direct responses to me.

Bill Ogden
W2WO

(If I can arrange it, the diamond loop will be attached to the top of a 65 foot aluminum pole that, in turn, will be a base-fed 80/160 meter vertical; but that is a future goal.)

3307. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A25B7F0.70C75CCB@dvol.com>
Source record: 175479

Fractenna wrote:

> >>1) Where the heck to I get a weather balloon or other similar balloon that
> >>would hold the weight of antenna and coax?
> >>
>
> Edmund Scientific

>
Absolute fact that Lawnchair Larry got his weather balloons from Edmund. Don't seem to be in the current catalog.
>

> >>2) I'm thinking of getting a canister of helium to fill it with. Any other
> >>suggestions? I thought about using a hot air system, but the mechanics would
> >>be a bit harder to work out.
>
> Helium is readily available in party stores as canisters. Not cheap.

>
Not particularly expensive either depending on the coefficient of mischief involved.
>

>
>
> >>3) Any other tips or things I should look for? I want to learn from other
> >>people's experience.
> >>
>
> Be sure it meets with FAA regs:-) Also, you need to anchor it with at least 3
> points on the ground.

>
Except in the vicinity of charted and/or controlled airports the FAA has no jurisdiction over flight operations below 700 feet. Fly it over 700 AGL and oh well.
>
Just for the record Lawnchair Larry virtually shut down LAX with his antics, the second busiest TCA in the country. Needless to say he had more feds twiling their cuffs when he finally landed than Al Capone ever did.
>

> Car dealerships commonly dow awhat you say, only they tackily put those rows of
> plastic flags along the ground guys.
>

> 73
> Chip N1IR
>
> >>If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
> >>to have fun...
> >>
> >> Robert / KG4FGN
> >>
> >>--
> >> "My wife said if I don't give up ham radio she'd leave me...OVER"

>
Like I told the ex, "Well OK but damn I'm really gonna miss you . . . " OVER
>
w3rv

3308. Re: More tuner questions (with ladder line)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A25C793.9D2A6DC6@IEEE.org>
Source record: 175480

Bill Ogden wrote:
> I have heard similar questions from other hams, so responses on this
> newsgroup might be more helpful than direct responses to me.

You can vary the length of the ladder-line to get a reasonable
interface to a current choke/balun at the tuner. Many hams are
doing just that to obtain an impedance that their built-in
tuners are happy with.
--
http://www.mindspring.com/~w6rca

3309. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <904m11rhq1@slb6.atl.mindspring.net>
Source record: 175481

Best place for good price on helium is a welding supply store.
--
CW
KC7NOD
"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:2kv109.8q3.ln@mail.specsol.com...
> KG4FGN <kg4fgn@mindspring.com> wrote:
.
>
> > 2) I'm thinking of getting a canister of helium to fill it with. Any
other
> > suggestions? I thought about using a hot air system, but the mechanics
would
> > be a bit harder to work out.
>
> Party supply store. But beware, even balloon grade helium in this quantity
> isn't going to be cheap.
>

3310. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <904mm9esv1@slb7.atl.mindspring.net>
Source record: 175482

Jake is right on the regulations on heavy kites. In the same regs, there is
also a limit on balloons that limits them to 105 cubic feet of gas. Quite
small actually. Any larger and authorities have to be notified before
launch. Large kites and balloons are limited to 150 feet or less AGL.
--
CW
KC7NOD
"Jake Brodsky" <frussle@erols.com> wrote in message
news:r3na2toov337t0j9svqprgn1p69t9h6qps@4ax.com...
> Keep the kite/balloon weight under 5 pounds or you'll need to have a
> discussion with your local Flight Standards District Office before you
> launch. Read Federal Aviation Regulations part 101 (it's short and
> quite understandable) for more details.
>
> Jake Brodsky, mailto:frussle@erols.com
> PP ASEL IA, Cessna Cardinal N30946, Based @ FME
> Amateur Radio Station AB3A

3311. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <902ip5$b6i$1@slb0.atl.mindspring.net>
Source record: 175557

At the risk of stating the obvious -- watch out for power lines.
You are, after all, going to feed this with wire. You really
don't want 220v or worse, 4000v 60Hz ac on your antenna,
and in your shack.

Talk about line noise!

gl & 73

--
Tom Wagner - N1MM
Check out the N1MM Free Contest Logger at
http://tomwagner.home.mindspring.com/n1mm.htm

KG4FGN <kg4fgn@mindspring.com> wrote in message
news:901mbo$348$1@slb6.atl.mindspring.net...
> OK, I'm hoping someone else out here has tried this idea and can give me
> some pointers.
>
> We've all heard the Darwin Award about the Lawnchair guy who hooked some
> balloons to a lawn chair and wound up floating to 12,000 feet. (If you
> haven't read this hilarious story, go to www.darwinawards.com, click on
> honorable mentions, vintage years, and click on Lawn Chair Larry).
>
> So I was chuckling with my wife over the turkey holidays, remembering some
> of the Darwin stuff. It got me to thinking though, if it worked with an
> idiot, it would probably work OK for an antenna. So I'm thinking, if I
built
> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane)
and
> hung it off the bottom of a weather balloon, and fed it with some light
> weight coax, I could run it up to 100 or 150 feet and maybe do some
> interesting dx type work on 2 meter. Might also make an interesting
addition
> to field day.
>
> So what I really need to know is:
>
> 1) Where the heck to I get a weather balloon or other similar balloon that
> would hold the weight of antenna and coax?
>
> 2) I'm thinking of getting a canister of helium to fill it with. Any other
> suggestions? I thought about using a hot air system, but the mechanics
would
> be a bit harder to work out.

>
> 3) Any other tips or things I should look for? I want to learn from other
> people's experience.
>
> If you think I'm nuts, my wife agrees with you. But what the heck, a guy
has
> to have fun...
>
> Robert / KG4FGN
>
> ---
> "My wife said if I don't give up ham radio she'd leave me...OVER"
>
>
>
>

3312. KLM JV2X or JV220X blueprints nedded

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: AK <nobody@nowhere.earth>
Message-ID: <902ooi$6u6$1@newssrv.otenet.gr>
Source record: 175558

Hi,
I need to construct a circular antenna to transmit FM (radio).

Does anyone have any construct instructions for the KLM JV2X or JV220X models?

It would be great also, to sent me instructions for similar antennas.

TIA
Andreas Cordonouris
Hellas

3313. Best way to improve car FM reception?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Sodah <sodah5@home.com>
Message-ID: <1q7V5.723352$8u4.11790152@news1.rdc1.bc.home.com>
Source record: 175559

One of my preferred FM radio stations which I listen to when in my car, happens to be a fringe station (i.e. far away), and consequently often fades away and/or has lots of noise. How can I go about improving my reception for this station: (1) Install a booster amp? (2) Install a larger (or additional) antenna (i.e. to increase antenna surface area and height)? (3) Opt for a more expensive, higher quality FM receiver?...
Also, what does an FM filter do exactly and would a filter (of this or any other conceivable kind) be of any use -say in combination with any of the above- as far as reducing unwanted noise?

Thanks in advance,
Sodah

E-mail address: sodah5@home.com

3314. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: jchapman@gcfn.org
Message-ID: <9030n8$a2m$1@acme.gcfn.org>
Source record: 175560

R.Wilhelm (nhbiwilh@rrzn-user.uni-hannover.de) wrote:

: Apart from the allocation of some military service the frequency range
: 35 to 35.2 is allocated to remote control. The people at this club where
: just astonished to find their planes falling from sky :-(

Just because the miltary is "allocated" 35 to 35.2 doesn't mean that they stay there. Most of their rigs will tune a much wider area, and the fact that you were hearing "North American English" tells me that it was probably military in nature.

I've heard our military all over the place here in the US, including the ham bands (6m is common), the National Guard seems to be the worst offender. They don't follow allocations very well.

I'd have someone bring a scanner to your flying sessions in the future, and monitor the frequencies in use. If you hear voice traffic, it's time to move to a different channel.......

Good luck!
--
--*-*-*-*-*-*-*-*-*-*-*-*-*-
John Chapman WB8INY
Ohio Section ARES, District Emergency Coordinator, District 7
http://www.rexall.com/eLife (for your health, for your future)

3315. mobile antenna swinging mount...??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Fred Davis <fmdavis@nortelnetworks.com>
Message-ID: <MPG.148ee387dbb36cfe989907@carnews0>
Source record: 175561

Hey all,
Years ago I had a mobile antenna mount that would swing the whole antenna into the trunk. This "fold over" mount was very handy when entering low-height areas and also to hide the antenna when parking in less-than-desireable areas.
Basically the mount screwed to the inside lip of the trunk and would come up inbetween the trunk lid and the body of the car.

Anyone know if these mounts are still commerically available anywhere?

tnx es 73 de Fred VA3FD

3316. Re: Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <sV8V5.2842$tj4.8062@tor-nn1.netcom.ca>
Source record: 175562
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

There is also GEOCLOCK with the HAM RADIO PACKAGE. But it is a little
pricey.

Many logging programs in the same price range have a similar map feature!
See DX4WIN and LOGIC (www.hosenose.com), etc...

The web page for Geoclock is http://home.att.net/~geoclock/

73's
Rob

"Rob" <Pse@NoEmail.Com> wrote in message
news:44_U5.2765$tj4.7607@tor-nn1.netcom.ca...
> See DXMon by VE3SUN...
>
> Gives you a great circle map, distance, bearings etc!!
>
> Best of all it is FREEWARE!! No need to buy expensive logging software!
>
> (see http://www.benlo.com/dxmon.html)
>
> Rob
>
> "Phil" <philvdk@pandora.be> wrote in message
> news:504U5.18727$zF6.158702@afrodite.telenet-ops.be...
> > Hi,
> >
> > I'm looking for a program to use in Windows that shows all PREFIX on a
> > detailed map.
> > It would be great if I even can calculate worked distances and bearings.
> > All info is welcome on thsi subject !
> >
> > Thanks and 73 de Phil
> > ON4BAW
> >
> >
>
>

3317. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011291624150.28995-100000@unics>
Source record: 175563

On 29 Nov 2000, John W Chapman wrote:

>
> I'd have someone bring a scanner to your flying sessions in the future,
> and monitor the frequencies in use. If you hear voice traffic, it's time
> to move to a different channel.......
>
>
Hi John,

yes actually it was a friend of mine who told me about the lost planes and
I proposed to him to buy a cheap handscanner. I don't know how many people
they are in his club but estimate 50 to 100 so this should give any
problem for them.

Vy 73

Ralf

==
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==

Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==

3318. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011291629440.28995-100000@unics>
Source record: 175564

On 28 Nov 2000, Fractenna wrote:

>
> Also,I suspect you are misunderstanding the inverse square law. This applies
> only in the far field. For example (not an antenna one): as you go under the
> surface of the earth, the gravitational force goes as 1/R, not 1/R^2. It sounds
> like the close by structure you describe are in the near field of your
> antenna.
>
> 73
> Chip N1IR
>
>
Hi Chip,

I wanted to write field strength proportional square root (power).
If I double the the mass of the earth, gravitational force will double:
I don't have the formula here but I think for two point masses it is
something like

V=- grav-konst*(M)/r
some people put m here, too

Force propto (1/r^2)*M*m

Integrating for a (lets say homogenious) 'real' mass distribution I still
obtain the linear mass dependence.

Now converting to the antenna:
in the NEC formulation, the response of a wire arrangement to a electrical
field at the feedpoint is calculated.

If I double my power, the electric potential at the feedpoint will
increase by square root power.

The response of the wires is linear, so the charges and currents will be
modified in such a manner that the field produced by the wire will
increase by square root (power) to.

Take an infinitesimal current element.
The current is proportional to square root (power).
The vector potential is something like

A proportional (J/r)*exp(-ikr)
J=current
k=2*pi/lambda
r=distance

i='square root of -1'
The H field is rot A (outside the wire at least) proportional J
The E field is rot rot A (same restriction) proportional J.

To me all fields are proportional square root (power) ???

For real antennas just sum up many current elements. You still have the square root (power) law.

By taking the response of the antenna to an external field, you arrive at power delivered to load is proportional H- or E-Field squared (by inverting this confimrs the above law).

The far field is produced by superposition of the fields close to the antenna some how (optical equivalent diffraction).

If the near field did not go by square root (power) but the far field does, wouldn't that mean that my far field radiation pattern becomes power dependent ?
Is NEC totally useless then ?

Vy 73

Ralf

DL 6 OAP

==========
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Tel: +49 511 762 2232
==========
Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

3319. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10011291652150.28995-100000@unics>
Source record: 175565

On Tue, 28 Nov 2000, Jim Glover wrote:

>
> I suspect that some of the confusion here is that some people are thinking
> about the case where the goal is to "tune" an antenna in the sense of
> adjusting the length, spacing and orientation of its elements, with a
> goal of optimizing its radiation pattern, while other people are thinking
> about the case where the goal is to "tune" the antenna *system* in the
> sense of matching the feedline to the transmitter (or perhaps the
> antenna...but let's keep things simple and assume that some of us are
> thinking in terms of a standard tuner-in-the-shack set-up).
>
Hi, Jim

I'm among the people (or maybe I'm alone) who understood the initial
question in the latter sense.
Strictly speaking, my argumentation refers to this case. But if your 80
mtr Dipole is only '0.5 mtrs from resonance', you can probably/hopefully
use the same argumentation. I'm not sure what happens if I have to double
the antenna's length to make it resonant. I think it depends on where the
field strength is measured (a maximum perhaps becomes a minimum then ?).

> If no adjustments are made to the antenna--can we count on near field
> strength to vary in step with the power delivered to the antenna?
> Never mind whether it varies inversely proportionally to R, or R^2...
> Never mind whether it varies linearly at all with respect to power
> delivered to the antenna (though I suspect it probably should)...
If no length changing is done, the field strength is proportional square
root (power), whereever you measure it and this will at least mean maximum
fieldstrength = maximum power radiated .

>
> I suspect that the only precaution we'd have to take to be able to
> count on things working that way (again, assuming a standard tuner-
> in-the-shack set-up) would be to take the field strength measurement
> from somewhere closer to the antenna than to the shack. Otherwise,
> we might be observing a peak in "RF in the shack" rather than RF out
> to the antenna system. As long as we avoid that, can we count on a
> maximum of field strength to coincide with a maximum of power delivered
> to the antenna?
>
I assumed that all field indicated is coming to the meter from the
antenna.

I don't like the idea to put a field strength meter in the tree to avoid
measuring rf in the shack, so I tune via swr indicator. In my CB times I

tried once to tune via field strength (meter close to station) and I only
got 'maximum distortion', to me that means that although the square root o
power law is correct for all fields, it might be of limited use for
tuning.

Vy 73

Ralf

DL 6 OAP
==========
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Tel: +49 511 762 2232
==========
Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

3320. Re: mobile antenna swinging mount...??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805B993BF@www.indianarep.com>
Source record: 175566

I see them in the AES catalog - not in front of me but I seem to think it's
by Comet. Try http://www.aesham.com (and then compare elsewhere for a
cheaper price, er uhm).

Fred Davis <fmdavis@nortelnetworks.com> wrote in message
news:MPG.148ee387dbb36cfe989907@carnews0...
> Hey all,
> Years ago I had a mobile antenna mount that would swing the whole
> antenna into the trunk. This "fold over" mount was very handy when
> entering low-height areas and also to hide the antenna when
> parking in less-than-desireable areas.
> Basically the mount screwed to the inside lip of the trunk and
> would come up inbetween the trunk lid and the body of the car.
>
> Anyone know if these mounts are still commerically available
> anywhere?
>
> tnx es 73 de Fred VA3FD

3321. Re: Best way to improve car FM reception?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805B99546@www.indianarep.com>
Source record: 175567

I recommend that you try (in order) 2, 1, 3. I used a booster amp once, and while it worked ok, it badly overloaded the receive when NOT in a fringe area. Having experienced the difference between a magmount "mini whip" and a 7/8 wavelength trunk mount on 2 meters, the difference with a GOOD antenna is dramatic.

Sodah <sodah5@home.com> wrote in message news:1q7V5.723352$8u4.11790152@news1.rdc1.bc.home.com...
> One of my preferred FM radio stations which I listen to when in my car,
> happens to be a fringe station (i.e. far away), and consequently often fades
> away and/or has lots of noise. How can I go about improving my reception
> for this station: (1) Install a booster amp? (2) Install a larger (or
> additional) antenna (i.e. to increase antenna surface area and height)? (3)
> Opt for a more expensive, higher quality FM receiver?...
> Also, what does an FM filter do exactly and would a filter (of this or any
> other conceivable kind) be of any use -say in combination with any of the
> above- as far as reducing unwanted noise?
>
> Thanks in advance,
> Sodah
>
> E-mail address: sodah5@home.com
>

3322. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A255343.68CD65AF@eznec.com>
Source record: 175568

NEC isn't "totally useless" -- it's in daily use worldwide, helping to design real antennas that work. The strength of both the near and far fields (volts or amps/meter) are proportional to the square root of the applied power, and NEC reports this. Most people view far field outputs in dBi, which is normalized to the power input, so far field results in dBi do not change as the input power changes.

NEC calculates both the electric and magnetic fields, giving results accurate in both the near and far fields. If you're interested in how it's done, you can find the NEC-2 manual on line at http://members.home.net/nec2/preface.html. The EZNEC demo (free, from http://eznec.com) can be used as an easy way to look at NEC-2 results with simple antennas.

Roy Lewallen, W7EL

"R.Wilhelm" wrote:
> >
> Hi Chip,
>
> I wanted to write field strength proportional square root (power).
> If I double the the mass of the earth, gravitational force will double:
> I don't have the formula here but I think for two point masses it is
> something like
>
> V=- grav-konst*(M)/r
> some people put m here, too
>
> Force propto (1/r^2)*M*m
>
> Integrating for a (lets say homogenious) 'real' mass distribution I still
> obtain the linear mass dependence.
>
> Now converting to the antenna:
> in the NEC formulation, the response of a wire arrangement to a electrical
> field at the feedpoint is calculated.
>
> If I double my power, the electric potential at the feedpoint will
> increase by square root power.
>
> The response of the wires is linear, so the charges and currents will be
> modified in such a manner that the field produced by the wire will
> increase by square root (power) to.
>
> Take an infinitesimal current element.

> The current is proportional to square root (power).
> The vector potential is something like
>
> A proportional (J/r)*exp(-ikr)
> J=current
> k=2*pi/lambda
> r=distance
> i='square root of -1'
> The H field is rot A (outside the wire at least) proportional J
> The E field is rot rot A (same restriction) proportional J.
>
> To me all fields are proportional square root (power) ???
>
> For real antennas just sum up many current elements. You still have the
> square root (power) law.
>
> By taking the response of the antenna to an external field, you arrive at
> power delivered to load is proportional H- or E-Field squared (by
> inverting this confimrs the above law).
>
> The far field is produced by superposition of the fields close to the
> antenna some how (optical equivalent diffraction).
>
> If the near field did not go by square root (power) but the far field
> does, wouldn't that mean that my far field radiation pattern becomes power
> dependent ?
> Is NEC totally useless then ?
>
> Vy 73
>
> Ralf
>
> DL 6 OAP

3323. HF Pack (new e-group) Portable HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 00:34:55 UTC
From: radioadventure@aol.com
Message-ID: <20001128193455.00565.00000350@ng-cg1.aol.com>
Source record: 175546

Interesting group called "HFpack" has just formed on eGroups. It is growing very fast. Here is the link:
http://www.egroups.com/group/hfpack

This is the description:
Portable and Handheld HF Transceivers and Antenna systems for backpack operation. Walking and portable operation of HF SSB / CW / Data systems in the field. HF Handhelds. Battery and alternative energy operation of HF systems for amateur, commercial, marine, and other systems. Miniaturization and use of Manpacks, Personpacks, HFpacks, solar charging, lightweight power supplies, ergonomic designs for backpack radios, mounting systems for whip antennas, compact antenna tuning and loading devices, tape antennas, collapsible antennas, handsets, controllers, headsets, microphones, earphones, keyers, paddles. Low power consumption techniques for transmit and receive. Portable RF Amplifiers and maximizing effectiveness of low RF power output transmitters. Expedition radio systems.

3324. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 01:05:43 UTC
From: Peter Freeman <Peter.Freeman@sci.monash.edu.au>
Message-ID: <3A244857.88EB8132@sci.monash.edu.au>
Source record: 175547
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy
Body handling: Binary attachment payload not displayed: Peter.Freeman.vcf

The other option is to bring up the Character Map application (in Accessories). You can then search for the character you want. Click on the character, then click on Select, then Copy. The character is now on the clipboard, and you can paste into your main application. Slower, but works fine.

Peter
VK3KAI

Ian Jackson wrote:

> In article <8vuab5$8ec$1@iac5.navix.net>, Fred Hambrecht
> <Fred@w4jle.com> writes
> >Both examples use the extended ASCII character sets associated with your
> >particular code page. A true slash zero will display with the normal ASCII
> >zero in the 128 character code set (030)
> >
> >"Paul Keinanen" <keinanen@sci.fi> wrote in message >
> >> On a Windows machine hold down "alt" key and type 0248, like this ï¿½
> >>
> >> ... and you have a "lower case slashed zero".
> >>
> >>
> >
> >
> On my machine you get a 'ï¿½' like this...
> Turn on the 'num lock'.
> While holding down 'alt' type 0, then 2, then 1, then 6 ON THE NUMERIC
> KEYBOARD (or whatever you call it - you know what I mean - the one which
> has the 'home', 'pg up', 'end' etc). After you have typed the '6',
> release the 'alt' key.. and up pops the 'ï¿½'.
>
> Note: the 'top row' numbers DO NOT work.
>
> Cecil (W6RCA) did post (some time ago) a list of the interesting
> characters which he had found between 'alt0130' and 'alt0255', although
> I find that mine seem to start at 'alt0161' (I only get 'ï¿½' before
> that). 'Alt0181' is a useful one - it's 'ï¿½'.
>
> There are two problems...
> 1. I believe that everybody may not receive the 'correct' character -
> eg, the 'alt0181' should be a Greek 'mu' - who didn't get this?

> 2. I haven't worked out how to do this on a laptop where there is no
> numeric keyboard.
>
> ï¿½ï¿½ï¿½ï¿½ ï¿½ï¿½w!
>
> Ian.

--

Peter Freeman Phone: 03 5122 6416 or
School of Applied Sciences 03 9902 6416
Monash University Fax: 03 5122 6738 or
Churchill Vic 3842 03 9902 6738
Australia

peter.freeman@sci.monash.edu.au

[One or more binary attachments are retained only in the source text.]

3325. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 01:52:06 UTC
From: kg9qm@nomail.net
Message-ID: <ajZU5.344$75.257240@news1.iquest.net>
Source record: 175548

Maybe TWO ballons with balsa spreader between and a dipole on that, fed by ladder line. But, just try to control the direction it was pointed - eh?

Oh, then you hang a couple zenon tubes up there to flash while you transmit!

Who was it that said "you gotta make your own fun!"?

In article <901mbo$348$1@slb6.atl.mindspring.net>, kg4fgn@mindspring.com was of the opinion...
>
>OK, I'm hoping someone else out here has tried this idea and can give me
>some pointers.
>
>We've all heard the Darwin Award about the Lawnchair guy who hooked some
>balloons to a lawn chair and wound up floating to 12,000 feet. (If you
>haven't read this hilarious story, go to www.darwinawards.com, click on
>honorable mentions, vintage years, and click on Lawn Chair Larry).
>
>So I was chuckling with my wife over the turkey holidays, remembering some
>of the Darwin stuff. It got me to thinking though, if it worked with an
>idiot, it would probably work OK for an antenna. So I'm thinking, if I built
>an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
>hung it off the bottom of a weather balloon, and fed it with some light
>weight coax, I could run it up to 100 or 150 feet and maybe do some
>interesting dx type work on 2 meter. Might also make an interesting addition
>to field day.
>
>So what I really need to know is:
>
>1) Where the heck to I get a weather balloon or other similar balloon that
>would hold the weight of antenna and coax?
>
>2) I'm thinking of getting a canister of helium to fill it with. Any other
>suggestions? I thought about using a hot air system, but the mechanics would
>be a bit harder to work out.
>
>3) Any other tips or things I should look for? I want to learn from other
>people's experience.
>
>If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
>to have fun...
>
> Robert / KG4FGN
>
>--

> "My wife said if I don't give up ham radio she'd leave me...OVER"
>
>
>
>

3326. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 02:16:50 UTC
From: fractenna@aol.com
Message-ID: <20001128211650.20942.00002314@ng-fc1.aol.com>
Source record: 175549

>>1) Where the heck to I get a weather balloon or other similar balloon that
>>would hold the weight of antenna and coax?
>>

Edmund Scientific

>>2) I'm thinking of getting a canister of helium to fill it with. Any other
>>suggestions? I thought about using a hot air system, but the mechanics would
>>be a bit harder to work out.

Helium is readily available in party stores as canisters. Not cheap.

>>3) Any other tips or things I should look for? I want to learn from other
>>people's experience.
>>

Be sure it meets with FAA regs:-) Also, you need to anchor it with at least 3
points on the ground.

Car dealerships commonly dow awhat you say, only they tackily put those rows of
plastic flags along the ground guys.

73
Chip N1IR

>>If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
>>to have fun...
>>
>> Robert / KG4FGN
>>
>>--
>> "My wife said if I don't give up ham radio she'd leave me...OVER"
>>
>>
>>
>>
>

3327. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 02:22:35 UTC
From: fractenna@aol.com
Message-ID: <20001128212235.20976.00001975@ng-fc1.aol.com>
Source record: 175550

>1) Where the heck to I get a weather balloon or other similar balloon that
>would hold the weight of antenna and coax?
>

More info: try this link:

http://www.eoss.org/pubs/faqloon.htm

73
Chip N1IR

3328. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 02:53:58 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A246FBE.ACABC151@att.net>
Source record: 175551

First things first:

How do you propose to keep a Yagi pointed in three dimensions to a
desired heading?

Think about it . . .

I really doubt that there is anyone else with such experience to guide
you.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

KG4FGN wrote:
>
> OK, I'm hoping someone else out here has tried this idea and can give me
> some pointers.
>
> We've all heard the Darwin Award about the Lawnchair guy who hooked some
> balloons to a lawn chair and wound up floating to 12,000 feet. (If you
> haven't read this hilarious story, go to www.darwinawards.com, click on
> honorable mentions, vintage years, and click on Lawn Chair Larry).
>
> So I was chuckling with my wife over the turkey holidays, remembering some
> of the Darwin stuff. It got me to thinking though, if it worked with an
> idiot, it would probably work OK for an antenna. So I'm thinking, if I built
> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
> hung it off the bottom of a weather balloon, and fed it with some light
> weight coax, I could run it up to 100 or 150 feet and maybe do some
> interesting dx type work on 2 meter. Might also make an interesting addition
> to field day.
>
> So what I really need to know is:
>
> 1) Where the heck to I get a weather balloon or other similar balloon that
> would hold the weight of antenna and coax?
>
> 2) I'm thinking of getting a canister of helium to fill it with. Any other
> suggestions? I thought about using a hot air system, but the mechanics would
> be a bit harder to work out.
>
> 3) Any other tips or things I should look for? I want to learn from other
> people's experience.
>

> If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
> to have fun...
>
> Robert / KG4FGN

3329. Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 03:17:27 UTC
From: David Findlay <nedz@bigpond.com>
Message-ID: <Uu_U5.145790$e5.85780@newsfeeds.bigpond.com>
Source record: 175552
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

First, sorry for the cross-post, but this is relevant to both groups and saves me typing this twice.

I am looking for information and recommendations on antennas for space communications. I have read about quad-helix antennas in an old antenna book, and these seem to be exactly what I want. I don't have room for a dish. I would like to know of anyone's experiences using these. Also how are they to build?

I am mainly looking to recieve images from weather sats, and listening to manned spacecraft such as the shuttle and ISS. What size quad-helix should I go for and what bands are most useful? I am going to build on a motor driven alt-az mount that will be guided by computer software.

Any recommendations on these antennas would be appreciated.

David Findlay

3330. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 03:31:05 UTC
From: fractenna@aol.com
Message-ID: <20001128223105.24694.00002346@ng-cd1.aol.com>
Source record: 175553

>KG4FGN wrote:
>> So I'm thinking, if I built
>> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
>> hung it off the bottom of a weather balloon, and fed it with some light
>> weight coax, I could run it up to 100 or 150 feet and maybe do some
>> interesting dx type work on 2 meter. Might also make an interesting
>addition
>> to field day.
>
>You could, like the other guy, float up to 12,000 ft. and work
>your DX from there. :-)
>--
>http://www.mindspring.com/~w6rca
>

He'd need 45 balloons and LOTS of sandwiches.

And, oh yes--a pellet gun:-)

Getting serious again, Edmund Scientific has sold weather balloons for over 40 years:-) Definitey in the catalog but don't know about web site.

73
Chip N1IR

3331. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 03:33:42 UTC
From: fractenna@aol.com
Message-ID: <20001128223342.24766.00002042@ng-cd1.aol.com>
Source record: 175554

Here's the Edmund balloon link

http://www.edmundscientific.com/Products/Search.cfm?query=balloon

73
Chip N1IR

3332. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 04:20:27 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <902067$2ve$1@nnrp1.deja.com>
Source record: 175555

In article <901mbo$348$1@slb6.atl.mindspring.net>,
"KG4FGN" <kg4fgn@mindspring.com> wrote:
> OK, I'm hoping someone else out here has tried this idea and can give
me
> some pointers.
>

Check back issues of QST. There was an article or two sometime in last
two years about using balloons to support antennas. I just checked my
Dec 2000 QST index for 2000 and found no such article, must have been
earlier than 2000.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com http://www.deja.com/
Before you buy.

3333. Re: Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-29 04:58:43 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <3A248D03.E1BC51DC@amsat.org>
Source record: 175556
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Go to: www.members.aol.com/k5oe
Jerry's page has some excellent, easy to build antennas that work great.
I use 3 of them myself, 2M, 70cm, and WXsat.
Jim

3334. Re: hustler 6-btv any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <PzEV5.628$Tv6.43106@nntp2.onemain.com>
Source record: 175419

Jeff I have a 4btv and used it against a chain link fence wherein I bonded the top rail. It was about 33 ft on either side of the vert. I have worked lotsa dx that way with 100w and sometime 50w.....good ground reference is the key. I shoulda bought the 6btv now that I think of it.....

Pat WB7FFI

3335. Re: hustler 6-btv any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A272496.155C@wt.net>
Source record: 175420

jeff wright wrote:
>
> i am thinking of putting up an hf vertical, and don't have a lot of room
> for a counterpoise or radials and saw an ad for the 6-btv. does anyone
> have experience with the 6-btv without using radials?

I'd rather get a butternut myself. I've had the 80-10 hustler and wasn't overly impressed. Sure , you can get out on them, but they seem overly lossy to me. On 40m compared to a 32 ft whip was like a dummy load nearly.
With the excess loss of the hustler 80m resonators, I wouldn't expect 80 to be that great either. I gave the hustler vertical I had away. I'd rather build my own where I can control things, but if I were to spend the money on one, I'd go the butternut. I like the design better. No traps. Also about the radials, both need them. The performance of either one is greatly improved with radials. The radials or radial are half the antenna. If they are missing , you have an incomplete antenna. And your feedline becomes the lower half. Not good. The performance of either one without radials won't be anything to write home about. Judging by my results with the hustler I had, without radials it will be a good dummy load. Or at least compared to a "good" antenna like a 1/4 whip. The shorter the radiator in wavelength, the more critical the ground radial system. MK
--
http://web.wt.net/~nm5k

3336. Re: NEED HELP TO ID THIS SIGNAL !!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn92di7j.t5r.X@animas.frontier.net>
Source record: 175421
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

On Wed, 29 Nov 2000 19:54:45 -0800, Lloyd posted

>begin 666 Unknown.wav
>M4DE&1N3+!0!7059%9FUT(! ````!``$`1*P``$2L```!``@`9&%T8<#+!0"4

There be a special place in Hell for those idiots that
cross-post large binaries in text-only newsgroups!

Newsgroups:
alt.radio.amateur.club.clarc, alt.radio.amateur.club.taparc,
aus.radio.amateur.digital, aus.radio.amateur.misc,
es.rec.radio.amateur, fr.rec.radio.amateur,
free.uk.amateur-radio, rec.radio.amateur.antenna,
rec.radio.amateur.equipment, rec.radio.amateur.ho

3337. Sky King Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Ellen Bj&#65533;rgan <allegt15@swipnet.se>
Message-ID: <6moV5.1308$tm.5389@nntpserver.swip.net>
Source record: 175492

I have trubel with my Rotor.
Som out here now this rotor with 5 wire and the controll box?
Eu2000-5E (Old Typ) made in Japan Taiwan?
73 de
from Odd

3338. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Sri Billy Bob <nulport@home.com>
Message-ID: <hb4c2t0efgpaipl6u0l32sro73fohg8j5t@4ax.com>
Source record: 175493

On Tue, 28 Nov 2000 19:34:20 -0600, "KG4FGN" <kg4fgn@mindspring.com>
enlightened us with:

>OK, I'm hoping someone else out here has tried this idea and can give me
>some pointers.
>
>We've all heard the Darwin Award about the Lawnchair guy who hooked some
>balloons to a lawn chair and wound up floating to 12,000 feet. (If you
>haven't read this hilarious story, go to www.darwinawards.com, click on
>honorable mentions, vintage years, and click on Lawn Chair Larry).
>
>So I was chuckling with my wife over the turkey holidays, remembering some
>of the Darwin stuff. It got me to thinking though, if it worked with an
>idiot, it would probably work OK for an antenna. So I'm thinking, if I built
>an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
>hung it off the bottom of a weather balloon, and fed it with some light
>weight coax, I could run it up to 100 or 150 feet and maybe do some
>interesting dx type work on 2 meter. Might also make an interesting addition
>to field day.
><snip>

I used to use a longwire attached to a large kite for SWL. Copper
coated steel welding wire worked pertty well but direction depended on
the wind.

You might try a kite with a 6 or 10 Meter dipole as the vertical
"stick". Or go horizontal if the wind is blowing along the axis you
want to listen/transmit to.

Wonder if Lawnchair Larry took a portable reciever with him?

Imagine the FM DX he could have picked up ;)

SBB

3339. Re: Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: ed <ed@vuurwerk.nl>
Message-ID: <3A26201D.6F5CF786@vuurwerk.nl>
Source record: 175494
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

```
Jim Jerzycke wrote:
>
> OOOOOPS! Just a little Brain Fade!
> Try this:
> http://members.aol.com/k50e/
> NO "www"....just straight hypertext.
> Jim

try it again :)

http://members.aol.com/k5oe

And it works from Zero to ohhhhhh
```

3340. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: DeeJayDubya <davidw@copper.net>
Message-ID: <JPqV5.2155$1O.8064@newsfeed.slurp.net>
Source record: 175495

Tch Tch Tch. Some of the younger fools are launching nylon monofilaments over the high-copper, and pulling small-diameter wires up from anchored spools .. they do it from far away at nite, and the high-energy plasma is spectacularly bright, and must be loud (squirrels pop the 65A fusible primary links around here, and it sounds like a 105mm shots). Must look like lightning striking the lines. Apparently, pilots are spotting these incidents after nightfall.

What next?

Wonder what the fault current is?

Should we hope the perps don't confuse the spools? Or spark a blaze?

73, Dave, K3BHJ

3341. hustler 6-btv any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: jeff wright <wright00@att.net>
Message-ID: <3A2641CF.58C47F1C@att.net>
Source record: 175496

i am thinking of putting up an hf vertical, and don't have a lot of room for a counterpoise or radials and saw an ad for the 6-btv. does anyone have experience with the 6-btv without using radials?

3342. RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Fraser Robertson <f.g.robertson@open.ac.uk>
Message-ID: <905mp6$4t1$1@yarrow.open.ac.uk>
Source record: 175497

Hi, I'm plagued by s9 local noise on topband. An active RX loop enables me to null it by 3 or 4 s points. I was wondering about using a noise pick up ant and making a noise cancelling unit - phase and amplitude.

Has anyone experience of such things, or can point me in the direction of any info.

Thanks / 73 Fraser G4BJM

f.g.robertson@open.ac.uk

3343. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <905msb$l1n$1@uranium.btinternet.com>
Source record: 175498

A kite or baloon supporting a sloping wire works wonders on
160m.

A 1/4 wave 130-foot wire requires a very low resistance
ground connection for high efficiency. Not easy to arrange
for a field day.

A nice length is about a halfwave where even a very poor
ground connection provides moderate efficiency but 250 feet
of wire in the air might contravene regulations and be
expensive to erect. A 5/8-wave is perfect, day or night.

So for us ordinary mortals, best length is roughly 3/8-wave,
about 200 feet. It will tune very nicely with a series 140
pF capacitor (300 pF max to make sure for somewhat shorter
lengths).
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Birken Vogt <vogt@oro.net> wrote in message
news:3A2584F7.30C970D5@oro.net...
> I thought I remembered reading about a 160M antenna
supported by a
> balloon on the one end in QST. It was a full length
vertical or
> something like that. It was used to work some contest and
it worked so
> well that some people were accusing the owner of using
illegal power. I
> can't find it in the ARRL index search and was wondering
if anybody knew
> where I had read that.
>
> Birken KE6DLT/AG

3344. Re: Best way to improve car FM reception?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <3WMmOuMraXIeRFxfrYL10CZtx6eR@4ax.com>
Source record: 175499

"Sodah" <sodah5@home.com> wrote:

>One of my preferred FM radio stations which I listen to when in my car,
>happens to be a fringe station (i.e. far away), and consequently often fades
>away and/or has lots of noise. How can I go about improving my reception
>for this station: (1) Install a booster amp? (2) Install a larger (or
>additional) antenna (i.e. to increase antenna surface area and height)? (3)
>Opt for a more expensive, higher quality FM receiver?...
>Also, what does an FM filter do exactly and would a filter (of this or any
>other conceivable kind) be of any use -say in combination with any of the
>above- as far as reducing unwanted noise?

You might look at a bigger and/or better antenna. Try
http://www.ccrane.com and look at their FM car antennas, especially
their big mother trucker's am/fm antenna.

That's not guaranteed to work, but it might be worth a try.

I'm not sure what kind of FM filters you're talking about, unless it's
a filter to reduce engine noise and hash. That might help, but your
basic problem is your station is too far away to lock in on the
receiver, so, in turn, you hear more engine noise or whatever.

Another thing you can do on weak FM stereo stations, is to simply put
your radio in the monoaural mode. That kills your stereo effect, but
often makes the signal easier to lock in. (I'm assuming your radio has
a stereo/mono switch -- it may not.)

Bob
k5qwg

>
>Thanks in advance,
>Sodah
>
>E-mail address: sodah5@home.com
>

3345. Re: hustler 6-btv any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t2ct17erpaha96@corp.supernews.com>
Source record: 175500

I've used the 4BTV and 6BTV and I think they are ok antennas, certainly worth the price.

As far as radials, I read in a DX mag about DXpeditions using chicken wire, so I tried an experiment with mine once in which I put down and hooked up two 25 foot by 18 inch wide strips of plain old chicken wire in an "X" under the 6BTV--best ground system I ever used--I was really shocked! But I don't argue with actual experience! So I left it for about a year. Then I decided to see if I could improve the performance by adding a normal radial system. I added several radials for 20, 40, and 80, but couldn't notice any improvement.

Only problem with chicken wire is that you should replace it frequently, perhaps every year or two, long before it embeds into the ground because as it disintegrates it will leave you with a mess of sharp ends and something hard to pull up. Mine is in a pasture so it doesn't matter. You might use the same idea, but much shorter strips to fit your room. Of course, if the area is frequently traveled by guests, remember, it doesn't look very pleasing to anyone but a ham!

The principle is that if you don't have a lot of room, use lots of radials to blanket the ground in the area you do have.

As far as a counterpoise (I assume you mean you are going to elevate the 6BTV), you should have a bare minimum of one resonant for each of the 6 bands, as they form the other half of the semi-vertical dipole for that band.

73,

Greg, N6GK

"jeff wright" <wright00@att.net> wrote in message
news:3A2641CF.58C47F1C@att.net...
> i am thinking of putting up an hf vertical, and don't have a lot of room
> for a counterpoise or radials and saw an ad for the 6-btv. does anyone
> have experience with the 6-btv without using radials?
>

3346. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t2cu3pl0o62t8f@corp.supernews.com>
Source record: 175501

If you decide to use a balloon, please strongly weigh the risks of it escaping because of a broken line. I've wanted to use a balloon, but haven't used one because I live in a heavily traveled flight zone (commercial jet pattern for San Jose is about 3000 feet above my home). I'd hate to think the problems--or liability--a loose balloon might cause!

Greg, N6GK

"Birken Vogt" <vogt@oro.net> wrote in message news:3A2584F7.30C970D5@oro.net...
> I thought I remembered reading about a 160M antenna supported by a
> balloon on the one end in QST. It was a full length vertical or
> something like that. It was used to work some contest and it worked so
> well that some people were accusing the owner of using illegal power. I
> can't find it in the ARRL index search and was wondering if anybody knew
> where I had read that.
>
> Birken KE6DLT/AG

3347. Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: adamory <adamory@ntlworld.com>
Message-ID: <Z4wV5.1193$0z.13506@news2-win.server.ntlworld.com>
Source record: 175502

Hi All,

I need some help with a coaxial type collinear antenna. I used to have the diagrams to knock one of these up, but I've lost them. If anyone can help with designs for 70cm or 23cm then that would be great. I have need for a vertical antenna with gain for 2320MHz and by scaling one of these antennas for the band maybe this will be a suitable antenna for vertical polarisation.

Email direct please to AdamORY@ntlworld.com

With thanks in advance for your time and effort.

73

Adam

3348. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2696B3.C88C2C7D@oio.net>
Source record: 175503

Fraser Robertson wrote:
>
> Hi, I'm plagued by s9 local noise on topband. An active RX loop enables me
> to null it by 3 or 4 s points. I was wondering about using a noise pick up
> ant and making a noise cancelling unit - phase and amplitude.
>
> Has anyone experience of such things, or can point me in the direction of
> any info.
>
> Thanks / 73 Fraser G4BJM
>
> f.g.robertson@open.ac.uk

Fraser,
MFJ makes one like your looking for. I have no idea
about the availability or price in the UK, but shouldn't
be too much more expensive than building one...
'Doc

3349. LF Converters for listening between 0-200 kHz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Martin M5CIX <oscura@cwcom.net>
Message-ID: <W2yV5.513$lg.6001@news1-hme0>
Source record: 175504

Datong VLF Converters

LF Converters for listening between 0-200 kHz covers navigation, loran, beacons and armature bands 73khz & 136khz

Datong pulled out of the Amateur Radio Market some years ago to concentrate on surveillance radio equipment for government agencies.

All details are at www.sounds-good.co.uk/datong

Sounds Good has purchased the remaining stocks of theses converters and offers them for sale to LF enthusiasts £38.16 ($55.70) each to include VAT. Post and Package (UK) and Insurance. Royal Mail Swift-air Overseas recorded delivery, which takes 2-3 days costs £6 ($8.76). £1=$1.46

Payment can be made by cheque to Sounds Good Ltd, or by phoning, faxing or emailing (martin@sounds-good.co.uk) M5CIX your Visa/Access number and expire date
or Switch with issue number.

Sounds Good Ltd
12 Chiltern Enterprise Centre, Station Road, Theale, Berkshire RG7 4AA. Fax 0118 930 1709 or Telephone 0118 930 1701 and speak to Martin (M5CIX)

3350. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: twilson@ag-eco.nospam.tamu.edu
Message-ID: <906coj$e1t$1@news.tamu.edu>
Source record: 175505

In article <3a1efbfe.88182604@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI) wrote:

>>www.gapantenna.com
>
>Better yet, take a listen to them on the lower bands....if you can
>hear them in the background noise.
>
>They work OK on some higher bands, but they really stink on the lower
>bands. A modest mobile antenna can actually be better on the low
>bands.

I'll second that. I have a Gap antenna which is supposed to handle 10-80 meters. It's mounted on a simple tv-antenna pole sunk in concrete and bolted to the side of the roof, with the antenna only up a little higher so it won't have to be guyed. I use it mainly on 10 and 20 meters with no problem. It tunes fine with my Kenwood TS-940SAT internal tuner down through 40 meters, though I haven't operated 40 much. I can't get it to find a match at all on 80 meters. I've tried an external MFJ-989 tuner, which is a piece of sh*t and won't tune on any band.

So, I'd easily recommend a Gap for 40-10, but if you're wanting to do 80 or lower, go with something else. I'm seriously considering a trap dipole.

Troyce
KC5CBI

3351. Re: Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <906dt2$la5$1@news.asu.edu>
Source record: 175506
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

WolfgangS (schliess@gmx.de) wrote:
: Hi !
: I want to calculate the L component of a Magnetic loop.
: Is this right ???

: r=radius
: w=width of the loop lipe

: L=12.57*r*log(2*r/w)+0.08

: (Magnetic) Loop
: N=1, r=50cm , w=1 cm
: L= 2.8944 uH

: (Magnetic) Loop
: N=1, r=50cm , w=4 cm
: L= 2.031 uH ?!?!?!!!??!

: Can is be when the w increases then L component decreases ?!?!?

The external DC inductance of a thin circular loop is calculated in many texts. In the one in front of me, J.D. Jackson's Classic Electrodynamics, it is given as a problem at the end of a chapter 5. In microhenries the result is
L(microH) = 0.1 4 pi a [ln(8a/b)-2]
where a is the radius of the loop in cm and b is the radius of the wire in cm. the factor 0.1 is the conversion factor between electromagnetic and SI units. This is identical to the formula you wrote in your first post, and identical to the formula that Reg wrote (if I assume that his 2.451 is an approximation to 2-ln(2/pi) = 2.4516...). For your first formula the lengths need to be in meters, and the log is base 10 rather than the natural log above (your factor of 2.3 is ln(10) = 2.302...). At true DC, there is current throughout the cross section of the wire, and you may find formulas that have -7/4 instead of the -2 above. These include the inductance from the magnetic field in the wire -- the so-called internal inductance. At rf the skin effect makes this negligible. As Reg mentions, these DC approximations will only be reasonable if the loop is small and the wire thin.

As you make the wire larger, to a first approximation, the magnetic field outside the wire is the same as it was before at the same distance from the wire. Now however, you have excluded the field from the region between the radius of the original wire and the larger wire. The field energy in this volume no longer contributes to the inductance, and the inductance is smaller.

73 Kevin w9cf@ptolemy.la.asu.edu

3352. Re: Re Dual Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3a26c6c3$0$35009$44a10c7e@news.net-link.net>
Source record: 175507

Cecil--I think he wants to increase the transmit range so he should tilt them forward like the truckers so they can talk down the road farther. If the station is behind him, he could use motorized mounts and tilt them back for gain that way. Maybe tilt one forward and one backwards and vary the phase. I know I am about 4 months early with this!
Cecil wrote in message <3A20000A.B0828693@IEEE.org>...
>"Mr. Arthur Garabedian" wrote:
>> Hello, Can someone tell me how to connect 2 VHF mobile antennas
and
>> tune them for mobile use, one in the front and one in the back of the
>> car using the same transmitter at the same time?
>
>Are you trying to effect mobile phased verticals?
>--
>http://www.mindspring.com/~w6rca

3353. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A26DF2B.79B2D0A8@ecs.syr.edu>
Source record: 175508

VE9SRB wrote:

> "Keith Dysart" <dysart@nortel.ca> wrote in message
> news:8vis99$4f4$1@bcarh8ab.ca.nortel.com...
> >>
> > <snip>
> > To carry the study a bit further we can ask what is happening in the
> > generator after time 2 * t.
> > If we assume a Thevenin circuit for the generator it is dissipating 0 W.
> > If we assume Norton, it is dissipating 200 W.
> > Dissipation in generators depends more on generator design than 'reflected
> > power'. Any argument that 'reflected power' is dissipated in the generator
> > can easily be shown to be false by substituting Norton for Thevenin or
> vice
> > versa.
> >
> > For a short-circuited TL after 2 * t:
> > - the voltage will be 0 V everywhere
> > - the current will be 2 A
> > - this still leads to 0 W
> > - the energy is stored in the inductance of the TL
> > - Thevenin will dissipate 200 W
> > - Norton will dissipate 0 W
> >
> > The so called 'reflected power' is the same but the dissipations are all
> > different.
> >
> > Some might argue that it is the 0 frequency case that is special and that
> > 'reflected power' makes sense for non-zero frequency.
> >
> > <snip>
> >
> > ...Keith
> >
>
> Hi Keith:
>
> All of the exact same concepts discussed in my previous post also apply to
> the situation with a Norton equivalent circuit. In this case, we first need
> to correctly define the Norton circuit. It must be a circuit which delivers
> a *forward* current of 1 A to the transmission line. Let's assume that the
> Norton circuit is a current source of 2 A and a parallel impedance of 50
> ohms.
>

> At time T=0, the current source sees a total impedance of 25 ohms and it
> delivers a forward traveling current of 1 A to the transmission line and 1 A
> to the internal source impedance. The total voltage across the internal
> impedance is 50 V and the forward traveling voltage in the transmission line
> is 50 V.
>
> The 1 A of current arrives at the open circuit termination and a reflected
> current of 1 A is created and travels rearward towards the Norton generator.
> At time T=2t, the Norton current source is still delivering 1 A to the
> internal impedance and 1 A to the transmission line. However, there is a
> rearward traveling current of 1 A arriving back at the transmission line
> input. The total or net current delivered to the transmission line is 0 A
> (I+ - I-). The total current developed in the internal source impedance
> is now 2 A. 1 A from the source and 1 A from the reflected wave.
>
> If you draw the steady state Norton circuit, transmission line and all
> currents you would see a 2 A source delivering 1 A to the source impedance
> and 1 A to the TL. There would also be 1 A returned from the TL, it is
> delivered to the internal source impedance.
>
> Perhaps the most significant concept in all of this is understanding what
> reflected power means to the transmitter or the source. We cannot look at
> the problem in terms of power delivery. For example, if 50 watts of
> reflected power arrives back at a matched source, this does not mean that
> the source must dissipate or absorb this 50 watts of power. We must not
> approach the analysis with a thought process that requires us to account for
> 50 watts of "additional" internal power dissipation. It does not happen
> this way. All that we need to consider is how voltages and currents combine
> in the source and in the transmission line. The steady state voltages and
> currents developed within the source are a function of the source voltage or
> current and the reflected voltage and current arriving back at the source.
> The steady state voltage and current developed in the source are a net
> combination of the two. The internal power dissipation occurring within the
> source is a function of how the voltages and currents develop.
>
> In the Thevenin and Norton circuits, we see two different internal power
> dissipation but both are correct given the defined source parameters and the
> reflected voltage and current. Both examples are consistent with circuit
> theory and transmission line theory. Both correctly describe the affect of
> the wave reflections in the transmission line. The fact that the "power
> dissipation" in each example is different in meaningless in terms of
> understanding wave behavior in transmission lines.
>
> Steve VE9SRB

It is nice to see a reasonable implementation of transient analysis once in a while!!!! It is also nice to see that proper emphasis has been put onto the fact that whatever happens inside of the source is not the same as what happens on the line. For those whom really like equations, you can describe your source in a practical AC circuit as follows:

Vs=Acos(wt)--where 'w' stands in for the proper lower-case omega.
In the DC circuit (DC within the time constant of the 'circuit') representation that is used in many instances the source is:
Vs=A(sqrt(2)). A is a constant which represents the RMS voltage.
Now, when a DC Vs is applied to an open circuit, we can argue whether or not the transient current flow inside the elements of the open circuit has a value or not to high heaven (it does, by the way..... represented by: I(t) = Ishort *e^(-at), where a is 1 over the time constant--1/'tau'--assuming that the circuit is critcally damped), but it will not affect the steady-state AC response beyond approximately five time constants (5*'tau'). This is because the un-terminated feedline acts like a capacitance to a DC transient signal. How a feedline reacts to a true AC circuit (one that is AC INSIDE OF FIVE TIME CONSTANTS--& one where AC is represented in a sinusodial waveform) has very little to do with the DC response of an un-terminated feedline--certianly not enough to be used as a argument against reflected energy in a feedline.

(I think that everyone here knows what to do the above information for other solutions..., so I'll let them drop for now.)

Also, TDR uses a half-wave AC-like waveform. Therefore, it can prove reflected energy, but it has nothing to do with DC transient response within five time constants (at least so far as we mortals care to solve the differential equations for....). Thus, any argument which shows that TDR works does not work for a DC transient response argument (under nearly all cases.....) & vice-versa.

In any case, reflected energy is easily proven to exist by a simple high-school physics experiment. Attach two lengths (about 10 feet) of different mass-per-length ropes (different "impedance" ropes....) together. Tie one end to a door knob. Move the free end in a sinusodial motion as if you were to be jumping rope with somebody. Feel the reflected energy as it comes back to your hand & your body attempts to absorb it. Reflected energy exists. Impedance exists.

Does anybody dare to attempt to disprove that?

--
Drew Northup, N1XIM

3354. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A26D395.7CF67AE8@IEEE.org>
Source record: 175509

Drew Northup wrote:
> Reflected energy exists.
> Does anybody dare to attempt to disprove that?

First you must prove that you exist. :-)
--
http://www.mindspring.com/~w6rca

3355. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <C9hAyCADHuJ6Ewax@g3ohx.demon.co.uk>
Source record: 175510
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <umk62tg3qvsu12hr28frs0u0r26043di73@4ax.com>, Aaron Jones
<nomail@nomail.com> writes
>Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote:
>>2. I haven't worked out how to do this on a laptop where there is no
>>numeric keyboard.
>
>Most laptops do have a numeric keyboard. They are a subset on the
>regular keys. To get the extended ASCII on mine you use the function
>key + the alt key.
>
>7=7 8=8 9=9
>u=4 i=5 o=6
>j=1 k=2 l=3

Thanks for the information, everyone.
Ian.

3356. Trade Cushcraft R7 MFJ MFJ 969 Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: ktheo7707@aol.com
Message-ID: <20001130184539.08961.00002376@ng-ca1.aol.com>
Source record: 175511

Hello
Do you have a MFJ 969 Antenna Tuner (that covers 6 meters) to trade for
a Cushcraft R7?
TNX KARL (K2CWT)

3357. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A26DDA6.4B5D@pacbell.net>
Source record: 175512

```
Cecil wrote:
>
> Drew Northup wrote:
> > Reflected energy exists.
> > Does anybody dare to attempt to disprove that?
>
> First you must prove that you exist. :-)
> --
> http://www.mindspring.com/~w6rca

He thinks doesn't he? No other proof is needed.

Tom Donaly KA6RUH
```

3358. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A26F1B6.6070006@hiwaay.net>
Source record: 175513

You just think he thinks

Donaly wrote:

> Cecil wrote:
>
>> Drew Northup wrote:
>>
>>> Reflected energy exists.
>>> Does anybody dare to attempt to disprove that?
>>
>> First you must prove that you exist. :-)
>> --
>> http://www.mindspring.com/~w6rca
>
>
> He thinks doesn't he? No other proof is needed.
>
> Tom Donaly KA6RUH

3359. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2709B2.A3EEFAD@ecs.syr.edu>
Source record: 175514

Bill Aycock wrote:

> You just think he thinks
>
> Donaly wrote:
>
> > Cecil wrote:
> >
> >> Drew Northup wrote:
> >>
> >>> Reflected energy exists.
> >>> Does anybody dare to attempt to disprove that?
> >>
> >> First you must prove that you exist. :-)
> >> --
> >> http://www.mindspring.com/~w6rca
> >
> >
> > He thinks doesn't he? No other proof is needed.
> >
> > Tom Donaly KA6RUH

Damnit, I hope that you can call this thinking!!!!!!
Anyway....., "Cogito ergo sum" only refers back to he whom is
thinking that he is thinking........, so get a load of that......
I think that I am therefore I must be......, no matter what you
think. Highly empirical, huh?

--
Drew Northup, N1XIM

3360. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A270A4E.6A45A7AE@ecs.syr.edu>
Source record: 175515

Cecil wrote:

> Drew Northup wrote:
> > Reflected energy exists.
> > Does anybody dare to attempt to disprove that?
>
> First you must prove that you exist. :-)
> --
> http://www.mindspring.com/~w6rca

No, you must prove that I don't. By a mathematical proof. ;^)
Can you prove that which has no true qualifiers or quantifiers
& is external to yourself?

--
Drew Northup, N1XIM

3361. 144/440mhz mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <90739dolg1@news.gate.net>
Source record: 175516

I need a 144/440 dualband mobile antenna. Assuming the glass on my 98 Honda Accord coupe isn't the UV metalized kind, how close to the embedded heater wires in the rear can I get with a thru-glass Larsen? Will it hurt if the edge of the mount is right next to one of these wires as long as it isn't underneath it?

Or....if I don't go with the thru-glass Larsen and opt of an NMO mount with a 3/4" hole in the roof, which one would you recommend? Mind you, I don't want anything too long (I'm already sporting an HS-1500 screwdriver), preferably under 36" would be nice.

Any ideas?

Thanks,
David, K4ZZR

3362. Re: 144/440mhz mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <90742r$1n18$1@news.gate.net>
Source record: 175517

....follow up on my initial question.....I just checked the rear glass on my Accord and it says "TemperLite".....is that metalized glass?

"David" <k4zzrNONSPAM@gate.net> wrote in message news:90739dolg1@news.gate.net...
> I need a 144/440 dualband mobile antenna. Assuming the glass on my 98
> Honda Accord coupe isn't the UV metalized kind, how close to the embedded
> heater wires in the rear can I get with a thru-glass Larsen? Will it hurt
> if the edge of the mount is right next to one of these wires as long as it
> isn't underneath it?
>
> Or....if I don't go with the thru-glass Larsen and opt of an NMO mount with
> a 3/4" hole in the roof, which one would you recommend? Mind you, I don't
> want anything too long (I'm already sporting an HS-1500 screwdriver),
> preferably under 36" would be nice.
>
> Any ideas?
>
> Thanks,
> David, K4ZZR
>
>

3363. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A27153C.8DD55315@IEEE.org>
Source record: 175518

Drew Northup wrote:
>
> Cecil wrote:
> > First you must prove that you exist. :-)
>
> No, you must prove that I don't.

Well, that proves it. It is impossible to prove a negative.
--
http://www.mindspring.com/~w6rca

3364. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:31:35 UTC
From: Stephane Montpetit <ve2sg@sympatico.ca>
Message-ID: <3A259FDD.BDD493FC@sympatico.ca>
Source record: 175483

Try to use a regular Outdoor TV antenna with a 20 DB preamplifier, they are
usually very good for FM also.
Look at http://www.channelmaster.com

Chickenhawk a ï¿½crit :

> Hello All I am looking for plans for a High Gain FM Antenna to cover 87Mhz
> to 109Mhz to pick up fm stations about 250Km Away if anyone can help me I
> would be greatly Appreciated
> Thanks In advance
> 73's

3365. WTB:Used ARRL Videotape Courses

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 00:47:01 UTC
From: Charles Hunter <"crhunter(nospam)"@idirect.com>
Message-ID: <3A25A509.CA5B0ADA@idirect.com>
Source record: 175484

Wanted: Used ARRL Tech or GEN videotape courses for electronic theory
instruction only - NOT for the exam bank.
The courses are not available from the ARRL.
Please remove (nospam) from the address to reply quoting asking price

3366. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 01:11:47 UTC
From: Tom Brown <tab@signalgrp.com>
Message-ID: <3A25A953.69EA63EC@signalgrp.com>
Source record: 175487

A large number of the "AdverBlimps" are manufactured by Raven Industries
in Sioux Falls, SD, or one of their subsidiaries. They built a couple
of 9000 cubic foot (volume) blimps for me a few years ago.

FWIW, I have NO connection of any kind with Raven Industries.

Tom
--

Tom Brown
The Signal Group
Wake Forest, NC

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Richard Clark wrote:
>
> On Wed, 29 Nov 2000 20:31:41 GMT, ehsjr@bellatlantic.net wrote:
>
> >Talk to them to get any practical pointers they can give you
> >on flying the thing.
> >
>
> Hi OM,
>
> Other good pointers found here. To your point however I would add
> that the balloons I have seen that manage wind well are those designs
> that look like dirigibles. In other words, they exhibit some airfoil
> property. I've seen these "fly" into the wind, but with stiff winds
> they do a bit of thrashing (flying in a figure 8 pattern). On the
> other hand, round balloons just lay right down.
>
> 73's
> Richard Clark, KB7QHC

3367. Re: FM ANTENNA HELP PLEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 01:18:18 UTC
From: k1bqt@aol.com
Message-ID: <20001129201818.09835.00002335@ng-cu1.aol.com>
Source record: 175485

Some top-end TV preamps have FM traps built in to keep strong FM broadcast stations from causing IMD problems with TV reception. Cheaper ones may not, and can provide "flat" response (which means you may hear a few TV sync buzzes mixed in with your FM).

If your TV antenna is a LPA (which most are), it might provide good FM reception. On the other hand, it--too--might have an FM trap built in on a PC board at the feedpoint. Sometimes these filters can be switched on or off (Wineguard used to offer this feature). See the literature with your antenna and pre-amp so you'll know exactly what you are working with.

Hope that helps.

73

Rick K1BQT

3368. Re: Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 01:59:36 UTC
From: David Findlay <nedz@bigpond.com>
Message-ID: <MriV5.146563$e5.87772@newsfeeds.bigpond.com>
Source record: 175486
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

That link is dead.

David

"Jim Jerzycke" <kq6ea@amsat.org> wrote in message
news:3A248D03.E1BC51DC@amsat.org...
> Go to: www.members.aol.com/k5oe
> Jerry's page has some excellent, easy to build antennas that work great.
> I use 3 of them myself, 2M, 70cm, and WXsat.
> Jim
>
>

3369. Re: Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 05:34:38 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <3A25E6EE.AA59C193@amsat.org>
Source record: 175488
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

OOOOOPS! Just a little Brain Fade!
Try this:
http://members.aol.com/k50e/
NO "www"....just straight hypertext.
Jim

3370. Re: More tuner questions (with ladder line)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 06:33:13 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A25F4A9.523C4E14@oio.net>
Source record: 175489

Bill,
I don't see why a 'current' balun wouldn't work. As Cecil said, changing feed line length can change things so that the tuner is 'happier' with it. I would suggest that the coax going out to the balun be as short as possible. The usual recomendation is no more than 12 feet. A couple of feet one way or the other shouldn't make a ~lot~ of difference, but keep it short...
'Dco

3371. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 06:36:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A25F587.403BF2B5@oio.net>
Source record: 175490

Birken,
There's all kinds of different ways of doing this, but
one of, if not the most important thing is to stay away
from any power lines. That means 2 or 3 times the length
of the wire/cable/string/rope/what ever tethering the baloon.
'Doc

3372. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-11-30 06:37:05 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <904sih$479$3@bashir.peak.org>
Source record: 175491

Mark Keith <nm5k@wt.net> wrote:

: Maybe so, but I still think can be valid on some antennas like mobile's.
: I've noticed pruning loading coils and testing with antennas, that the
: maximum field strength is just a bit off from where the antenna is
: resonant. Overall, don't think it amounts to a whole lot, but I seemed
: to a see 10-20 kc difference in the max field strength point of tuning,
: and the point of least least SWR. Of course in the real world I'm not

Make sure you are not confusing minimum SWR and resonance. They generally
are not the same thing.

--
Bill Nelson (billn@peak.org)

3373. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Anon <alias@microsoft.com>
Message-ID: <qbUV5.1009$zC.287231@news.uswest.net>
Source record: 175319

Take some good advice and don't bother with modeling that antenna J.C., as MOM (NEC) modeling assumptions do not include conditions where elements have become critically coupled.

Anon

jcm <jcmenard@wanadoo.fr> wrote in message news:900vdv$fp0$1@wanadoo.fr...
> I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's
> (G4ZU) Jungle Job design.
> It works reasonably well but I would try to optimize it and model it with
> EZNEC but I don't know what diameter to enter for the segments of the
> radiator which is made of 1.5mm copper wire inside tapered
> phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the tip.
> Has somebody some experience with this problem ?
> Thank you in advance.
>
> J.C MENARD - F8ND
>
>

3374. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a910176.3193297549@news.seanet.com>
Source record: 175320

On Fri, 01 Dec 2000 12:36:39 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>"R.Wilhelm" wrote:
>> . . .
>> Guess I would by the EZNEC version for windows if there were a distributor
>> in here in germany and the price were not higher then 200 DM. I think is's
>> advertised in QST for 89 Dollars so the second condition would probably
>> within reach. I'm convinced that EZNEC is worth every Dollar it costs, but
>> don't like the idea to send credit card numbers via the internet. Maybe
>> you find a way to sell it germany, too.
>
>I've found a way to sell it in Germany -- several, in fact. I probably
>sell more programs to Germany than any other country outside the U.S.
>And visitors from Germany to my web site consistently outnumber those
>from any other country except the U.S.
>
>Communication with the secure server used for web credit card orders is
>encrypted by the site and your web browser, and I've never received a
>report of theft or fraud due to purchase from my web site. U.S.
>customers are limited by federal law to a maximum liability of $50 if
>their credit card is stolen. (I have no idea what protection is offered
>in other countries.) Nevertheless, a surprising number of people even in
>the U.S. are willing to give their cards to a sales clerk or gas pump
>jockey but aren't willing to purchase via a secure server on the
>Internet. I don't understand this, but it's o.k. with me.
>
>Anyone who doesn't want to purchase via the internet can order by phone,
>fax, or mail. All necessary information is at
>http://eznec.com/ordering.htm. International CD-ROM orders are sent by
>air mail. Typical delivery time is one week to most parts of the world.
>A very sizable fraction of my sales are to other countries.
>
>Credit card orders are billed in U.S. dollars (required by my bank),
>which customers see on their bills in their local currency. Most credit
>card companies give a better exchange rate for these transactions than
>you'll get any other way. But if you prefer, you can purchase and send a
>U.S. dollar check. This is invariably more expensive than using a credit
>card. Occasionally I receive U.S. currency from a foreign country, sent
>by registered mail. I don't recommend this, but haven't gotten any
>reports of money being lost this way. I don't accept direct wire funds
>transfers for the standard version, because at least two banks are
>involved, each charging a substantial fee.
>

>If I had a distributor in Germany, he would have to be paid for his time
>and trouble, and would have to collect from you the sizable taxes you
>have there. Disks would either have to be sent there in bulk, with duty
>being paid, or manufactured there. Because of the smaller quantities,
>manufacturing cost would be higher if produced there than here. My share
>of the DM collected by the distributor would have to be converted to
>dollars with the usual currency conversion losses (considerably greater
>than losses from a credit card sale). The result would be that the
>program would cost a lot more. And I would have a lot of extra work and
>get less from each sale. Other than saving the typical one week transit
>time, what would be the advantage to the customer to have a German
>distributor?
>
>We are more and more getting to be an international community, and can
>all benefit if we don't consider international borders to be an obstacle
>to commerce, but instead figure out ways to make them transparent.
>
>This seems like a pretty commercial posting, but nearly all the
>information applies to any international web sales and purchasing, which
>are becoming increasingly common. I hope readers find it informative.
>
>Roy Lewallen, W7EL

Hi Roy,

I found your posting VERY informative.

Readers should be able to receive at least one credit for
International Economics 101 from your very good presentation of the
realities of the global marketplace!

73's
Richard Clark, KB7QHC

3375. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a9202c7.3193634163@news.seanet.com>
Source record: 175321
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Fri, 01 Dec 2000 14:26:13 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> How many magmounts do you know of that make an electrical connection
>> to that same metal desk or filing cabinet (or car roof top for that
>> matter)?
>
>All of the VHF/UHF mag mounts that I have tried make an adequate
>capacitive RF electrical connection. They work well with the
>capacitively coupled ground plane and don't work well without it.

Hi Cecil,

This says much, but answers nothing in regard to my comments to
Edward.

I have noted for years that mag mounts do indeed work, so do air
cooled resistors - either work to some degree.

As we are offering a newbie solutions to a difficult (apartment)
situation, it behooves us to not simply offer marginal answers where
simple solutions could easily resolve his problems. A mag mount may
indeed take care of it, but as you note by your proviso:
>They work well with the
>capacitively coupled ground plane and don't work well without it.
introduces the issue of what constitutes a good ground.

73's
Richard Clark, KB7QHC

3376. Re: Nathan Cohen Public Figure Public Fool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Anon <alias@microsoft.com>
Message-ID: <vqUV5.1015$zC.294965@news.uswest.net>
Source record: 175322

And your post reveals that you are at no higher level... and I shouldn't be
feeding the TROLLS! ;-(

Anon

Gerald Schmitt <kk5yyNOSPAM@arrl.net> wrote in message
news:3a2351b3.89377196@nntp.mindspring.com...
>
> Literally thousands of disruptive posts. Hundreds of
> frivolous threats of pseudoleagal action. Countless
> cases of slander directed at folks who actually contribute
> and you don't think you have made yourself a Public Figure
> much less a legitimate target of ridicule?
>
> No Nathan it is not everyone else who is at fault here it is
> you alone who has made Nathan Cohen a subject of ridicule
> and fair game foe the lampooners.
>
> If you were to stop your posting in a few short weeks your
> memory would fade and mention of you would also. But that's
> not what you want is it Nathan you want to be the center of attention
> and on your terms no less. You remind me of a little kid who
> falls down then looks around for an audience to see if it is
> worth the effort to cry.
>
> Sorry Nathan no sympathy what happens to you is a direct
> result of your immature sociopathic behavior nd you have
> none but yourself to blame.
>
> I hope this helps.

3377. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A28129E.ADAD52A3@IEEE.org>
Source record: 175323
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark wrote:
> ... as you note by your proviso:
> >They work well with the
> >capacitively coupled ground plane and don't work well without it.
> introduces the issue of what constitutes a good ground.

I am assuming that a metal disk, 1/2WL in diameter, would be the
minimum adequately functional magnetically coupled ground plane.
At VHF/UHF frequencies, metal desks, metal tables, and metal filing
cabinets are usually that large or larger.
--
http://www.mindspring.com/~w6rca

3378. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Anon <alias@microsoft.com>
Message-ID: <JHUV5.1022$zC.304516@news.uswest.net>
Source record: 175324

Robert,

It is possible that you could bend the dipole around the balloon in a open loop similar to an onmidirectional H-polarized - or perhaps like a circular polarized - FM broadcast antenna.

However there is one conundrum to consider; as the height above average terrain increases so will the ERP. However the feedline losses will increase with its length.

A.

KG4FGN <kg4fgn@mindspring.com> wrote in message news:901mbo$348$1@slb6.atl.mindspring.net...
> OK, I'm hoping someone else out here has tried this idea and can give me
> some pointers.
>
> We've all heard the Darwin Award about the Lawnchair guy who hooked some
> balloons to a lawn chair and wound up floating to 12,000 feet. (If you
> haven't read this hilarious story, go to www.darwinawards.com, click on
> honorable mentions, vintage years, and click on Lawn Chair Larry).
>
> So I was chuckling with my wife over the turkey holidays, remembering some
> of the Darwin stuff. It got me to thinking though, if it worked with an
> idiot, it would probably work OK for an antenna. So I'm thinking, if I built
> an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane) and
> hung it off the bottom of a weather balloon, and fed it with some light
> weight coax, I could run it up to 100 or 150 feet and maybe do some
> interesting dx type work on 2 meter. Might also make an interesting addition
> to field day.
>
> So what I really need to know is:
>
> 1) Where the heck to I get a weather balloon or other similar balloon that
> would hold the weight of antenna and coax?
>
> 2) I'm thinking of getting a canister of helium to fill it with. Any other
> suggestions? I thought about using a hot air system, but the mechanics would
> be a bit harder to work out.
>
> 3) Any other tips or things I should look for? I want to learn from other
> people's experience.
>
> If you think I'm nuts, my wife agrees with you. But what the heck, a guy has
> to have fun...

>
> Robert / KG4FGN
>
> ---
> "My wife said if I don't give up ham radio she'd leave me...OVER"
>
>
>
>

3379. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A281D67.4E88CD9A@eznec.com>
Source record: 175325
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Jim Bromley, K7JEB" wrote:
> . . .
> Interestingly, some of the other programs I run that insist on using
> fixed-width fonts, notably Not-GNU, don't recognize the font as having
> that characteristic. I wonder if that's a Windows setup thing or is
> there a bit set in the font file itself that tells everybody it is
> is that way?

It's a property of the font, which a program has access to. For example, some of the outputs in EZNEC, like the tabular far field output, require a fixed font to be displayed properly. So when you open the "Set Font" dialog in this window, the program gives you only the fixed width fonts on your system to choose from. The property is surely embedded in the font file in some manner.

Roy Lewallen, W7EL

3380. GAP Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Emil Vukasovic <kf4zip@home.com>
Message-ID: <EiVV5.39368$iy3.8973438@news1.rdc1.tn.home.com>
Source record: 175326

I'm thinking of buying and installing a GAP Titan DX antenna.

Can someone tell me aboout their success (or troubles) with the GAP Titan DX?

Thanks.

3381. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001201173422.07785.00002855@ng-fy1.aol.com>
Source record: 175327

>From: "KG4FGN" kg4fgn@mindspring.com

>The problem you are going to encounter is RF exposure. At 50 watts, you will
>need to give the antenna a minimum of six feet clearance, otherwise you
>begin to fry yourself and family members.

I think "fry" is a bit excessive. But hams should comply with the regs.

There are a lot of factors that can enter into RF safety. The transmit power is one, but that can be adjusted by feed-line losses, operating modes and duty factors. For a typical 50-watt FM operation, a ham might operate for only very short periods.

A good rule of thumb for the required distance in feet on VHF is:

D = 1.047 * sqrt(P*G) where P is the *average* power delivered to the antenna in watts and G is the *numerical* gain of the antenna in dBi. An antenna of 3 dBi gain has a numerical gain of 2. If the antenna's gain is specified in dBd, add 2.15 dB to the gain to obtain dBi. I usually round it down to sqrt(P*G).

For info on RF safety, see:

http://www.arrl.org/tis/info/rfexpose.html

73,

3382. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001201173547.07785.00002856@ng-fy1.aol.com>
Source record: 175328

>From: rwclark@seanet.com (Richard Clark)

>How many magmounts do you know of that make an electrical connection
>to that same metal desk or filing cabinet (or car roof top for that
>matter)?

Most of them, actually. There is considerable capacitance between the mount
and the metal surface. The only time I have had a problem is with my HF mag
mount on 40 meters and below; there was insufficient capacitance to get a good
"connection."

73,
Ed Hare, W1RFI

3383. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Jim Rice <HassenBenSober@kumputer.net>
Message-ID: <6WVV5.23614$II2.2236168@newsread2.prod.itd.earthlink.net>
Source record: 175329
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Mag Mount on the Refrigerator works well for me, at least for 5 watts, on 2M
and 70 CM.

"N5MJ" <n5mj@delthis.hotmail.com> wrote in message
news:JlRV5.22807$II2.2163419@newsread2.prod.itd.earthlink.net...
> Got a balcony with a metal railing? That'd work. Mag mount atop a metal
> filing cabinet works too, just remember that any metal near the antenna
> (discounting the metal filing cabinet) will detune it.
>
> Don't spray 50W of RF at yourself and the family at close distance. Use
5W.
>
> If cable TVI becomes a problem, esp. on cable channels 18 or 19.... move
the
> antenna.
>
> Good luck.
>
> Mike N5MJ
>
> "tjp" <tjp@pobox.invalid> wrote in message
> news:lkqe2tsu64eah16sgluuvsu28mq1uvh840@4ax.com...
> > I have read *hours* worth of "Apartment Antenna" threads from the
> > various usenet groups via deja.com. I have one question for the
> > group:
> >
> > I'm new to all of this so please be kind.
> >
> > Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> > of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> > from inside. I can grab quite a few repeaters in my area from inside
> > with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> > table? Would that work OK?? Is 50w too much to push out in a setup
> > like this etc??
> >
> > Thanks in advance.
>
>
>

3384. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001201175410.24678.00002633@ng-cd1.aol.com>
Source record: 175330

>...voracity rather than veracity....<

You are kirrect and I am radfaced (kant get nun of my infromation strate).
Frank you, and I'll tri to getta speal co-rector on hear.

Rick K1BQT

3385. Webster Bandspanner help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: JJ&A <w7ls@blarg.net>
Message-ID: <3A282F2A.DC34F06F@blarg.net>
Source record: 175331

I have an old Banspanner and the collet that locks the whip into position has old rubber parts that are hard and cracked. What is the proceedure for making it work, again? Stuff grommets in there, or something? The whip doesn't lock tight and stay where it is supposed to. Thanks. Jim W7LS

3386. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <3a282d0a.38949040@news.azstarnet.com>
Source record: 175332

On Fri, 01 Dec 2000 12:36:39 -0800, Roy Lewallen <w7el@eznec.com> wrote:

[snip]
>
>Communication with the secure server used for web credit card orders is
>encrypted by the site and your web browser, and I've never received a
>report of theft or fraud due to purchase from my web site. U.S.
>customers are limited by federal law to a maximum liability of $50 if
>their credit card is stolen. (I have no idea what protection is offered
>in other countries.) Nevertheless, a surprising number of people even in
>the U.S. are willing to give their cards to a sales clerk or gas pump
>jockey but aren't willing to purchase via a secure server on the
>Internet. I don't understand this, but it's o.k. with me.
>

As Roy knows, I am one of those that refuse to put his credit card numbers on the Internet. While the law might limit the monetary loss, the hassle of cleaning up the mess if security is breached somehow, scares me to death. I recall recent news of none other than Western Union contacting hundreds of clients to ask them to cancel their credit cards because their numbers had been stolen from WU's "secure" system.

That said, I can give a personal example of just what Roy is talking about when he mentions turning over your card to the gas pump jockey. Only in this case, my wife went to the rural Mom and Pop grocery to get some fuel. The credit card reader on the pump was inoperative so she was required to leave the card inside the store while she pumped the gas.

When I reconciled the monthly statement, I noted an extra $20 charge with the same merchant number and a transaction number one digit removed from the gas purchase. Apparently a crooked clerk pocketed the twenty and used the charge slip to make her cash register balance. A call to the credit card company got the charged removed, but only by maintaining constant vigilance and meticulous record keeping can one be sure he isn't getting ripped off.

I suppose my tale makes Roy's point but I remain in the minority camp on this issue.

Wes N7WS

3387. Re: Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <909co1$3q2$1@nnrp1.deja.com>
Source record: 175333

In article <908u3imsq1@nnrp1.deja.com>,
tom_bruhns@agilent.com wrote:

> Well, assuming he uses solid Teflon dielectric semi-rigid line, which
> should be a very reasonable way to do it, each section will be around
> 8.9 centimeters (3.5 inches) long.

Doi. Belay that. Make that half that long, about 4.45cm (1.75 inches)
per section.

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3388. Re: Webster Bandspanner help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <909chc$ol9$1@iac5.navix.net>
Source record: 175334

I used to use a small rubberband, simply loop it around and around.
"JJ&A" <w7ls@blarg.net> wrote in message news:3A282F2A.DC34F06F@blarg.net...
> I have an old Banspanner and the collet that locks the whip into
> position has old rubber parts that are hard and cracked. What is the
> proceedure for making it work, again? Stuff grommets in there, or
> something? The whip doesn't lock tight and stay where it is supposed
> to. Thanks. Jim W7LS
>

3389. Re: Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A283E37.48C03B1C@eznec.com>
Source record: 175335

At least as important at this frequency as getting the lengths right is making the connections with near zero length wires. I think a pretty good job can be done with semi-rigid coax, swapping phase as is done with collinear Franklin type antennas. Even so, the significant impedance bumps at the junctions might be bad enough to throw things off. By all means give it a try, but do pay careful attention to the connections.

Roy Lewallen, W7EL

tom_bruhns@agilent.com wrote:
>
> Well, assuming he uses solid Teflon dielectric semi-rigid line, which
> should be a very reasonable way to do it, each section will be around
> 8.9 centimeters (3.5 inches) long. It will be important to measure and
> construct accurately, but then that's true of pretty much everything you
> do at that frequency anyway. (I sent him a writeup about how to do it,
> via email.)
>
> Cheers,
> Tom
>
> --
> Tom Bruhns -- K7ITM
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3390. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A284218.E824F8F3@eznec.com>
Source record: 175336

There's nothing magic about "critical" coupling, and no assumptions made by NEC which make it unable to model antennas with this claimed mystical feature. Claims that NEC is unable to model them is promoted pretty much solely by antenna vendors who've found that NEC's results (which correspond well with known theory) contradict their unsupported claims of impossibly good performance.(*) I suspect Anon is one of these. Unlike Anon, I'm willing to attach my name to what I say.

Roy Lewallen, W7EL

(*) Some time back I publicly offered one of these vendors, on this newsgroup, to pay the cost of a professional antenna range test if its results showed the performance he was claiming. He didn't accept. Apparently professional antenna ranges also make assumptions that make them incapable of demonstrating the true, miraculous performance of these antennas.

Anon wrote:
>
> Take some good advice and don't bother with modeling that antenna J.C., as MOM
> (NEC) modeling assumptions do not include conditions where elements have become
> critically coupled.
>
> Anon
>
> jcm <jcmenard@wanadoo.fr> wrote in message news:900vdv$fp0$1@wanadoo.fr...
> > I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's
> > (G4ZU) Jungle Job design.
> > It works reasonably well but I would try to optimize it and model it with
> > EZNEC but I don't know what diameter to enter for the segments of the
> > radiator which is made of 1.5mm copper wire inside tapered
> > phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the tip.
> > Has somebody some experience with this problem ?
> > Thank you in advance.
> >
> > J.C MENARD - F8ND
> >
> >

3391. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A286082.E910854E@ecs.syr.edu>
Source record: 175337

"George, W5YR" wrote:

> Reminds me of a learned saying that I made up in high school in the
> early 40's:
>
> He who thinks is faultless
> He who thinks he thinks . . .is thoughtless.
>
> Ouch!
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> Drew Northup wrote:
> >
> > Bill Aycock wrote:
> >
> > > You just think he thinks

I try not to think too often..... it could be dangerous (like it could
make it easier to get work done.....).

--
Drew Northup, N1XIM

3392. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A28582A.341C06CA@dvol.com>
Source record: 175338

Bob Miller wrote:

> Brian Kelly <kelly@dvol.com> wrote:
>
> >
> >
> >tjp wrote:
> >
> >ith just an HT with a rubber duckie. Right off a magmount antenna
> >depends on the sheet metal of a vehicle to serve as a gound plane to
> >opererate properly so forget the mag mount antenna.
>
> Well, not quite. I've used a mag mount Larson dual bander stuck to a
> metal serving platter, thrown on the floor of the house, and hit every
> 2 meter & 440 repeater in Houston with 25-45 watts. Full quieting on
> most.\

>
The guy sed: "What about a 20'' mag mount on a table?" Tables not usually
being metal or metal serving platters, etc.
>
Heh.

>
>
> Bob
> k5qwg

>
w3rv

3393. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A285AF2.ADF300F5@dvol.com>
Source record: 175339

W1RFI wrote:

> There are a lot of factors that can enter into RF safety. The transmit power
> is one, but that can be adjusted by feed-line losses, operating modes and duty
> factors. For a typical 50-watt FM operation, a ham might operate for only very
> short periods.
>
> A good rule of thumb for the required distance in feet on VHF is:
>
> D = 1.047 * sqrt(P*G) where P is the *average* power delivered to the antenna
> in watts and G is the *numerical* gain of the antenna in dBi. An antenna of 3
> dBi gain has a numerical gain of 2. If the antenna's gain is specified in dBd,
> add 2.15 dB to the gain to obtain dBi. I usually round it down to sqrt(P*G).
>
> For info on RF safety, see:
>
> http://www.arrl.org/tis/info/rfexpose.html
>
> 73,

>
When was it that an MD signed off the death certificate of a newly deceased ham
with the cause of the death listed as "Kilt by excessive exposure to radio
waves."??
>
w3rv

3394. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A286870.3E31@wt.net>
Source record: 175340

Troyce wrote:

>
> I'm assuming I have a bad one with an internal problem somewhere. I opened it
> up, and I'm not very impressed with the quality inside of it. I did some
> checking, but everything seems ok, just find it doesn't seem to want to tune
> well at all. This is my second MFJ tuner, the first was a Versatronic II. It
> also failed to work adequately, but I suspect in that case it wasn't the
> tuner's fault, since I had a very compromised dipole arrangement in the attic
> of a duplex. But with the 989C, I can't get it to tune to an adequate swr on
> any band, including ones my internal tuner on the TS-940 has no problems with.
> That's the reason I think the MFJ is trash.
>
> Troyce
Not really normal. I've got one of those and mine tunes just about
anything. Actually, I don't think I've ever not been able to tune
something with it. The only gripe I have with it is the somewhat flimsy
roller coil. I've had to adjust it to keep it rolling tight. MK
--
http://web.wt.net/~nm5k

3395. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A286A5B.1EF@wt.net>
Source record: 175341

jbhall1282@my-deja.com wrote:
>
> I need to put another antenna in my back yard that will favor East and
> West on 40M. It will be close to my 80-40-30M trap inv-vee that runs
> along a nearly East-West line. The new antenna will probably be a
> dipole running perpendicular to the East leg of the inv-vee and a few
> feet above it. My concern is that the close proximity of these antennas
> will result in interaction and who knows what for a pattern. I have
> tried to model various arrangements but my model is probably over
> simplified. Any thoughts on this would be appreciated.
> 73,
> JB
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

It can happen. Try to keep the wires at right angles if possible. I'm curious...How high is your current 40 antenna? If you are not high in the air, it's likely your pattern quite omni directional. On most dipoles in the real world at low heights, you may have more performance broadside than you think. If the new dipole wins it will likely be because of better perfomance due to being a non trap antenna rather than direction. You will need to get it pretty high to see any nulls off the end. MK
http://web.wt.net/~nm5k

3396. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <24tg2tcudrucc0ha156urhjssvrhcipgq2@4ax.com>
Source record: 175342

>>How many magmounts do you know of that make an electrical connection
>>to that same metal desk or filing cabinet (or car roof top for that
>>matter)?

All of them. At VHF, capacitance makes as good an electrical
connection as a wire.

73, Bill W7TI

3397. Compression trimmer capacitors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <0ltg2tcudnv9lts1kcj9aivm4uuhm1bbhd@4ax.com>
Source record: 175343

I'm building an HF mobile antenna and need a few of those mica
compression trimmer capacitors for the matching network. Anyone know
where to get them? Need about 500-800 pF max or so.

Thanks,

73, Bill W7TI

3398. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <3A285F3C.6AB7@silverstar.com>
Source record: 175344
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Newbie asks about working from within an apartment with 50 watts on 2M/440.

50 watts is WAY too much within the confines of an apartment if you don't want irate neighbors coming after you with tar and feathers. Also, that amount of power in close proximity to your eyes, brain and other soft tissues would do a world of hurt to you in quick order.

Five watts is more than sufficient even to access repeaters nearby. On a recent trip to Denver I used 3 watts and a 5/8 rubber dummy load to access several repeaters on mountain tops 15-25 miles away.

Buy a couple of SO-239 flange chassis mount connectors and build "droopy drawer" antennas for 2M and 440. No. 14 gauge solid copper wire for the verticals and radials. Vertical solders to the cup on the back side of the SO-239 and the radials solder to the four holes in the flange. Use a short length of RG-58 to PL-259 connector and you're in business. Just don't jerk on the coax as the vertical may pop out of its cup if not soldered in properly. [somewhere here I've got a cutting length chart for Antenna Specialist scanner antennas I used to put together for sale to fire departments/EMTs. Check to see if someone in your area has any of those or re-read the antenna compendiums for info on the 1/4 wave ground plane antenna. Form a small loop in the vertical and you can hang it from the ceiling on a swag lamp hook.

Mag mount antennas rely on the body of the vehicle they mount on top of to act as the counterpoise for the radiated signal. Tabletops won't cut it. At least put it on top of a fridge or a top opening freezer.

3399. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A287BC7.A7ABC96F@IEEE.org>
Source record: 175345

Wes Stewart wrote:
> When I reconciled the monthly statement, I noted an extra $20 charge with the
> same merchant number and a transaction number one digit removed from the gas
> purchase.

Someone charged a whole set of new tires to my credit card.
--
http://www.mindspring.com/~w6rca

3400. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <2h2h2tckabnav1g129cn4r944iu9g05s3p@4ax.com>
Source record: 175346

On Fri, 01 Dec 2000 20:32:28 -0600, Dean Arthur
<dearthur@silverstar.com> wrote:

>Also, that amount of power in close proximity to your eyes, brain and other
>soft tissues would do a world of hurt to you in quick order.

Can you cite any cases where 50 watts of 2M/440 energy has actually
done a "world of hurt" to anyone? Names, dates and places? Or is
this just urban legend?

73, Bill W7TI

3401. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn92fubf.vnb.X@animas.frontier.net>
Source record: 175347
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Fri, 1 Dec 2000 06:35:43 -0700, Jim Bromley, K7JEB scribbled:
>Paul Keinanen, OH3LWR <keinanen@sci.fi> wrote:
>
>> That is not slashed zero, it is a vowel in at least Norwegian and
>> Danish, the uppercase ï¿½ is at U+00D8 and the lower case ï¿½ at U+00F8.
>
>I downloaded the font and installed it. Now my zero's are slashed.

OK, now try to use it in a spreadsheet.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

3402. Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: tjp <tjp@pobox.invalid>
Message-ID: <lkqe2tsu64eah16sgluuvsu28mq1uvh840@4ax.com>
Source record: 175433
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

I have read *hours* worth of "Apartment Antenna" threads from the various usenet groups via deja.com. I have one question for the group:

I'm new to all of this so please be kind.

Can I simply stick a oh, say a little Cushcraft AR-270 in the corner of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A from inside. I can grab quite a few repeaters in my area from inside with my HT and a Comet SMA-24. What about a 20'' mag mount on a table? Would that work OK?? Is 50w too much to push out in a setup like this etc??

Thanks in advance.

3403. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <wgLV5.1717$eT4.217445@nnrp3.clara.net>
Source record: 175434

Rick Littlefield wrote:
>I can vouch for N1XIM's existance, but not for the voracity of his Physics.
>Anybody comment on that?

>Rick K1BQT

Well Rick, if you really do mean voracity rather than veracity I guess there
will be some interesting comments ;-)

73, John G8OZH

3404. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A278986.EB4571A7@dvol.com>
Source record: 175435
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

tjp wrote:

> I have read *hours* worth of "Apartment Antenna" threads from the
> various usenet groups via deja.com. I have one question for the
> group:
>
> I'm new to all of this so please be kind.
>
> Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> from inside. I can grab quite a few repeaters in my area from inside
> with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> table? Would that work OK?? Is 50w too much to push out in a setup
> like this etc??
>
> Thanks in advance.

>
I'm not specifically familiar with any of that equipment but the bottom line is that it all depends on how far you are from the machines you'd like to hit and the terrain and close-in obstacles between you and the machines. I can hit a couple nearby machines from anywhere inside my apt with just an HT with a rubber duckie. Right off a magmount antenna depends on the sheet metal of a vehicle to serve as a gound plane to opererate properly so forget the mag mount antenna. Any antenna designed to be installed outdoors on a tower or pole will include both the radiator and the ground system (radials or coaxial sleeve) and will work properly. A Ringo, one of the Larsons hung upside down from the ceiling, etc. Personally, I'd homebrew dipoles and tape 'em to a window. As far as power goes, check the manufacturer's specs.
>
w3rv

3405. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <9083a2rpr1@slb6.atl.mindspring.net>
Source record: 175436
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Hi TJP,

The problem you are going to encounter is RF exposure. At 50 watts, you will need to give the antenna a minimum of six feet clearance, otherwise you begin to fry yourself and family members.

At five watts, or maybe even 10 I think you might be OK. I had a MFJ portable J-Pole that I used when I lived in an apartment, hung it up next to a window, hooked it to my five watt HT and away I went.

At 50 watts though, you really should get the antenna outside. Maybe you can put it on a balcony while you use it, then take it down afterward? That would be easy to do with a mag mount, and you could be inside with the antenna outside and have a wall between you and the 'tenna.

Robert / KG4FGN

"tjp" <tjp@pobox.invalid> wrote in message
news:lkqe2tsu64eah16sgluuvsu28mq1uvh840@4ax.com...
> I have read *hours* worth of "Apartment Antenna" threads from the
> various usenet groups via deja.com. I have one question for the
> group:
>
> I'm new to all of this so please be kind.
>
> Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> from inside. I can grab quite a few repeaters in my area from inside
> with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> table? Would that work OK?? Is 50w too much to push out in a setup
> like this etc??
>
> Thanks in advance.

3406. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <7IMV5.25$5O5.18788@paloalto-snr1.gtei.net>
Source record: 175437
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"tjp" <tjp@pobox.invalid> wrote in message
news:lkqe2tsu64eah16sgluuvsu28mq1uvh840@4ax.com...
> I have read *hours* worth of "Apartment Antenna" threads from the
> various usenet groups via deja.com. I have one question for the
> group:
>
> I'm new to all of this so please be kind.
>
> Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> from inside. I can grab quite a few repeaters in my area from inside
> with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> table? Would that work OK?? Is 50w too much to push out in a setup
> like this etc??
>
> Thanks in advance.

Many years ago, when I lived in an apartment for a short while, I ran a horizontal 5 element Cushcraft 2/440 yagi suspended about 6" from the ceiling with an extension from the existing ceiling light tubular rod that held the cover on. You can buy this rod in various lengths from most hardware stores, etc.

Simply unscrew the cover, remove the short 6" rod, replace it with about 15" of new rod. Then replace the light "bowl" and use a nut instead of the knurled button to hold it in place. This leaves about 8-9" of rod to mount the antenna to. I mounted it by drilling a 1/2" hole through the antenna boom, passing the rod through the boom, and securing it with the original knurled button from the light fixture.

The antenna weighed only a few pounds, and it never presented any problems from this type of mounting. Turn it via the "armstrong" method. I ran a 100 watt SSB rig through it and it worked very well. If you happen to have one of those hanging chain lights, you can even run the coax back down the wall using the existing chain hooks.

When the time comes to move, simply replace the original fixture rod, put the light cover back on, and nobody will ever know the difference.

73 and Good Luck de W6DKN

3407. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A27A775.1E4F3285@IEEE.org>
Source record: 175438
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

tjp wrote:
> What about a 20'' mag mount on a table?

Make sure it's a metal table. A metal desk or metal filing
cabinet works. You need a ground plane for a mag mount.
--
http://www.mindspring.com/~w6rca

3408. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: twilson@ag-eco.nospam.tamu.edu
Message-ID: <908b2s$e7s$1@news.tamu.edu>
Source record: 175439

In article <3A270230.52C59F68@att.net>, "George, W5YR" <w5yr@att.net> wrote:

>Curious, but I use one on all bands and have done so for over 3 years
>now with excellent results. I have 4 different antennas that I use with
>the MFJ.
>
>Perhaps your problems lie elsewhere?

I'm assuming I have a bad one with an internal problem somewhere. I opened it up, and I'm not very impressed with the quality inside of it. I did some checking, but everything seems ok, just find it doesn't seem to want to tune well at all. This is my second MFJ tuner, the first was a Versatronic II. It also failed to work adequately, but I suspect in that case it wasn't the tuner's fault, since I had a very compromised dipole arrangement in the attic of a duplex. But with the 989C, I can't get it to tune to an adequate swr on any band, including ones my internal tuner on the TS-940 has no problems with. That's the reason I think the MFJ is trash.

Troyce

3409. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10012011516120.17599-100000@unics>
Source record: 175440

On Wed, 29 Nov 2000, Roy Lewallen wrote:

> NEC isn't "totally useless" -- it's in daily use worldwide, helping to
> design real antennas that work. The strength of both the near and far
> fields (volts or amps/meter) are proportional to the square root of the
> applied power, and NEC reports this. Most people view far field outputs
> in dBi, which is normalized to the power input, so far field results in
> dBi do not change as the input power changes.
>
> NEC calculates both the electric and magnetic fields, giving results
> accurate in both the near and far fields. If you're interested in how
> it's done, you can find the NEC-2 manual on line at
> http://members.home.net/nec2/preface.html. The EZNEC demo (free, from
> http://eznec.com) can be used as an easy way to look at NEC-2 results
> with simple antennas.
>
> Roy Lewallen, W7EL
>
Hi Roy,

totally agreed. There are some people around who say that far fields
follow the 'square root law' and near fields don't. According to my
understanding of the Maxwell equation ALL fields should follo the square
root law.

I did not want to say that NEC is useless, I only wanted to say that it
would be useless if the near fields did not behave like this.
According to my memory the theory part of the manual (I think it was part
one of the manual) starts with the vector potential mentioned in my
posting and evaluates the fields in a similar manner as I did (the 'art'
is to make currents and fields 'self consistent', it's no real task to
calculate the fields given the currents/charges).

NEC (used in the form of NEC2d here) is an excellent tool to me. I've done
a lot of modelling with NEC and almost always obtained results close to my
'intuition'; since last friday I cannot say this about the MININEC based
program I use here, but this may be due to bad formulation of the problem.
The only weakness I have noticed is modelling very small
loops (close to ground you can produce negative feedpoint resistance ?).
I think there is some 'improved loop code' developed but I don't know if
it's available 'to the public'.

Guess I would by the EZNEC version for windows if there were a distributor
in here in germany and the price were not higher then 200 DM. I think is's
advertised in QST for 89 Dollars so the second condition would probably
within reach. I'm convinced that EZNEC is worth every Dollar it costs, but

don't like the idea to send credit card numbers via the internet. Maybe
you find a way to sell it germany, too.

Vy 73

Ralf

DL 6 OAP

==
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==
Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==

3410. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <908eto$dm2$1@nnrp1.phx.gblx.net>
Source record: 175441
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Paul Keinanen, OH3LWR <keinanen@sci.fi> wrote:

> That is not slashed zero, it is a vowel in at least Norwegian and
> Danish, the uppercase ï¿½ is at U+00D8 and the lower case ï¿½ at U+00F8.

I downloaded the font and installed it. Now my zero's are slashed!

Unfortunately, I have lost the ability to distinguish between

0 and ï¿½

They are exactly the same! I will never be able to read Norwegian
again! However, I couldn't read Norwegian before, so the impact
will probably be minimal.

Interestingly, some of the other programs I run that insist on using
fixed-width fonts, notably Not-GNU, don't recognize the font as having
that characteristic. I wonder if that's a Windows setup thing or is
there a bit set in the font file itself that tells everybody it is
is that way?

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

3411. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <908etu$dm2$2@nnrp1.phx.gblx.net>
Source record: 175442

> >Bill Aycock, W4BSG wrote:
> >Chip You know you dont want the books- you know it all already, so any
> >references are superfluous

> Chip, N1IR wrote:
> So, what is it in my history that allows you to make such an inaccurate and
> factually unjustified assertion as the above?

Chip, This NG is the Amazon.Com_from_Hell_and_Damnation. It reads your cookies and snidely tells you which books you DON'T want to read, the books ordered by people with whom you have violent disagreements and the addresses of mental health facilities you should visit at first opportunity.

;-) <----- (note smiley-face)

FWIW, quite a while back a NG participant alerted us to the opportunity to buy the old, gone-out-of-print edition of Jasik & Johnson's "Antenna Engineering Handbook" for $5.00 from Edward Hamilton, Bookseller. The savings from that transaction paid for 6 months of my ISP subscription.

Book and software for-sale postings seem to me to be appropriate to the intellectual pursuits of this NG. Ordinary antenna for-sale or for-auction postings might find a better venue in the r.r.a.swap NG, if only to avoid the inevitable, acidic follow-ups denigrating the offered antenna as an efficient radiator of electromagnetic waves.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

3412. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10012011543090.17599-100000@unics>
Source record: 175443

On Fri, 1 Dec 2000, George, W5YR wrote:

> Interesting scatological comment of the MFJ 989C, Troyce.
>
> Curious, but I use one on all bands and have done so for over 3 years
> now with excellent results. I have 4 different antennas that I use with
> the MFJ.
>
> Perhaps your problems lie elsewhere?
>
> Troyce wrote:
> I've tried an external MFJ-989 tuner, which is a piece of sh*t and
> > won't tune on any band.
>
>

I remember an article in german cqDL magazine about one of the GAP antenna. It was not the 10 to 80 mtrs Gap but the one 80 to 20 or so (was it called 'Challenger' ?). The OM also tried to use a MFJ tuner with this antenna and said it was not possible to tune on some bands. I think it was due to a capacitor at the output, will try to find the article at the weekend.

Vy 73

Ralf

DL 6 OAP

==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover

Tel: +49 511 762 2232
==========

Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

3413. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A27BCB0.6030408@hiwaay.net>
Source record: 175444

You do truly have a way with words

Bill-W4BSG

Rick Littlefield wrote:

> I can vouch for N1XIM's existance, but not for the voracity of his Physics.
> Anybody comment on that?
>
> Rick K1BQT

3414. Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: jbhall1282@my-deja.com
Message-ID: <908ha6$b3l$1@nnrp1.deja.com>
Source record: 175445

I need to put another antenna in my back yard that will favor East and West on 40M. It will be close to my 80-40-30M trap inv-vee that runs along a nearly East-West line. The new antenna will probably be a dipole running perpendicular to the East leg of the inv-vee and a few feet above it. My concern is that the close proximity of these antennas will result in interaction and who knows what for a pattern. I have tried to model various arrangements but my model is probably over simplified. Any thoughts on this would be appreciated.
73,
JB

Sent via Deja.com http://www.deja.com/
Before you buy.

3415. Pls check my numbers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <oPPV5.109617$4U6.3865849@news1.rdc2.on.home.com>
Source record: 175446

I'm putting up an inverted v on top of my 2 story roof. The metal mast attached to the side of the roof is 30 feet from the ground to the apex. The width of my roof is approx 30 feet and the roof height is 16 feet.
This makes the apex angle approx 90 degrees.
Using the antenna design program EZNEC to compute the wire lengths for 14.03 mhz, I get 17.5 feet for each side of the dipole rather than the expected 16.5 feet.
Does this seem OK?

Wayne
ve3 gqx

3416. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: gpewitt@execpc.com
Message-ID: <3a27ca04$0$54341$272ea4a1@news.execpc.com>
Source record: 175447
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

In my second floor condo I use a Cushcraft 270 standing in a corner
hooked up to the Yaesu 5100 putting out 50w. In the bedroom I have
a RS HTX-202 on a 13v power supply hooked to a MFJ roll up J pole
putting out 5w. In the living room I have a Kenwood TX-28A with
a hotrod antenna also on 13v and putting out 5w. All work well into
local repeaters. The Kenwood will not make the repeater without the
hotrod on it's internal battery. With the hotrod it will when the
battery is fresh. On 13v it will make it with the rubber duck.
I bought a three element beam (MFJ) but the J pole works better.
The mag mount would be better on top of the fridge or some other
metal object. The RS HTX-212 in my truck with a mag mount works
well on the cab but wouldn't work on the fiberglass camper shell
even if it would stick. 8-)
I've not noticed any problems with 50w but 5 is usually enough.
Maybe the green pin feathers I've started to sprout may be a
side effect?
I would put the antenna as far away from your operating position
as possible. You could poke a hole in the ceiling of a closet and
stuff the 270 up into the attic. Unless there is another apartment
above yours. Might cause some hassles if so.
73 Gary

On Fri, 01 Dec 2000 02:17:53 -0700, tjp <tjp@pobox.invalid> wrote:

>I have read *hours* worth of "Apartment Antenna" threads from the
>various usenet groups via deja.com. I have one question for the
>group:
>
>I'm new to all of this so please be kind.
>
>Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
>of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
>from inside. I can grab quite a few repeaters in my area from inside
>with my HT and a Comet SMA-24. What about a 20'' mag mount on a
>table? Would that work OK?? Is 50w too much to push out in a setup
>like this etc??
>
>Thanks in advance.

3417. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Nick G4FAL <ntotterdell@riverauto.co.uk>
Message-ID: <DfQV5.2670$nd.23605@stones>
Source record: 175448

Now I don't remember the exact details but I remember a tale from my youth (1970s). Apparently the Wimbledon and District Amateur Radio Society, some years previously, had used a gas-filled weather balloon to raise an antenna during a field day event. The balloon broke free of its mooring and was lost. Next day one of the London evening papers reported the discovery of an unidentified balloon which had landed somewhere in West London. I don't think the W&DARS and the balloon were ever reunited.

Let this be lesson to you! Sounds like a lot of fun to me!

Anyone know the full story?

--
Regards

Nick G4FAL
ntotterdell@riverauto.co.uk
Birken Vogt <vogt@oro.net> wrote in message
news:3A2584F7.30C970D5@oro.net...
> I thought I remembered reading about a 160M antenna supported by a
> balloon on the one end in QST. It was a full length vertical or
> something like that. It was used to work some contest and it worked so
> well that some people were accusing the owner of using illegal power. I
> can't find it in the ARRL index search and was wondering if anybody knew
> where I had read that.
>
> Birken KE6DLT/AG

3418. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A27C8F5.6C5E@pacbell.net>
Source record: 175449

Rick Littlefield wrote:
>
> I can vouch for N1XIM's existance, but not for the voracity of his Physics.
> Anybody comment on that?
>
> Rick K1BQT

Oh, no! It's happening to you, too. Mrs. Malaprop said, "I am sorry to say, Sir Anthony, that my affluence over my niece is very small." Later, "Well, Sir Anthony, since you desire it, we will not anticipate the past! - so mind, young people - our retrospection will be all to the future." I think this newsgroup needs the services of a priest to exorcise the old broad's spirit. (I almost wrote "exercise.") Is there a priest in the group, or even a guru?

Tom Donaly KA6RUH

3419. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a8dc95e.3178937890@news.seanet.com>
Source record: 175450
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Fri, 01 Dec 2000 07:28:21 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>tjp wrote:
>> What about a 20'' mag mount on a table?
>
>Make sure it's a metal table. A metal desk or metal filing
>cabinet works. You need a ground plane for a mag mount.

Hi Cecil,

How many magmounts do you know of that make an electrical connection
to that same metal desk or filing cabinet (or car roof top for that
matter)?

73's
Richard Clark, KB7QHC

3420. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a8ecb61.3179452070@news.seanet.com>
Source record: 175451

On Fri, 01 Dec 2000 14:03:09 GMT, twilson@ag-eco.nospam.tamu.edu
(Troyce) wrote:

>In article <3A270230.52C59F68@att.net>, "George, W5YR" <w5yr@att.net> wrote:
>
>>Curious, but I use one on all bands and have done so for over 3 years
>>now with excellent results. I have 4 different antennas that I use with
>>the MFJ.
>>
>>Perhaps your problems lie elsewhere?
>
>I'm assuming I have a bad one with an internal problem somewhere. I opened it
>up, and I'm not very impressed with the quality inside of it. I did some
>checking, but everything seems ok, just find it doesn't seem to want to tune
>well at all. This is my second MFJ tuner, the first was a Versatronic II. It
>also failed to work adequately, but I suspect in that case it wasn't the
>tuner's fault, since I had a very compromised dipole arrangement in the attic
>of a duplex. But with the 989C, I can't get it to tune to an adequate swr on
>any band, including ones my internal tuner on the TS-940 has no problems with.
>That's the reason I think the MFJ is trash.
>
>Troyce

Hi Troyce,

You may want to consider that your difficulties might have been due to
common mode currents rather than poor equipment. Your hint of a
> very compromised dipole arrangement in the attic
would make this a near certainty - especially if you did not
sufficiently decouple your line from your antenna through a current
Balun.

73's
Richard Clark, KB7QHC

3421. WTB:Heath HD-1426

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Heath <radiovintage@hotmail.com>
Message-ID: <9LQV5.2174$Tv6.176848@nntp2.onemain.com>
Source record: 175452
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I am interested in buying a Heathkit HD-1426 Field Strength Meter.Please include price and condition.
THANKS

3422. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Edward Dowdy <ellhatespamdowdy@home.com>
Message-ID: <S_QV5.99148$a7.1542949@news1.rdc1.il.home.com>
Source record: 175453
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

He didn't say ground connection. He said ground plane.

--
Please reply to eldowdy@home.com. Spam is a pain!

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a8dc95e.3178937890@news.seanet.com...
> On Fri, 01 Dec 2000 07:28:21 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >tjp wrote:
> >> What about a 20'' mag mount on a table?
> >
> >Make sure it's a metal table. A metal desk or metal filing
> >cabinet works. You need a ground plane for a mag mount.
>
> Hi Cecil,
>
> How many magmounts do you know of that make an electrical connection
> to that same metal desk or filing cabinet (or car roof top for that
> matter)?
>
> 73's
> Richard Clark, KB7QHC

3423. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Edward Dowdy <ellhatespamdowdy@home.com>
Message-ID: <m4RV5.99151$a7.1543797@news1.rdc1.il.home.com>
Source record: 175454
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

There is a capacitive coupling to ground.

--
Please reply to eldowdy@home.com. Spam is a pain!

"Edward Dowdy" <elIhatespamdowdy@home.com> wrote in message
news:S_QV5.99148$a7.1542949@news1.rdc1.il.home.com...
> He didn't say ground connection. He said ground plane.
>
> --
> Please reply to eldowdy@home.com. Spam is a pain!
>
>
>
> "Richard Clark" <rwclark@seanet.com> wrote in message
> news:3a8dc95e.3178937890@news.seanet.com...
> > On Fri, 01 Dec 2000 07:28:21 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> > wrote:
> >
> > >tjp wrote:
> > >> What about a 20'' mag mount on a table?
> > >
> > >Make sure it's a metal table. A metal desk or metal filing
> > >cabinet works. You need a ground plane for a mag mount.
> >
> > Hi Cecil,
> >
> > How many magmounts do you know of that make an electrical connection
> > to that same metal desk or filing cabinet (or car roof top for that
> > matter)?
> >
> > 73's
> > Richard Clark, KB7QHC
>
>

3424. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: g0xay@aol.com
Message-ID: <20001201123533.13865.00002278@ng-fa1.aol.com>
Source record: 175455

Birken.
Re balloons. Our Club did this some years back with good results. So good in fact that someone put the club callsign on the side of the balloon. This was easily read by pilots on finals for the old Whitchurch, Bristol Airport. You can guess the rest!
Dick G0XAY

3425. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: N5MJ <n5mj@delthis.hotmail.com>
Message-ID: <JIRV5.22807$II2.2163419@newsread2.prod.itd.earthlink.net>
Source record: 175456
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Got a balcony with a metal railing? That'd work. Mag mount atop a metal filing cabinet works too, just remember that any metal near the antenna (discounting the metal filing cabinet) will detune it.

Don't spray 50W of RF at yourself and the family at close distance. Use 5W.

If cable TVI becomes a problem, esp. on cable channels 18 or 19.... move the antenna.

Good luck.

Mike N5MJ

"tjp" <tjp@pobox.invalid> wrote in message news:lkqe2tsu64eah16sgluuvsu28mq1uvh840@4ax.com...
> I have read *hours* worth of "Apartment Antenna" threads from the
> various usenet groups via deja.com. I have one question for the
> group:
>
> I'm new to all of this so please be kind.
>
> Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> from inside. I can grab quite a few repeaters in my area from inside
> with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> table? Would that work OK?? Is 50w too much to push out in a setup
> like this etc??
>
> Thanks in advance.

3426. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t2fp5nll9lt74f@corp.supernews.com>
Source record: 175457

I use the Gap Voyager and have had pretty good all around results with it. On 160, it beats out my full size dipole over about 1,000 miles--working KH2, KH6, etc., but gets trounced on local (up to 500 miles) stuff--which is to be expected; on 80, it allows me to run the east coast while my full size dipole allows me to only hear them--the dipole is better close in; on 40, it is roughly equal to my 40 meter full size dipole and ground mounted 6btv with radials...sometimes the dipole wins, sometimes the voyager wins; on 20, its about equal to my full size dipole. All antennas are in the back pasture, so buildings/trees etc. are not a factor. In tons of A/B tests, I certainly have found no evidence for the accusation that it is an inferior antenna or acts like a "dummy load." But, your mileage may differ.

Also, it has the wonderful convenience of low SWR across large portions of the bands, something valuable to me as I enjoy operating all modes all frequencies--and my rig loves it! (Yes, I know dummy loads have a perfect 1.1 to 1 across all bands...but they don't get out like the GAP!).

Yes, let's be frank--there are better antennas--like the 3 el 75 meter full-size monster beam on a 150 foot tower I heard this morning working stuff I could not hear--but the guy moaned he couldn't QSY more than 10 khz because of the narrow bandwidth. Hey, if working DX in one speck of 75 is your thing, go the $20,000 monster antenna, I am sure you will be happy...but I can happily work lots of DX on both CW and SSB, and work both 3.501, 3.795, and 3.995 without problems! A ratio of 50/1 bandwidth over the "monster." It just depends whether you want a well-rounded do-everything antenna or not.

I have not had an opportunity to compare it with the butternuts or R7's, so have no idea how it compares to those.

As far as durability, my GAP Voyager has been up for about 5 years and has never given me any problem at all. For those of you who are "right brainers," think of it as a 46 foot work of art that also doubles as a ham antenna!

73,

Greg, N6GK

3427. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A27E57E.8E0FD282@oio.net>
Source record: 175458

jbhall1282@my-deja.com wrote:
>
> I need to put another antenna in my back yard that will favor East and
> West on 40M. It will be close to my 80-40-30M trap inv-vee that runs
> along a nearly East-West line. The new antenna will probably be a
> dipole running perpendicular to the East leg of the inv-vee and a few
> feet above it. My concern is that the close proximity of these antennas
> will result in interaction and who knows what for a pattern. I have
> tried to model various arrangements but my model is probably over
> simplified. Any thoughts on this would be appreciated.
> 73,
> JB
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

JB,
It will naturally affect the 'tune' of both antennas to some
extent. With the second antenna being perpendicular to the other,
there should be less affect than if they were parallel. Depending
on the height, neither one probably has much of a pattern anyway.
'Doc

3428. Re: Pls check my numbers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A27E5D5.8AEC1E@oio.net>
Source record: 175459

Wayne Jones wrote:
>
> I'm putting up an inverted v on top of my 2 story roof. The metal mast
> attached to the side of the roof is 30 feet from the ground to the apex. The
> width of my roof is approx 30 feet and the roof height is 16 feet.
> This makes the apex angle approx 90 degrees.
> Using the antenna design program EZNEC to compute the wire lengths for 14.03
> mhz, I get 17.5 feet for each side of the dipole rather than the expected
> 16.5 feet.
> Does this seem OK?
>
> Wayne
> ve3 gqx

Wayne,
It will probably be a bit long. But that's better
than it being too short, and having to add wire later.
'Doc

3429. Re: Re Dual Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <ogqf2tcghu0hgvtvir2nhqc6v0tfackluv@4ax.com>
Source record: 175460

On Thu, 30 Nov 2000 21:24:36 -0000, "Rudolph M. Marcelletti"
>Cecil--I think he wants to increase the transmit range so he should tilt
>them forward like the truckers so they can talk down the road farther.

CB antennas are usually fiberglass or flexible metal whips.
They tilt the antennas forward so that when they are at
highway speeds the antennas are near vertical.

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

3430. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a8fe361.3185596665@news.seanet.com>
Source record: 175461
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Fri, 01 Dec 2000 17:19:14 GMT, "Edward Dowdy"
<elIhatespamdowdy@home.com> wrote:

>There is a capacitive coupling to ground.

Hi Edward,

This goes without saying, but is this capacitive coupling from the
radiator, or from the feed? Or in other words is this capacitor
across the feed or in series?

As it stands, without a direct connection, yes there is certainly a
capacitive load added due to the proximity of this sheet of metal, and
as that sheet of metal must then serve as a circuit element, it
necessarily needs to conduct as part of a network (that is through
ohmic, metal connections to satisfy that half of the circuit). Thus
my question, is there a direct, close metallic connection, or are
these currents in the capacitance forced to find the long way back to
the source?

A sheet of metal in the vicinity of an antenna is not a guarantor of
fulfilling the function of a ground plane. If this plane is large
enough (on the order of several many wavelengths, 10 typically) then
it can serve as an improvement to low angle radiation, but that is a
far field phenomenon and not a function of a ground plane per sï¿½.

There are far too many reports in this group of improved performance
where radiators' feedpoints are tied directly to the sheet metal when
they replace thru-glass or mag mounts.

73's
Richard Clark, KB7QHC

3431. Re: Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <908u3imsq1@nnrp1.deja.com>
Source record: 175462

In article <A7FV5.82$7d.9043@newshog.newsread.com>,
"Roger Halstead" <rdhalste@tm.net> wrote:

> "adamory" <adamory@ntlworld.com> wrote

> > I need some help with a coaxial type collinear antenna. I
used to
> > have the diagrams to knock one of these up, but I've lost them. If
anyone
> > can help with designs for 70cm or 23cm then that would be great. I
have
> need
> > for a vertical antenna with gain for 2320MHz and by scaling one of
these
> > antennas for the band maybe this will be a suitable antenna for
vertical
> > polarisation.
> >
> Man, but that is one whale of a lot of scaling. 10:1
>
> I think those would be some mighty short tubes.

Well, assuming he uses solid Teflon dielectric semi-rigid line, which
should be a very reasonable way to do it, each section will be around
8.9 centimeters (3.5 inches) long. It will be important to measure and
construct accurately, but then that's true of pretty much everything you
do at that frequency anyway. (I sent him a writeup about how to do it,
via email.)

Cheers,
Tom

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3432. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <qh0g2tkpiiosomapc1a3358fjd8sscva8t@4ax.com>
Source record: 175463

On Fri, 01 Dec 2000 15:49:29 GMT, jbhall1282@my-deja.com wrote:

>I need to put another antenna in my back yard that will favor East and
>West on 40M. It will be close to my 80-40-30M trap inv-vee that runs
>along a nearly East-West line. The new antenna will probably be a
>dipole running perpendicular to the East leg of the inv-vee and a few
>feet above it. My concern is that the close proximity of these antennas
>will result in interaction and who knows what for a pattern.

If it's perpendicular, +/- a few degrees, coupling will me almost nil.
Go for it.

73, Bill W7TI

3433. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Edward Dowdy <ellhatespamdowdy@home.com>
Message-ID: <1ETV5.99273$a7.1546460@news1.rdc1.il.home.com>
Source record: 175464
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

The way I understand, it's a capacitive coupling to ground at the feed point.

--
Please reply to eldowdy@home.com. Spam is a pain!

3434. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A280BD7.3400D941@eznec.com>
Source record: 175465

"R.Wilhelm" wrote:
> . . .
> Guess I would by the EZNEC version for windows if there were a distributor
> in here in germany and the price were not higher then 200 DM. I think is's
> advertised in QST for 89 Dollars so the second condition would probably
> within reach. I'm convinced that EZNEC is worth every Dollar it costs, but
> don't like the idea to send credit card numbers via the internet. Maybe
> you find a way to sell it germany, too.

I've found a way to sell it in Germany -- several, in fact. I probably sell more programs to Germany than any other country outside the U.S. And visitors from Germany to my web site consistently outnumber those from any other country except the U.S.

Communication with the secure server used for web credit card orders is encrypted by the site and your web browser, and I've never received a report of theft or fraud due to purchase from my web site. U.S. customers are limited by federal law to a maximum liability of $50 if their credit card is stolen. (I have no idea what protection is offered in other countries.) Nevertheless, a surprising number of people even in the U.S. are willing to give their cards to a sales clerk or gas pump jockey but aren't willing to purchase via a secure server on the Internet. I don't understand this, but it's o.k. with me.

Anyone who doesn't want to purchase via the internet can order by phone, fax, or mail. All necessary information is at http://eznec.com/ordering.htm. International CD-ROM orders are sent by air mail. Typical delivery time is one week to most parts of the world. A very sizable fraction of my sales are to other countries.

Credit card orders are billed in U.S. dollars (required by my bank), which customers see on their bills in their local currency. Most credit card companies give a better exchange rate for these transactions than you'll get any other way. But if you prefer, you can purchase and send a U.S. dollar check. This is invariably more expensive than using a credit card. Occasionally I receive U.S. currency from a foreign country, sent by registered mail. I don't recommend this, but haven't gotten any reports of money being lost this way. I don't accept direct wire funds transfers for the standard version, because at least two banks are involved, each charging a substantial fee.

If I had a distributor in Germany, he would have to be paid for his time and trouble, and would have to collect from you the sizable taxes you have there. Disks would either have to be sent there in bulk, with duty being paid, or manufactured there. Because of the smaller quantities, manufacturing cost would be higher if produced there than here. My share

of the DM collected by the distributor would have to be converted to dollars with the usual currency conversion losses (considerably greater than losses from a credit card sale). The result would be that the program would cost a lot more. And I would have a lot of extra work and get less from each sale. Other than saving the typical one week transit time, what would be the advantage to the customer to have a German distributor?

We are more and more getting to be an international community, and can all benefit if we don't consider international borders to be an obstacle to commerce, but instead figure out ways to make them transparent.

This seems like a pretty commercial posting, but nearly all the information applies to any international web sales and purchasing, which are becoming increasingly common. I hope readers find it informative.

Roy Lewallen, W7EL

3435. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A280965.4A4AC7DA@IEEE.org>
Source record: 175466
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark wrote:
> How many magmounts do you know of that make an electrical connection
> to that same metal desk or filing cabinet (or car roof top for that
> matter)?

All of the VHF/UHF mag mounts that I have tried make an adequate
capacitive RF electrical connection. They work well with the
capacitively coupled ground plane and don't work well without it.
--
http://www.mindspring.com/~w6rca

3436. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <t2g3f24me9d620@corp.supernews.com>
Source record: 175467
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A278986.EB4571A7@dvol.com...
> Right off a magmount antenna
> depends on the sheet metal of a vehicle to serve as a gound plane to
> opererate properly so forget the mag mount antenna.

A mag mount antenna for 2m/70cm will fork fine. I used one 2 years ago on an ironing board setup in front of a window on a 9th floor dorm room at the local university. The antenna worked fine with a 50 watt mobile unit at full power. Used this for some contacts while at the Dayton Hamvention. Everyone we talked to got a good laugh about what we using, but it sure did work.

Last year used a 5/8 wave 2m/6m mag mount stuck up side down on the drop ceiling panel supports as a ground plane. That worked fine, after a little tuning, with a new IC-706G a friend got at the Dayton Hamvention last year. Worked some 2m, and 6m stations. with that setup too. The 6m tuning was touchy however, got with in 6 to 10 feet of the antenna, and the SWR went to pot.

> Any antenna designed
> to be installed outdoors on a tower or pole will include both the
> radiator and the ground system (radials or coaxial sleeve) and will work
> properly. A Ringo, one of the Larsons hung upside down from the ceiling,
> etc. Personally, I'd homebrew dipoles and tape 'em to a window. As far as
> power goes, check the manufacturer's specs.

I have used a Comet dual band antenna in the corner of my ground floor apartment for the past 2 years just fine. They don't make the exact model I have any more, but the closest thing to it is the Z780 (4.5 dbi on 2m, 7.5 dbi on 70cm). Make up a simple mount to screw it in to, and add a few 20 inch radials around the base, and you are done. I also have a homebrewed 2m turnstile in the other corner for 2m SSB, and a 1/2 WL 6m loop hanging from the front room ceiling for 6m SSB. Most of the time I never have to run more that 10 watts to get in to repeaters 10 to 15 mile away. So far I have found any type of 6m antenna is touchy to tune inside of the apartment. The wavelength is so long that the antenna "couples" in to anything close by like walls, floors, and ceilings. The 2m and 70cm antennas are fine so long as you keep them about a foot away from the walls, water pipes etc.

What you have to watch out for with apartment hamming is:

1. Keep the antennas as far away as you can from the walls where the other renters have their TV's, radios, computers, etc

2. The vertical antennas may give real bad SWR readings if they are located near water pipes in the walls, and electrical wire runs.

3. If your building has a steel structure, aluminum siding, and or foil covered insulation in the walls. Now you need to think about window antennas or sneaking one outside some place.

4. Power level. Keep it down during the day, and early evening. I don't seem to have problems running higher power late at night because most people are in bed anyway.

5. Check your home electronics. Buy or use filters on your ham gear if the output is not clean enough where your home electronics are picking up harmonics from a 10 to 15 watt signal about 10 feet away.

--
Leland C. Scott
KC8LDO

3437. Re: Calculating Magnetic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 00:00:00 UTC
From: Tobias Demmer <tobias-demmer@gmx.de>
Message-ID: <9092liucr00$1@news.t-online.com>
Source record: 175468
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.antenna

kann mir das jemand ï¿½bersetzen ??

Tobias
<atkes@imap1.asu.edu> schrieb im Newsbeitrag
news:906dt2$la5$1@news.asu.edu...
> WolfgangS (schliess@gmx.de) wrote:
> : Hi !
> : I want to calculate the L component of a Magnetic loop.
> : Is this right ???
>
> : r=radius
> : w=width of the loop lipe
>
> : L=12.57*r*log(2*r/w)+0.08
>
> : (Magnetic) Loop
> : N=1, r=50cm , w=1 cm
> : L= 2.8944 uH
>
> : (Magnetic) Loop
> : N=1, r=50cm , w=4 cm
> : L= 2.031 uH ?!?!?!!!??!
>
> : Can is be when the w increases then L component decreases ?!?!?
>
>
> The external DC inductance of a thin circular loop is calculated in
> many texts. In the one in front of me, J.D. Jackson's Classic
> Electrodynamics, it is given as a problem at the end of a chapter 5. In
> microhenries the result is
> L(microH) = 0.1 4 pi a [ln(8a/b)-2]
> where a is the radius of the loop in cm and b is the radius of the wire
> in cm. the factor 0.1 is the conversion factor between electromagnetic
> and SI units. This is identical to the formula you wrote in your first
> post, and identical to the formula that Reg wrote (if I assume that his
> 2.451 is an approximation to 2-ln(2/pi) = 2.4516...). For your first
> formula the lengths need to be in meters, and the log is base 10 rather
> than the natural log above (your factor of 2.3 is ln(10) = 2.302...).
> At true DC, there is current throughout the cross section of the wire,
> and you may find formulas that have -7/4 instead of the -2 above. These
> include the inductance from the magnetic field in the wire -- the
> so-called internal inductance. At rf the skin effect makes this
> negligible. As Reg mentions, these DC approximations will only be

> reasonable if the loop is small and the wire thin.
>
> As you make the wire larger, to a first approximation, the magnetic
> field outside the wire is the same as it was before at the same
> distance from the wire. Now however, you have excluded the field
> from the region between the radius of the original wire and the larger
> wire. The field energy in this volume no longer contributes to the
> inductance, and the inductance is smaller.
>
> 73 Kevin w9cf@ptolemy.la.asu.edu

3438. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 01:39:23 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A270144.D6463546@att.net>
Source record: 175422

Reminds me of a learned saying that I made up in high school in the
early 40's:

He who thinks is faultless
He who thinks he thinks . . .is thoughtless.

Ouch!

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Drew Northup wrote:
>
> Bill Aycock wrote:
>
> > You just think he thinks

3439. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 01:43:19 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A270230.52C59F68@att.net>
Source record: 175423

Interesting scatological comment of the MFJ 989C, Troyce.

Curious, but I use one on all bands and have done so for over 3 years
now with excellent results. I have 4 different antennas that I use with
the MFJ.

Perhaps your problems lie elsewhere?

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Troyce wrote:
I've tried an external MFJ-989 tuner, which is a piece of sh*t and
> won't tune on any band.

3440. Re: DK3 Screwdriver UNUN?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 03:17:32 UTC
From: n4jzh@knology.net
Message-ID: <3a271804.269260916@news.knology.net>
Source record: 175424

On Sun, 26 Nov 2000 17:59:10 GMT, "William R. Moore"
<wr.moore@worldnet.att.net> wrote:

>I have obtained a DK3 screwdriver that has never been used. I am
>constructing the UnUn matching transformer that is specified in Johnson's
>notes. I have 2 questions.
>
>The notes (Figure 10) call out the number of turns explicitly only once and
>that number is unreadable on my copy. The diagrams look like there should
>be 14 turns. Is that correct?
>
>In winding the bifilar turns, should the wires be twisted or wound in
>parallel?
>
>Tnx es 73,
>Randy, KS4L
>
>Randy Moore Huntsville, AL
>
>
Randy,
I concur with Jerry, it will work good on 75 meters
but will begin to suffer as it approaches 10 meters.
best of luck. Donnie N4JZH

3441. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 03:28:16 UTC
From: k1bqt@aol.com
Message-ID: <20001130222816.24672.00002771@ng-fl1.aol.com>
Source record: 175425

I can vouch for N1XIM's existance, but not for the voracity of his Physics.
Anybody comment on that?

Rick K1BQT

3442. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 03:40:57 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <d5FV5.81$7d.8990@newshog.newsread.com>
Source record: 175426

Might make a whale of a sloping dipole on 160.

Actually it only takes a light breeze for a big kite to lift a lot of
weight.

Make one of those coax antennas where the inner conductor makes one half a
dipole and the braid is folded back over the jacket to make the other half
Let it hang vertically from the kite. It wouldn't take much to get a half
wave vertical dipole a wavelength or two up. Well, except for a *lot* of
horizontal space to keep clear of power lines.

Now, how long would it take a person to strip the jacket and roll back that
much braid??

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Sri Billy Bob" <nulport@home.com> wrote in message
news:hb4c2t0efgpaipl6u0l32sro73fohg8j5t@4ax.com...
> On Tue, 28 Nov 2000 19:34:20 -0600, "KG4FGN" <kg4fgn@mindspring.com>
> enlightened us with:
>
> >OK, I'm hoping someone else out here has tried this idea and can give me
> >some pointers.
> >
> >We've all heard the Darwin Award about the Lawnchair guy who hooked some
> >balloons to a lawn chair and wound up floating to 12,000 feet. (If you
> >haven't read this hilarious story, go to www.darwinawards.com, click on
> >honorable mentions, vintage years, and click on Lawn Chair Larry).
> >
> >So I was chuckling with my wife over the turkey holidays, remembering
some
> >of the Darwin stuff. It got me to thinking though, if it worked with an
> >idiot, it would probably work OK for an antenna. So I'm thinking, if I
built
> >an inexpensive homebrew antenna (maybe a Yagi or a simple ground plane)
and
> >hung it off the bottom of a weather balloon, and fed it with some light
> >weight coax, I could run it up to 100 or 150 feet and maybe do some
> >interesting dx type work on 2 meter. Might also make an interesting
addition
> >to field day.
> ><snip>
>
> I used to use a longwire attached to a large kite for SWL. Copper

> coated steel welding wire worked pertty well but direction depended on
> the wind.
>
> You might try a kite with a 6 or 10 Meter dipole as the vertical
> "stick". Or go horizontal if the wind is blowing along the axis you
> want to listen/transmit to.
>
> Wonder if Lawnchair Larry took a portable reciever with him?
>
> Imagine the FM DX he could have picked up ;)
>
> SBB

3443. Re: Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 03:43:28 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <A7FV5.82$7d.9043@newshog.newsread.com>
Source record: 175427

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"adamory" <adamory@ntlworld.com> wrote in message
news:Z4wV5.1193$0z.13506@news2-win.server.ntlworld.com...
> Hi All,
>
> I need some help with a coaxial type collinear antenna. I used to
> have the diagrams to knock one of these up, but I've lost them. If anyone
> can help with designs for 70cm or 23cm then that would be great. I have
need
> for a vertical antenna with gain for 2320MHz and by scaling one of these
> antennas for the band maybe this will be a suitable antenna for vertical
> polarisation.
>
Man, but that is one whale of a lot of scaling. 10:1

I think those would be some mighty short tubes.

Roger (K8RI)
> Email direct please to AdamORY@ntlworld.com
>
> With thanks in advance for your time and effort.
>
> 73
>
> Adam
>
>
>

3444. sonia.perez@pyxis.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 05:12:01 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <BqGV5.24140$I5.437082@news1.rdc1.sdca.home.com>
Source record: 175428

Father Knows Best
2000 Darwin Award Winner
Confirmed True by Darwin
This is a classic Darwin. The man will no longer reproduce, and his son obviously had better genes for survival than his father-his mother's contribution, plus the more robust half of his father's genes. Although a man who could inspire such rage in a child is not a sympathetic figure, it is unfortunate that his son was traumatized.

(13 March 2000, New Jersey) It started out like a scene from The Brady Bunch. Andrew and his fianc&#65533;e were living together with his three children and her three children in Dover Township, when an argument over chocolate cake icing erupted.

Andrew accused his ten-year-old son of taking the missing container, and the two became embroiled in a heated disagreement. Andrew took the boy out to the garage for a private discussion, and there the conversation became even more emotional. Then the man made his fatal mistake.

He handed a five-inch kitchen knife to his angry son, and challenged the boy to stab him if he hated him so much. The boy put the knife down, but Andrew picked it up and placed it in his hand again. In the heat of the moment the outraged boy took him up on the offer and plunged the knife into his chest. The deadly blow happened so fast that no one could stop it.

Andrew was pronounced dead at Community Medical Center. His last words were "Would you believe the kid did that?"

The fourth grader, charged with manslaughter and illegal possession of a weapon, faces up to three years imprisonment. But Ocean County prosecutor E. David Millard said it was unlikely that he would serve jail time, as the boy had been provoked.

DarwinAw ar

3445. Tune dual band mobile antenna (2m/70c)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 05:12:49 UTC
From: Clark <KF4LAT@hotmail.com>
Message-ID: <lrGV5.22798$Le.2592711@ratbert.tds.net>
Source record: 175429
Cross-posted to: alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

I have tuned antennas for quite a while, but have never tuned a dual band.
I have my 2m down to 1.2:1 but my 70cm is 1.7:1. When I get my 70cm down,
then my 2m goes through the roof.
What am I doing wrong.
The antenna is mounted on the trunk lip, NMO mount, has a base coil and a
load half way up the whip.
Alex Clark

3446. Re: Tune dual band mobile antenna (2m/70c)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 06:00:12 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <907eqs$t7o$1@iac5.navix.net>
Source record: 175430
Cross-posted to: alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

No need to worry about a 1.7:1 on a mobile. SWR means nothing until it
causes the transmitter to cut back on your power.

SWR seems to be a holy grail, a properly resonated 1/4 antenna on 70cm will
have an impedance of 25 ohms causing a 2:1 SWR. Coax losses etc will cause
the transmitter to see something less.
What you are seeing is normal.

"Clark" <KF4LAT@hotmail.com> wrote in message
news:lrGV5.22798$Le.2592711@ratbert.tds.net...
> I have tuned antennas for quite a while, but have never tuned a dual band.
> I have my 2m down to 1.2:1 but my 70cm is 1.7:1. When I get my 70cm down,
> then my 2m goes through the roof.
> What am I doing wrong.
> The antenna is mounted on the trunk lip, NMO mount, has a base coil and a
> load half way up the whip.
> Alex Clark
>
>
>

3447. Re: sonia.perez@pyxis.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 06:07:43 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A27402F.33F894DC@oio.net>
Source record: 175431

wombat,
So what's your point, and how does it relate to antennas?
'Doc

3448. Re: Coax collinear help pse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-01 07:34:24 UTC
From: Charles Strong <strong@blazenet.net>
Message-ID: <t2el2fq8ike68f@corp.supernews.com>
Source record: 175432

Hi Adam,
Take a look at http://www.repeater-builder.com/rbtip/wa6svt.html
It is the only site I have found on the subject.
73 - Charlie, W3CQB

adamory <adamory@ntlworld.com> wrote in message
news:Z4wV5.1193$0z.13506@news2-win.server.ntlworld.com...
> Hi All,
>
> I need some help with a coaxial type collinear antenna. I used to
> have the diagrams to knock one of these up, but I've lost them. If anyone
> can help with designs for 70cm or 23cm then that would be great. I have
need
> for a vertical antenna with gain for 2320MHz and by scaling one of these
> antennas for the band maybe this will be a suitable antenna for vertical
> polarisation.
>
> Email direct please to AdamORY@ntlworld.com
>
> With thanks in advance for your time and effort.
>
> 73
>
> Adam
>
>
>

3449. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <vvnh2ts6meik1a3auncj1nanhiu7aqp3br@4ax.com>
Source record: 175269
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

rwclark@seanet.com (Richard Clark)
shared these priceless pearls of wisdom:

->A sheet of metal in the vicinity of an antenna is not a guarantor of
->fulfilling the function of a ground plane.

That doesn't happen to be the truth. "Vicinity" and "guarantor" are engineering variables in your statement.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3450. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7oh2t0cfn4jt67r4ul3j09kaqb7m0hi3t@4ax.com>
Source record: 175270
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

tjp <tjp@pobox.invalid>
shared these priceless pearls of wisdom:

From long experience...

1. Do *NOT* advertise with an external antenna who is balling up the TV picture on that 40 year old BW TV with a cardboard shield in the next door apartment. Keep a low profile or you'll have them pounding on your door every time the picture urps from ANY source. (Unless, of course, the TV is owned by that titsy blonde that you'd do ANYTHING to meet {;-))

2. The magmount on the fridge or the filing cabinet is by far the best solution for local operation. You aren't going to get DXCC from inside an apartment without a hell of a lot of gyrations that you really don't want to do. Besides that magmount can be used as a mobile antenna if you want to go on the road.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3451. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: aidehua@aol.com
Message-ID: <20001202131846.25401.00001577@ng-ba1.aol.com>
Source record: 175271

Try a Triangle/Loop antenna. They're directional, don't require as much height, have more gain, and are quieter than dipoles. Best of luck.

73,
Ed NI6S

3452. FM Auction Details Finally Posted...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: "MonsterFM.com" <engineering@MonsterFM.com>
Message-ID: <90bfro$i98$1@nnrp1.deja.com>
Source record: 175272

Several months ago, I had a couple of people asking for this information. Well, I know most of you have probably seen it and we're a little late in adding it but, if you're interested in one of the FM frequencies that'll soon be coming up for bid, the information pertaining to them is available at http://www.MonsterFM.com/engineering/rape.html . Unfortunately, I'm sure that you'll soon realize (by looking at the "Minimum Opening Bid" and "Upfront Payment" amounts) that this is just another way that our beloved government is making absolutely sure that each and every citizen can afford to reach into their pocket and compete with the "big-boys". (There's a bit of sarcasm in this post, somewhere. I'll leave it to you to find it.) There's no way *these* prices could possibly be geared toward keeping "big business" in control of the nations airwaves. But, go ahead and take a look. It's worth it to see the proof "in writing"...
In all honesty, there *are* a few FM allocations affordable to the average "John Doe"... As long as he'd be willing to relocate to the Nevada, Arizona, New Mexico or Utah "Emptiness" and serve an audience of 23.

Terry Keith Hammond
President/Technical Director

http://www.MonsterFM.com/

MonsterFM.com/Broadcast Services
Rt. 2, Box 21
Avinger, TX. 75630

(903) 562-1978 (Voice & Fax)
(903) 562-1998
(903) 562-1829
(903) 562-2060

Sent via Deja.com http://www.deja.com/
Before you buy.

3453. Re: Nathan Cohen Public Figure Public Fool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2949A5.D8E22B17@dvol.com>
Source record: 175273

Anon wrote:

> And your post reveals that you are at no higher level... and I shouldn't be
> feeding the TROLLS! ;-(
>
> Anon
>

>
Knock it the hell off willya? Everything in it's time, he's over, well past
time to move on.
>
w3rv

3454. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A296070.D8E53481@earthlink.net>
Source record: 175274

Tthe aperture of one person's antenna rarely overlaps the aperture of another.

Cortland

David wrote:

> This is a not-so-stupid question I have often idly pondered myself. My
> reasoning is as follows. An antenna placed in an electric field and
> terminated so that it extracts power from the field would be expected to
> make that field non-uniform, more so in the close vicinity of the antenna.
> If this happens over a volume much larger than that physically taken up by
> the antenna then power is being "stolen" from other areas in the field and
> the neighbour gets less signal.

3455. Re: What US/Canadian radio service is between 35 and 42 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A29647B.25C7DE1C@earthlink.net>
Source record: 175275

A search between 35.0 and 35.2 MHz in the Secondt Edition "POLICE CALL" CDROM shows 353 users in the USA. With solar condtions being as they are, you may expect ocassional reception in Germany.

Cortland

"R.Wilhelm" wrote:

> Hi all,
>
> a friend of minr lost a remote controlled model airplane a few weeks ago.
> The frequency he used for the remote control is close to 35 MHz. Because
> all electrical circuitry was working he asked me to find out, what might
> be the reason, IE if there was any interference possible. Apart from the 3
> rd harmonic of Radio Jordan I found some american accent radio traffic
> between 35 and 42 MHz. Since it sounded like american CB stations here in
> europe (you hear tens of stations at a time), I was not able to find out
> what it was. Could anyone tell me what kind of service allocated there ?
>
> Vy 73
>
> Ralf
>
> DL 6 OAP
>
> ==========
> Ralf Wilhelm
> Inst. f. Quantenoptik
> Universitï¿½t Hannover
>
> Welfengarten 1
>
> 30167 Hannover
>
> Tel: +49 511 762 2232
> ==========
> Hannover, Germany, where mankind's first motorized flight took place:
> Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
> (When will history notice this ?)
> ==========

3456. Maxwell Help Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <90bqkopud1@nnrp1.deja.com>
Source record: 175276
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

-----Original Message-----
From: sburns808@earthlink.net [SMTP:sburns808@earthlink.net]
Sent: Saturday, December 02, 2000 4:58 PM
To: e-layer@egroups.com
Subject: [E-Layer] I Really Need Help

A year ago I helped F. DeAquino Design the SysG experiment at his university in Brazil. It was successful Jan 2000 and posted on the Los Alamos bulletin board.

See:
http://jnaudin.free.fr./systemg/html/gravelf.htm

http://jnaudin.free.fr./systemg/index.html

http://www.elo.com.br/~deaquino/

I have been trying to design an ELF antenna to radiate sufficient power density for an application I am working with. Currently I am struggling with two issues. Maxwell's equation for antenna element wave propagation not in free space (i.e. conductivity > 0 and relativity permeability > 1) gives an imaginary value (square root of -1) for a surrounding medium of diamagnetic Bismuth with permeability of ~-2. How is this interpreted? In addition, an uninsulated copper element surrounded by high conductivity mu metel (78% Ni and remainder mostly Fe) says displacement current is negligible. With no displacement current can the element still radiate assuming signal attenuation due to conduction is excessive? Does the antenna need to be match? If so then at one milliHz (yes, 0.001HZ) a gyrator circuit can emulate a billion Farad capacitor to cancel reactance.

Best Regards-
Steve Burns

--
Tell your friends about E-Layer@egroups.com,
the University of Propagation.

Sent via Deja.com http://www.deja.com/
Before you buy.

3457. E-Layer mailgroup FAQ

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <90br94qck1@nnrp1.deja.com>
Source record: 175277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.mist

```
What is it?
-----------

E-Layer is an unmoderated mailing list, informally dubbed "The
University of Propagation", focused on the study and discussion of
HF Amateur Radio propagation and related geo-solar topics.

What sort of traffic appears there?
-----------------------------------

The discussion list does not deal much with day-to-day events or
forecasts, but rather on the underlying concepts. Thus you will
see little of things like next weeks forecast which are well
covered by other means, but rather you will see theoretical and
practical discussion of propagation matters.

For some examples of the traffic, go to our public message archives at

http://www.egroups.com/list/e-layer/

Start by browsing through the "Prop 101" messages from Bob Brown.

Administrivia
-------------

To subscribe, send an empty message to e-layer-subscribe@egroups.com.
Invite your friends.

To unsubscribe, send a message to e-layer-unsubscribe@egroups.com.

List Manager: e-layer-owner@egroups.com.

Sent via Deja.com http://www.deja.com/
Before you buy.
```

3458. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <e2ti2t4rehm9ddcs80ruf9v4i9d6j00f6t@4ax.com>
Source record: 175278

On Sat, 02 Dec 2000 03:51:06 -0800, Jim Weir <jim@rst-engr.com> wrote:

>You aren't going to get DXCC from inside an apartment
>without a hell of a lot of gyrations that you really don't want to do.
____

Maybe, maybe not. Back in '89-'90 I made DXCC from an apartment with
no external antennas at all. I had a couple of bent dipoles in the
attic, which were actually easier to install than stringing up dipoles
outdoors. Worked great, took about 18 months starting from scratch to
reach #100. Go for it!

73, Bill W7TI

3459. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a297e9d.11766692@news1.pei.sympatico.ca>
Source record: 175279
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

rwclark@seanet.com (Richard Clark) wrote:

>On Fri, 01 Dec 2000 07:28:21 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>wrote:
>
>>tjp wrote:
>>> What about a 20'' mag mount on a table?
>>
>>Make sure it's a metal table. A metal desk or metal filing
>>cabinet works. You need a ground plane for a mag mount.
>
>Hi Cecil,
>
>How many magmounts do you know of that make an electrical connection
>to that same metal desk or filing cabinet (or car roof top for that
>matter)?
>
>73's
>Richard Clark, KB7QHC

Richard you might profit from some technical reading there...FYI when you sit a magmount antenna on any metal surface it uses the metal as a 'counterpoise' or 'ground'. That's why they're so popular, people use them on top of their cars as a very portable and convenient antenna. Every ham should have one, they're very convenient as an emergency antenna, stick it almost anywhere. (almost, I said!).

You don't need a direct connection (DC) when dealing with RF you see, ever notice those 'through the glass' antennas?.

--
Gord Beaman
PEI Canada.

3460. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90c0ms$p7$1@slb6.atl.mindspring.net>
Source record: 175280

Thanks Roy:

Many folks do not seem to understand why things cost more in some parts of the world than in others.

The blame can almost always be placed at the feet of politicians.

The costly admistrivia which you so coherently described further up the thread comprise "non-tariff" barriers to trade.

Free trade, as perhaps best demonstrated by the efficient way the internal US domestic economy works, with very few inter-state barriers to trade, often illustrates how low prices can fall in an efficient trading system. Economic barriers, even if they are not called that, set up at political boundaries by politico's ultimately almost always do the citizens within the "protected" areas a dis-service.

Sorry, just some unsolicited commentary from a "free trader" who used to live behind tariff barriers and used to pay high prices.

-Peter K1PO

"Richard Clark" <rwclark@seanet.com> wrote in message news:3a910176.3193297549@news.seanet.com...
> On Fri, 01 Dec 2000 12:36:39 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >"R.Wilhelm" wrote:
> >> . . .
> >> Guess I would by the EZNEC version for windows if there were a distributor
> >> in here in germany and the price were not higher then 200 DM. I think is's
> >> advertised in QST for 89 Dollars so the second condition would probably
> >> within reach. I'm convinced that EZNEC is worth every Dollar it costs, but
> >> don't like the idea to send credit card numbers via the internet. Maybe
> >> you find a way to sell it germany, too.
> >
> >I've found a way to sell it in Germany -- several, in fact. I probably
> >sell more programs to Germany than any other country outside the U.S.
> >And visitors from Germany to my web site consistently outnumber those
> >from any other country except the U.S.
> >
> >Communication with the secure server used for web credit card orders is
> >encrypted by the site and your web browser, and I've never received a

> >report of theft or fraud due to purchase from my web site. U.S.
> >customers are limited by federal law to a maximum liability of $50 if
> >their credit card is stolen. (I have no idea what protection is offered
> >in other countries.) Nevertheless, a surprising number of people even in
> >the U.S. are willing to give their cards to a sales clerk or gas pump
> >jockey but aren't willing to purchase via a secure server on the
> >Internet. I don't understand this, but it's o.k. with me.
> >
> >Anyone who doesn't want to purchase via the internet can order by phone,
> >fax, or mail. All necessary information is at
> >http://eznec.com/ordering.htm. International CD-ROM orders are sent by
> >air mail. Typical delivery time is one week to most parts of the world.
> >A very sizable fraction of my sales are to other countries.
> >
> >Credit card orders are billed in U.S. dollars (required by my bank),
> >which customers see on their bills in their local currency. Most credit
> >card companies give a better exchange rate for these transactions than
> >you'll get any other way. But if you prefer, you can purchase and send a
> >U.S. dollar check. This is invariably more expensive than using a credit
> >card. Occasionally I receive U.S. currency from a foreign country, sent
> >by registered mail. I don't recommend this, but haven't gotten any
> >reports of money being lost this way. I don't accept direct wire funds
> >transfers for the standard version, because at least two banks are
> >involved, each charging a substantial fee.
> >
> >If I had a distributor in Germany, he would have to be paid for his time
> >and trouble, and would have to collect from you the sizable taxes you
> >have there. Disks would either have to be sent there in bulk, with duty
> >being paid, or manufactured there. Because of the smaller quantities,
> >manufacturing cost would be higher if produced there than here. My share
> >of the DM collected by the distributor would have to be converted to
> >dollars with the usual currency conversion losses (considerably greater
> >than losses from a credit card sale). The result would be that the
> >program would cost a lot more. And I would have a lot of extra work and
> >get less from each sale. Other than saving the typical one week transit
> >time, what would be the advantage to the customer to have a German
> >distributor?
> >
> >We are more and more getting to be an international community, and can
> >all benefit if we don't consider international borders to be an obstacle
> >to commerce, but instead figure out ways to make them transparent.
> >
> >This seems like a pretty commercial posting, but nearly all the
> >information applies to any international web sales and purchasing, which
> >are becoming increasingly common. I hope readers find it informative.
> >
> >Roy Lewallen, W7EL
>
>
> Hi Roy,

>
> I found your posting VERY informative.
>
> Readers should be able to receive at least one credit for
> International Economics 101 from your very good presentation of the
> realities of the global marketplace!
>
> 73's
> Richard Clark, KB7QHC

3461. Re: Nathan Cohen Public Figure Public Fool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001202183829.15095.00000470@ng-mj1.aol.com>
Source record: 175281

>Knock it the hell off willya? Everything in it's time, he's over, well past
>time to move on.
>>
>w3rv
>

Excuse me; I am very much alive;
just finished a fantastic JA run with the 10M FQY on 28487.0 KHz;getting rady
for 10M contest; and so on.

Look: just be quiet--or is that too easy??

NC

3462. Re: NEED HELP TO ID THIS SIGNAL !!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <90c3gs$81$1@nnrp1.phx.gblx.net>
Source record: 175282
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

> >On Wed, 29 Nov 2000 19:54:45 -0800, Lloyd posted
> >
> >>begin 666 Unknown.wav
> >>M4DE&1N3+!0!7059%9FUT(! ````!``$`1*P``$2L```!``@`9&%T8<#+!0"4
> >

> Alan Hackett <hacketta@iinet.net.au> wrote
>
> Sounds like a aircraft omni-directional beacon "YVR".
>
> Do you have an airport closeby??
>
> By the way its probably transmitting somewhere between 108 & 118 MHz.

It's probably TACAN, the military version of VHF Omni Range. In
the states the FAA co-locates both VOR and TACAN stations and gives
them a common ID. Also, the 1120 MHz frequency he reported jibes
perfectly with the allocation for TACAN.

And I agree with Jynx, we really didn't need to have a half
megabyte of .WAV file attached and so widely broadcast.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

3463. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A29911A.3C7D@wt.net>
Source record: 175283

jbhall1282@my-deja.com wrote:

>
> I am trying to put a better signal to the West coast from Iowa. So far
> a full sloper (1/2wl) is showing a little improvement over the inv-vee
> in that direction, but I keep thinking there has to be a better answer.
> 73
> JB

Hummm, myself, I would probably revert to my elevated GP. That was
always good for 2 s units to the west coast from Houston over my dipole.
Of course, you may not want to mess with on eof those. You might
consider phased dipoles. " parallel to each other" , or maybe even an
extended double zepp. The EDZ good for 2-3 db over a dipole broadside.
The phased array, maybe 4-5 db. I tried the phased dipoles once on 40m.
They worked quite well, and had a decent F/B ratio also. MK

--
http://web.wt.net/~nm5k

3464. Re: Maxwell Help Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <583j2tcio0q5phcbanjr48ohi9593kc7bl@4ax.com>
Source record: 175284

Original message:

>I have been trying to design an ELF antenna to radiate sufficient
>power density for an application I am working with. Currently I am
>struggling with two issues. Maxwell's equation for antenna element
>wave propagation not in free space (i.e. conductivity > 0 and
>relativity permeability > 1) gives an imaginary value (square root of
>-1) for a surrounding medium of diamagnetic Bismuth with permeability
>of ~-2. How is this interpreted? In addition, an uninsulated copper
>element surrounded by high conductivity mu metel (78% Ni and remainder
>mostly Fe) says displacement current is negligible. With no
>displacement current can the element still radiate assuming signal
>attenuation due to conduction is excessive? Does the antenna need to
>be match? If so then at one milliHz (yes, 0.001HZ) a gyrator circuit
>can emulate a billion Farad capacitor to cancel reactance.
>
>Best Regards-
>Steve Burns

Check with Fractenna. It's right up his alley.

73, Bill W7TI

3465. Re: More tuner questions (with ladder line)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3a29a52f_4@news1.prserv.net>
Source record: 175285

I want to use the antenna on several bands and in both "modes" (top of loop open or closed). I can see adjusting the feedline length to resolve a problem on one band, but is this practical for 30, 20, 17, 15, 12, and 10 meters.

Bill Ogden
W2WO

'Doc <w5lz@oio.net> wrote in message news:3A25F4A9.523C4E14@oio.net...
>
>
> Bill,
> I don't see why a 'current' balun wouldn't work. As Cecil
> said, changing feed line length can change things so that the
> tuner is 'happier' with it. I would suggest that the coax
> going out to the balun be as short as possible. The usual
> recomendation is no more than 12 feet. A couple of feet one
> way or the other shouldn't make a ~lot~ of difference, but
> keep it short...
> 'Dco

3466. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <Lq0pOqB50RKNNbtlx==l2Y89nB59@4ax.com>
Source record: 175286
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Sat, 02 Dec 2000 23:00:38 GMT, gbeaman@pei.sympatico.ca (Gord
Beaman) wrote:

snip
>
>You don't need a direct connection (DC) when dealing with RF you see, ever
>notice those 'through the glass' antennas?.

Hi Gord,

Yet those who describe replacing a thru-glass or mag mount with a
solid metallic connection invariably attends reports of better
performance. (It also matches my experience.)

The following is a general response to those various posters that
responded to my queries.

And still no one can respond to the discussion of currents and return,
or where this capacitance falls in the circuit. A capacitor with one
lead open does not exhibit very much capacitance except through a
third body (which also remains un discussed). At best, the sheet
metal presents an intermediate plate, and by common experience this
appears to be a poor solution ranking down there with the radiating
dummy load that "always" matches.

Anyone know the dielectric constant of this magnet? Or, more
importantly, its dissipation factor at resonance? Given that nearly
every mag mount that I have observed appears to have the common
ferrous magnetic material bound in a vinyl disk, it would do well to
remember not all ferrites are benign substances transparent to the
passage of RF.

73's
Richard Clark, KB7QHC

3467. Re: F/S books about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90cd74$3uu$1@nntp9.atl.mindspring.net>
Source record: 175287

Thread:

Re: Word email attachments...

MS Word email attachments should be banned from the universe!

In the few years since Word has supported macros and the Internet has become pervasive, Word email attachments have wrecked almost as much havoc upon humanity as influenza!

At least run the dammned attachments through Adobe and make them .pdf so that WE KNOW you haven't sent us a virus. Or cut and paste it directly into the body of the email.

Just my two cents...

-Peter K1PO [Word email attachment policeman!]

"Bob Miller" <bamiller@texas.net> wrote in message
news:GLkhOoUI+StVv5AjbT8sKSHbJm3N@4ax.com...
> "w0tok" <w0tok@email.msn.com> wrote:
>
> >I have over 30 antenna related books for sale. For a list
> >sent as an MS Word attachment just ask, for the list mailed
> >to your address, give me your name and address. Paul Washa,
> >W0TOK Mound, MN
> >
>
> Why does it have to come as a MS Word attachment? Why can't you put
> the list in an e-mail message, or post the list here on the newsgroup?
>
> (MS Word attachments are frequently used by hackers to destroy
> computer systems.)
>
> Bob
> k5qwg
>

3468. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A29D29B.3B3618D9@IEEE.org>
Source record: 175288
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Gord Beaman wrote:
> Open?...it's not open Richard, the braid is connected THROUGH the capacitance to
> the counterpoise. Very little difference than connecting it directly. imo.

It certainly depends on frequency. Big problem on 160m. No problem at
all on 70cm.
--
http://www.mindspring.com/~w6rca

3469. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <etlj2t45ahrtjrptav7noib1jnosgduv2q@4ax.com>
Source record: 175289

> ~300 pf is for sure a dead short at VHF.

Not quite a dead short. About 3.6 ohms at 144 MHz.

73, Bill W7TI

3470. Re: NEED HELP TO ID THIS SIGNAL !!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <3A29D1D7.442@silverstar.com>
Source record: 175290
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

YVR is the city/airport designator for Vancouver.

3471. Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: "hatzakis@u.washington.edu" <hatzakis@u.washington.edu>
Message-ID: <3A29F61C.4BD610E0@u.washington.edu>
Source record: 175291

I have a problem with RFI with a new dipole and looking for some suggestions.

20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet long and radio (IC-735) on a second floor office with a large solid ground wire directly to two 5 foot ground rods in a moist seattle soil.

My RF audio is getting into everything electronic between my house and the neighbors. I have a band pass filter, but this seems more like my signal is getting rectified in the audio section of my stereo receivers and my neighbors.

Any ideas on how to get this under control?

Thanks, Michael K3MH

(echo to my e-mail, if possible, m_hatz@yahoo.com)

3472. DAN'S SMALL PARTS 15% OFF SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: jparker@fix.net
Message-ID: <3a28abab.30497637@news.fix.net>
Source record: 175359

DAN HAS POSTED LOTS OF NEW ITEMS AND

A 15% OFF END OF YEAR SALE!

CHECK IT OUT AT: http://www.fix.net/dans.html

Enjoy,,,Jerry...k

3473. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A28B80F.1F35CC0F@oio.net>
Source record: 175360

JB,
I hope you don't give up on the idea before trying it.
At an average 35 feet, you will get some directivity from
a dipole. I certainly think it would be worth trying.
'Doc

3474. Re: Compression trimmer capacitors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A28B8B7.B0DBA474@oio.net>
Source record: 175361

Bill,
I haven't seen one of those in years, and not in that size
when they were common. You might try some of the 'used' parts
houses, you might find one in some old equipment.
'Doc

3475. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A28D16B.55183D5@eznec.com>
Source record: 175362

Anonymous wrote:
>
> Dear Roy,
>
> I don't like Spam and I am only trying to avoid it. My posting anonymously - or,
> semi in this case - is not intended to be a covert act! You have always posted
> in a courteous and professional manner and I respectfully propose that your
> disparaging innuendo regarding my intent fell below that standard.

Chuck,
I don't know of any spam which results from signing your name, just your email address. You don't have to conceal your name to conceal your email address. So why hide your identity?

> There is a shoot-out being conducted by RAC (Radio Amateur Canada) using a
> popular tribander and a tribander with critically coupled elements from the
> antenna vendor of whom you speak. Each tribander is on a separate 55' tower - I
> don't recall the exact separation between towers. The popular tribander has a
> 20ft boom the critically coupled tribander has a 12 ft boom. The popular
> tribander is being outperformed in every case, and on all bands, by a minimum of
> 2 to 3 S-units by the critically coupled tribander that you say has "unsupported
> claims of impossibly good performance". Up to this point, the evidence in
> support of critical coupling robustness is quite compelling, and the results of
> these tests will be published.

I look forward to seeing the published results. I assume we'll also see a comparison between the tribander and a dipole or other antenna with known gain, and the number of dB these "S-units" represent. Otherwise, the results are meaningless for any objective purpose.

> If you recall, the un-named vendor of whom you speak once offered to provide an
> antenna to anyone who would conduct tests with certifiable results. The offer
> went unheeded.

This isn't surprising. Why should someone pay for tests which the vendor should do in the first place?

> Alternatively, a "professional" test range is extremely
> expensive. I suppose you believe that everyone who starts a company with their
> own money has unlimited financial resources - which was not so in this case.
> They preferred to invest in future growth rather than squander resources,
> settling a pissing match. Your assertion of hesitancy is without basis.

Yes, a professional range is expensive. But all the vendor had to do to get a free test, with me paying the expenses, was supply an antenna which met the claims he was making. If he had, it wouldn't have cost him

a dime. The only reason I could see that he didn't take me up on the offer is that the antenna didn't meet the claimed performance. Can you think of any other reason?

You wouldn't happen to be that vendor, would you? Seems to me his name was Chuck, also.

> Perhaps the results this shoot-out, conducted by folks with uncompromised
> credibility and no self-interest in the results one way or the other, will
> finally put this issue to rest. Although test range performance analysis is
> always valuable, it is my position that *real world* performance is equally as
> valuable... perhaps even more so... after all, how many Hams operate on test
> ranges?

> BTW, after 6 years, one would suppose that at least some of the users of these
> antennas would have noticed a discrepancy in the vendors claims, and this has
> not happened!

It's interesting that some objective effort is being made to verify claims only after six years of making them. But I'm glad it's finally being done. The results will be meaningless, though, unless the tribander or whatever the reference is, is carefully measured against an antenna with known gain. Otherwise, all you know is how the antenna stacks up to an antenna of unknown quality.

> By your tenacious stance against any and all possibilities that this "impossibly
> good performance" - as you say - cannot be so, are you not implying that the
> folks who use and love the performance of these antennas are either too ignorant
> to notice otherwise or are "living in an illusion" as your colleague Brian B.
> once suggested? :-)

I make a distinction between satisfaction with the product and the claims made for it. For example, a car dealer might claim that his Corvettes produce 1,000 horsepower. If the purchasers never get into a real race with a Corvette of known horsepower, they'll likely be completely satisfied. (Or if they do race, they might conclude that the other 'vette is a kHP machine too.) The situation with amateurs and antennas is much the same. Vendors feel they need to impart their antennas with magical properties, newly discovered physical laws, and impossible gain to sell them. Amateurs find the front/back ratio good, the gain modest, the SWR reasonable, and the construction good, and are satisfied. They've gotten a fair value for their money. But that doesn't make the claims true.

Very, very few amateurs are able to tell the difference between 4.5 and 6 dB gain with respect to a dipole, which is about what the discrepancy between believable and claimed performance is. Shucks, almost no amateurs even have the slightest idea of how much the S-units on their meters represent, so they can't tell 4 dB from 12. All can notice front-back ratio, though, which is quite good on most of these two element beams. And a gain of 4.5 dB is noticeably better than a dipole, which they also notice. I'm not being critical of this -- after all,

it's just a hobby. But that's how it is.

> Enough said for now. Perhaps after the shootout results are published I will
> feel compelled towards further comment!

I look forward to it. And to knowing to whom I'm talking.

> Best 73,
>
> Chuck
>
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:3A284218.E824F8F3@eznec.com...
> > There's nothing magic about "critical" coupling, and no assumptions made
> > by NEC which make it unable to model antennas with this claimed mystical
> > feature. Claims that NEC is unable to model them is promoted pretty much
> > solely by antenna vendors who've found that NEC's results (which
> > correspond well with known theory) contradict their unsupported claims
> > of impossibly good performance.(*) I suspect Anon is one of these.
> > Unlike Anon, I'm willing to attach my name to what I say.
> >
> > Roy Lewallen, W7EL
> >
> > (*) Some time back I publicly offered one of these vendors, on this
> > newsgroup, to pay the cost of a professional antenna range test if its
> > results showed the performance he was claiming. He didn't accept.
> > Apparently professional antenna ranges also make assumptions that make
> > them incapable of demonstrating the true, miraculous performance of
> > these antennas.
> >
> > Anon wrote:
> > >
> > > Take some good advice and don't bother with modeling that antenna J.C., as
> MOM
> > > (NEC) modeling assumptions do not include conditions where elements have
> become
> > > critically coupled.
> > >
> > > Anon
> > >
> > > jcm <jcmenard@wanadoo.fr> wrote in message news:900vdv$fp0$1@wanadoo.fr...
> > > > I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's
> > > > (G4ZU) Jungle Job design.
> > > > It works reasonably well but I would try to optimize it and model it with
> > > > EZNEC but I don't know what diameter to enter for the segments of the
> > > > radiator which is made of 1.5mm copper wire inside tapered
> > > > phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the
> tip.
> > > > Has somebody some experience with this problem ?
> > > > Thank you in advance.
> > > >

> > > > J.C MENARD - F8ND
> > > >
> > > >

3476. Re: GAP Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: twilson@ag-eco.tamu.edu
Message-ID: <90ar2n$13r$1@news.tamu.edu>
Source record: 175363

In article <EiVV5.39368$iy3.8973438@news1.rdc1.tn.home.com>, "Emil Vukasovic"
<kf4zip@home.com> wrote:
>I'm thinking of buying and installing a GAP Titan DX antenna.
>
>Can someone tell me aboout their success (or troubles) with the GAP Titan
>DX?

I've had one for several years, it's been my only HF since I went on the air in 96 after buy the house. I've found it to be a mixed bag. It seems to work great on 10-20 meters, and 40 doesn't seem to bad either. I've yet to be able to tune an acceptable swr on 80 meters though. It's supposed to come pretune for 3900 mhz on the 80 meter band, vary narrow bandwith. It's controlled by the capacitor cap at the top. I probably need to check that whenever I get around to taking it down for a checkup. I've found it to be a good performer otherwise for anyone wanting a limited space vertical (and mine is only mounted on a tv pole strapped to the side of the garage, with the base only starting about 3 feet above the garage roof, so it isn't guyed). You might want to check out the review on eham.net.

Troyce
KC5CBI

3477. Re: Compression trimmer capacitors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001202084017.07653.00002868@ng-fy1.aol.com>
Source record: 175364

Check
http://www.rfparts.com
THey have a$25 minimum
If you find what you need & don't wanna go for the minimum, just give me the part number from their site... I might have some or a fixed value w/ a trimmer might be needed...
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

3478. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A28FE6B.D237B3BF@IEEE.org>
Source record: 175365

Anonymous wrote:
> Alternatively, a "professional" test range is extremely expensive.

But Roy offered to pay for the test range so one cannot use that
excuse.

> Roy Lewallen <w7el@eznec.com> wrote in message
> > (*) Some time back I publicly offered one of these vendors, on this
> > newsgroup, to pay the cost of a professional antenna range test if its
> > results showed the performance he was claiming. He didn't accept.
--
http://www.mindspring.com/~w6rca

3479. Re: Tune dual band mobile antenna (2m/70c)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Brian Esche <none@bigcorp.com>
Message-ID: <hL9W5.1162$NN6.4873@newsfeed.slurp.net>
Source record: 175366
Cross-posted to: alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

With the SWR listed your antenna is working well. The difference between
1:1 and 1.7:1 is imperceptible to both your transmitter and the receiving
station. For some reason there is a prevailing mentality that SWR must be
1:1 for proper operation. The reality is that SWR just isn't that important
when compared to other performance parameters such as resonance and
efficiency.

"Clark" <KF4LAT@hotmail.com> wrote in message
news:lrGV5.22798$Le.2592711@ratbert.tds.net...
> I have tuned antennas for quite a while, but have never tuned a dual band.
> I have my 2m down to 1.2:1 but my 70cm is 1.7:1. When I get my 70cm down,
> then my 2m goes through the roof.
> What am I doing wrong.
> The antenna is mounted on the trunk lip, NMO mount, has a base coil and a
> load half way up the whip.
> Alex Clark
>
>
>

3480. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: rgawtry@timewave.com
Message-ID: <90bc8fqvl1@newsfeed.minn.net>
Source record: 175367

In article <905mp6$4t1$1@yarrow.open.ac.uk>, "Fraser Robertson" <f.g.robertson@open.ac.uk> wrote:
>Hi, I'm plagued by s9 local noise on topband. An active RX loop enables me
>to null it by 3 or 4 s points. I was wondering about using a noise pick up
>ant and making a noise cancelling unit - phase and amplitude.
>
>Has anyone experience of such things, or can point me in the direction of
>any info.
>
>Thanks / 73 Fraser G4BJM
>
>f.g.robertson@open.ac.uk
>
>

Fraser,
The area of noise cancelling has been around for many years - back into the 1920s or 1930s. It started with passive LC networks for phase and amplitude adjusment and has evolved to the use of digital signal processing techniques for the most exotic systems. The techniques have several different names but use the same basic technical concepts. The current units available for amateur use are the Timewave ANC-4, the MFJ-1026 and a unit made by S.E.M. on the Isle of Man. A good summary with some QST and CQ magazine references and a homebrew design can be found at: http://207.108.137.61/n5ar/n5ar.htm

Info on the ANC-4 is found at: http://www.timewave.com

Randall Gawtry, K CBH
Timewave Technology Inc.

3481. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <mqnh2tkr0hslqi20vtra82hv5tteo8h1jd@4ax.com>
Source record: 175368
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

rwclark@seanet.com (Richard Clark)
shared these priceless pearls of wisdom:

->How many magmounts do you know of that make an electrical connection
->to that same metal desk or filing cabinet (or car roof top for that
->matter)?
->
->73's
->Richard Clark, KB7QHC

All of them. The metal of the magmount is capacitively coupled through the very thin sheet of plastic intended to keep the magnet from scratching the automobile paint. I haven't measured it lately, but as I recall, you get several hundred pf of capacitance between the car body and the magnet, which at two meters is damned near a dead short to RF.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3482. TA-33 MOSLEY BEAM --40--20--15--10 METERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 00:32:54 UTC
From: Matt <ke5ol@flash.net>
Message-ID: <WqXV5.24796$6W1.1331776@news.flash.net>
Source record: 175348

FS TA-33 MOSLEY THREE ELEMENT BEAM WITH 40 METER ADD ON..40-20-15-10 METERS ALL TRAPS GOOD, WITH MANULS, PICK UP ONLY. NO SHIPING $125.OO OR TRADE FOR LATE MODLE KENWOOD 2 METER RIG IN GUD WORKING CONDITION.

3483. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 01:05:42 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <v0ooOtzUwUNBPLhAnyJC6GUPc9UQ@4ax.com>
Source record: 175349

Brian Kelly <kelly@dvol.com> wrote:

>
>
>tjp wrote:
>
>ith just an HT with a rubber duckie. Right off a magmount antenna
>depends on the sheet metal of a vehicle to serve as a gound plane to
>opererate properly so forget the mag mount antenna.

Well, not quite. I've used a mag mount Larson dual bander stuck to a metal serving platter, thrown on the floor of the house, and hit every 2 meter & 440 repeater in Houston with 25-45 watts. Full quieting on most.

Bob
k5qwg

3484. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 01:58:46 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <3A285756.6E170B2D@powerup.com.au>
Source record: 175350

You're doing pretty well already at 3 or 4 S points. Assuming all the
noise originates from one spot (unlikely) you may do better with
a dedicated device. I have the ANC-4 and it is good within
the limitations of such things,

There have been several described in the 'Amateur Radio' mag.
published by the WIA here in Australia. The most recent was a
decription of how the writer used an old ant. tuner with a remote
wire and fed the signals into the rig with a 'T' piece.

Obviously one wouldn't build a tranmitting atu just for that
but a simple device in a little box would do the same thing.

You have almost got the same setup already! :-)

Cheers.

Fraser Robertson wrote:
>
> Hi, I'm plagued by s9 local noise on topband. An active RX loop enables me
> to null it by 3 or 4 s points. I was wondering about using a noise pick up
> ant and making a noise cancelling unit - phase and amplitude.
>
> Has anyone experience of such things, or can point me in the direction of
> any info.
>
> Thanks / 73 Fraser G4BJM
>
> f.g.robertson@open.ac.uk

--
****
* Murray Kelly vk4aok mailto://mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

3485. Re: NEED HELP TO ID THIS SIGNAL !!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 02:37:46 UTC
From: Alan Hackett <hacketta@iinet.net.au>
Message-ID: <p0og2tcrddpm854svqmpn4v44asd3p9d3c@4ax.com>
Source record: 175351
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

On 30 Nov 2000 21:39:00 GMT, X@Y.Z.net (Jynx) wrote:

>On Wed, 29 Nov 2000 19:54:45 -0800, Lloyd posted
>
>>begin 666 Unknown.wav
>>M4DE&1N3+!0!7059%9FUT(! ````!``$`1*P``$2L```!``@`9&%T8<#+!0"4
>
Sounds like a aircraft omni-directional beacon "YVR".

Do you have an airport closeby??

By the way its probably transmitting somewhere between 108 & 118 MHz.

++
Jenal Communications
Manufacturers and Suppliers of HF Selcall
P O Box 1108, Morley, WA, 6943
Tel: +61 8 9370 5533 Fax +61 8 9370 5106
Web Site: http://jenal.com
e-mail: alan@jenal.com
++

3486. High School Project/Packet Radio

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 03:40:33 UTC
From: Greg <gfischer4@mediaone.net>
Message-ID: <3A286F6C.EA9FC8F@mediaone.net>
Source record: 175352

Hello everyone...

This'll be a tough one - get ready...

I'm a high school geek from Michigan who knows absolutely nothing about am. radio, other than the fact that it exists (I went to Dayton Hamvention in 97 or 98, but that's irrelevant... :)). Our physics and engineering departments are pairing up to build 8 foot tall rockets and launch them in competitions (with FAA clearance). Part (most) of the competition involves designing a payload and doing something somewhat useful with it. I came across TINI (http://www.ibutton.com/TINI) chips and, later that week, amidst a linux (http://www.linux.org) kernel recompilation, I noticed Am. Radio support, which I had always completely disregarded. I thought about the possibility of combining the two and broadcasting temperature information (or barometric pressure or GPS data, etc...) live, while the rocket is in flight, to a computer on the ground and displaying it real-time.

The one major limitation is the amount of size in the payload section of the rocket. I BELIEVE (I'd have to check to make sure) that the rocket is six inches in diameter the payload section is about a foot long. I did a little research (emphasis on little) and determined that in order to broadcast data, I would need a Terminal Node Connector (?), which appeared to be a rather bulky piece of equipment. The other issue is licensing. It's my understanding that not just any fool can pick up an am. radio and start talking. What kind of a license would I need to broadcast data? How much would the equipment cost? I understand that this is probably going to be a substantial investment of time and money, but if we could get it to work, it would be REALLY cool.

A google search (http://www.google.com) yielded this page (http://www.arrl.org/news/stories/2000/10/10/1/?nc=1) which suggests that a Japanese packet radio group has had some success in implementing packet radio on TINI chips, so that issue may be solved.

This may also be overcomplicating a simple task. If anyone knows of a better way to get that data to the ground, I'd be grateful for all suggestions (PPP via cell phone?).

Thanks for taking the time to read this, any assistance is greatly appreciated.

-Greg

3487. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 05:33:30 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A2889AA.2C96@rpi.edu>
Source record: 175353

Mark Keith wrote:
>
> Troyce wrote:
>
> >
> > I'm assuming I have a bad one with an internal problem somewhere. I opened it
> > up, and I'm not very impressed with the quality inside of it. I did some
> > checking, but everything seems ok, just find it doesn't seem to want to tune
> > well at all. This is my second MFJ tuner, the first was a Versatronic II. It
> > also failed to work adequately, but I suspect in that case it wasn't the
> > tuner's fault, since I had a very compromised dipole arrangement in the attic
> > of a duplex. But with the 989C, I can't get it to tune to an adequate swr on
> > any band, including ones my internal tuner on the TS-940 has no problems with.
> > That's the reason I think the MFJ is trash.
> >
> > Troyce
> Not really normal. I've got one of those and mine tunes just about
> anything. Actually, I don't think I've ever not been able to tune
> something with it. The only gripe I have with it is the somewhat flimsy
> roller coil. I've had to adjust it to keep it rolling tight. MK
> --
> http://web.wt.net/~nm5k

I also have a 989(C) and have noticed tuning problems, particularly when
trying to extend the range on my Butternut HF6VX vertical. I suppose
that there is a limit to the impedances that can be matched effectively
with in this situation. For example, the normal 2:1 SWR tuning range of
my Butternut is around 50 khz, and I can spread it out to around 100 khz
with the tuner, but no further. I wanted to be able to cover the SSB DX
window (3790-3800 and the "net" end of the band ~3950) at the same time,
but it was never possible.

Curt Breneman
RPI Chemistry
KC2EBP

3488. WTB: TRANSCO SP6T Coaxial Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 05:54:21 UTC
From: aidehua@aol.com
Message-ID: <20001202005421.04199.00000172@ng-mh1.aol.com>
Source record: 175354

Looking for some of these. Thanks.

3489. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 05:56:50 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A288F19.7F3C413A@att.net>
Source record: 175355

Curt, try various lengths of feedline with the HF6V. I would bet that
you can find one length that will allow you to tune the DX window and
another that will allow you to tune around 3950.

Remember that when not terminated in Zo, a transmission line becomes an
impedance transformer that is doing part of the overall job of matching
your 50-ohm transmitter to the actual antenna impedance. Adjusting the
length of the line is one of the easiest ways to control that impedance
transformation and make it work for you instead of against you.

My experience with my 989C and 4 different antenna systems here has been
very positive. I can tune any of the antennas over entire bands with no
problem. The antennas are

88 ft EDZ for 20 meters - ladderline fed

full-wave horizontal low 40-meter loop - ladderline fed

Butternut HF9V ground-mounted over 60 radials - coax fed

4 half-wave dipoles in parallel on 80, 40, 30 and 20 in the attic - coax
fed

All of these antennas either cover and can be made to cover all bands
80-10 with no problem using the 989C. Maximum power here is 100 watts
and most operation is at 5 watts on CW or 30-50 watts PSK31.

The ladderline-fed antennas are connected through 12 ft lengths of
RG-213 and W2DU current baluns from the 989C to the ladderline.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

"Prof. Curt M. Breneman" wrote:
>
> Mark Keith wrote:
> >
> > Troyce wrote:
> >
> > >
> > > I'm assuming I have a bad one with an internal problem somewhere. I opened it
> > > up, and I'm not very impressed with the quality inside of it. I did some
> > > checking, but everything seems ok, just find it doesn't seem to want to tune
> > > well at all. This is my second MFJ tuner, the first was a Versatronic II. It
> > > also failed to work adequately, but I suspect in that case it wasn't the

> > > tuner's fault, since I had a very compromised dipole arrangement in the attic
> > > of a duplex. But with the 989C, I can't get it to tune to an adequate swr on
> > > any band, including ones my internal tuner on the TS-940 has no problems with.
> > > That's the reason I think the MFJ is trash.
> > >
> > > Troyce
> > Not really normal. I've got one of those and mine tunes just about
> > anything. Actually, I don't think I've ever not been able to tune
> > something with it. The only gripe I have with it is the somewhat flimsy
> > roller coil. I've had to adjust it to keep it rolling tight. MK
> > --
> > http://web.wt.net/~nm5k
>
> I also have a 989(C) and have noticed tuning problems, particularly when
> trying to extend the range on my Butternut HF6VX vertical. I suppose
> that there is a limit to the impedances that can be matched effectively
> with in this situation. For example, the normal 2:1 SWR tuning range of
> my Butternut is around 50 khz, and I can spread it out to around 100 khz
> with the tuner, but no further. I wanted to be able to cover the SSB DX
> window (3790-3800 and the "net" end of the band ~3950) at the same time,
> but it was never possible.
>
> Curt Breneman
> RPI Chemistry
> KC2EBP

3490. Re: Effect of Multiple Antennas in the Same Space?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 05:58:22 UTC
From: jbhall1282@my-deja.com
Message-ID: <90a31u$k41$1@nnrp1.deja.com>
Source record: 175356

> curious...How high is your current 40 antenna? If you are not high in
> the air, it's likely your pattern quite omni directional. On most
> dipoles in the real world at low heights, you may have more
performance
> broadside than you think.

Mark, you are probably right about that. Doc suggested that as well. It may be a waste of time and effort to run another dipole at a right angle to the East-West wire. My current 40M antenna is up about 45 feet in the center and about 30 feet at the ends. Modeling it shows what you have suggested, it also radiates most of the energy at a very high angle.

I am trying to put a better signal to the West coast from Iowa. So far a full sloper (1/2wl) is showing a little improvement over the inv-vee in that direction, but I keep thinking there has to be a better answer.
73
JB

Sent via Deja.com http://www.deja.com/
Before you buy.

3491. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 07:30:13 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <Bx1W5.4005$jg6.552555@news.uswest.net>
Source record: 175357

Dear Roy,

I don't like Spam and I am only trying to avoid it. My posting anonymously - or, semi in this case - is not intended to be a covert act! You have always posted in a courteous and professional manner and I respectfully propose that your disparaging innuendo regarding my intent fell below that standard.

There is a shoot-out being conducted by RAC (Radio Amateur Canada) using a popular tribander and a tribander with critically coupled elements from the antenna vendor of whom you speak. Each tribander is on a separate 55' tower - I don't recall the exact separation between towers. The popular tribander has a 20ft boom the critically coupled tribander has a 12 ft boom. The popular tribander is being outperformed in every case, and on all bands, by a minimum of 2 to 3 S-units by the critically coupled tribander that you say has "unsupported claims of impossibly good performance". Up to this point, the evidence in support of critical coupling robustness is quite compelling, and the results of these tests will be published.

If you recall, the un-named vendor of whom you speak once offered to provide an antenna to anyone who would conduct tests with certifiable results. The offer went unheeded. Alternatively, a "professional" test range is extremely expensive. I suppose you believe that everyone who starts a company with their own money has unlimited financial resources - which was not so in this case. They preferred to invest in future growth rather than squander resources, settling a pissing match. Your assertion of hesitancy is without basis.

Perhaps the results this shoot-out, conducted by folks with uncompromised credibility and no self-interest in the results one way or the other, will finally put this issue to rest. Although test range performance analysis is always valuable, it is my position that *real world* performance is equally as valuable... perhaps even more so... after all, how many Hams operate on test ranges?

BTW, after 6 years, one would suppose that at least some of the users of these antennas would have noticed a discrepancy in the vendors claims, and this has not happened!

By your tenacious stance against any and all possibilities that this "impossibly good performance" - as you say - cannot be so, are you not implying that the folks who use and love the performance of these antennas are either too ignorant to notice otherwise or are "living in an illusion" as your colleague Brian B. once suggested? :-)

Enough said for now. Perhaps after the shootout results are published I will feel compelled towards further comment!

Best 73,

Chuck

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A284218.E824F8F3@eznec.com...
> There's nothing magic about "critical" coupling, and no assumptions made
> by NEC which make it unable to model antennas with this claimed mystical
> feature. Claims that NEC is unable to model them is promoted pretty much
> solely by antenna vendors who've found that NEC's results (which
> correspond well with known theory) contradict their unsupported claims
> of impossibly good performance.(*) I suspect Anon is one of these.
> Unlike Anon, I'm willing to attach my name to what I say.
>
> Roy Lewallen, W7EL
>
> (*) Some time back I publicly offered one of these vendors, on this
> newsgroup, to pay the cost of a professional antenna range test if its
> results showed the performance he was claiming. He didn't accept.
> Apparently professional antenna ranges also make assumptions that make
> them incapable of demonstrating the true, miraculous performance of
> these antennas.
>
> Anon wrote:
> >
> > Take some good advice and don't bother with modeling that antenna J.C., as
MOM
> > (NEC) modeling assumptions do not include conditions where elements have
become
> > critically coupled.
> >
> > Anon
> >
> > jcm <jcmenard@wanadoo.fr> wrote in message news:900vdv$fp0$1@wanadoo.fr...
> > > I have built a 14 MHz 2 el. critical coupling wire beam as per Dick BIRD's
> > > (G4ZU) Jungle Job design.
> > > It works reasonably well but I would try to optimize it and model it with
> > > EZNEC but I don't know what diameter to enter for the segments of the
> > > radiator which is made of 1.5mm copper wire inside tapered
> > > phenolic/fiberglass fishing poles OD 40 mm at the root and 15 mm at the
tip.
> > > Has somebody some experience with this problem ?
> > > Thank you in advance.
> > >
> > > J.C MENARD - F8ND
> > >
> > >

3492. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-02 07:40:48 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A28A780.38AE@wt.net>
Source record: 175358
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark wrote:

>
> There are far too many reports in this group of improved performance
> where radiators' feedpoints are tied directly to the sheet metal when
> they replace thru-glass or mag mounts.
>
> 73's
> Richard Clark, KB7QHC

Maybe, but in my case, thats the way it worked out. I had one car where I had a larson mag mount 5/8 2m antenna on the roof with the larson magnet mount. "square looking deal" It worked fairly well, but after a period of time, I had to scrap the mag mount as I had knocked it off the roof one too many times and it was trashed. So I installed the same antenna onto the same exact spot except with a hole mount. I noticed quite an improvement in antenna performance with the hole mount. More than I expected. So in my case anyway it did make a difference. MK

--
http://web.wt.net/~nm5k

3493. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: tjp <tjp@pobox.com>
Message-ID: <pptj2tgm5vl3svcai7f2qiolt8uabmvsl6@4ax.com>
Source record: 175298
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

WOW! Thanks to all for the replies, quite a response. You have been
very helpful. Keep it coming and thanks again!

-Tim

On Fri, 01 Dec 2000 02:17:53 -0700, tjp <tjp@pobox.invalid> wrote:

>I have read *hours* worth of "Apartment Antenna" threads from the
>various usenet groups via deja.com. I have one question for the
>group:
>
>I'm new to all of this so please be kind.
>
>Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
>of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
>from inside. I can grab quite a few repeaters in my area from inside
>with my HT and a Comet SMA-24. What about a 20'' mag mount on a
>table? Would that work OK?? Is 50w too much to push out in a setup
>like this etc??
>
>Thanks in advance.

3494. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: glc1173@aol.com
Message-ID: <20001203032635.02591.00002822@ng-cq1.aol.com>
Source record: 175299
Body handling: HTML body converted to readable text

Richard wrote:
>Anyone know the dielectric constant of >this magnet? Or, more
>importantly, its dissipation factor at >resonance? Given that nearly
>every mag mount that I have observed >appears to have the common
>ferrous magnetic material bound in a vinyl >disk, it would do well to
>remember not all ferrites are benign >substances transparent to the
>passage of RF.

The real reason mag-mount antennas have that vinyl base is to prevent the
mount from scratching your car's finish as the antenna - and car - vibrate
while you drive.
(I've seen what a mag-mount 19" homebuilt two-meter antenna does as it
"chatters" along.)
Mobilizing the
nationwide trucker's strike that alone can end Algore's coup
~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, nationwide weather
Al Gore - in his own words
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

3495. FS: 259B and RF-1 ANTENNA ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <8IqW5.41163$nh5.2880734@newsread1.prod.itd.earthlink.net>
Source record: 175300

I have an MFJ 259B and Autek RF-1 analyzer that I would like to sell. Both are in excellent condition and work as new.

The MFJ has some small scratches in the paint but otherwise looks very good. It comes with the original box and manual along with 10 NiCads but no wall wart.
Asking $170.00 which includes shipping in CONUS.

The RF-1 works and looks like new and comes with the manual and accessories.
Asking $70.00 which includes shipping in CONUS

Larry N0SA

3496. Help - Hygain Trap Vertical plans

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "Steve W." <g0hmn@carbon15.karoo.co.uk>
Message-ID: <t2ke3t5itikl12@corp.supernews.co.uk>
Source record: 175301

Can anyone help, I'm looking for the assembly instructions for what I'm fairly sure is a Hygain 14AVQ/WB trap vertical I bought recently. what I'm looking for is the assembly instructions etc for reference. you can reply via e-mail,snail mail(I'm o.k. in QRZ, Callbook, RSGB et al)hope someone can help, I've tried Hygain/Telex with no success.

3497. FS:VAC VARIABLE CAP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <uMqW5.41171$nh5.2882309@newsread1.prod.itd.earthlink.net>
Source record: 175302

I have an Energy Laboratories vacuum variable cap for sale. It is in excellent condition. Rated 5 to 205 Pf at 7500 volts. It has a 1/4" shaft and requires 20 turns to run the full limit. Asking $75.00 which includes shipping in CONUS.
Larry N0SA

3498. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2A3C53.8D4DEEC6@oio.net>
Source record: 175303

Michael,
This probably won't 'cure' your problem, but it's simple
to do. Try disconnecting the ground wire. Grounding from
the second floor isn't easy, and especially on 20 meters
since the length of the ground will almost always be close
to a 1/4 wave.
'Doc

3499. RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Colin Marks <cbm@zip.com.au>
Message-ID: <3a2a42a6.b6a16@nancy.pacific.net.au>
Source record: 175304

I need to install new feedline about 70 feet long for my 20m antenna. No other band will be in use. . Leaving myself a large margin for error , I would like to feel it could safely handle 800 watts CW or about 700 SSB. (I normally run much less - legal limit here for SSB is 400 watts PEP). I am not worried about possible power loss. My concern is the power limitations of RG58 without causing damage or deterioration to the cable.
I have previously used RG58 for part of my feedline for many years under similar operating conditions with no problems but this installation will be the whole feedline.
I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost and rigid stiffness to work with.
Any comments?

Colin VK2LV Sydney

3500. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001203085547.15107.00000736@ng-mj1.aol.com>
Source record: 175305

Hi Sydney-

I looked this up last week, and--as I recall--300 Watts is the recommended power limit at 30 MHz for RG-58 and 350 Watts for RG-8M (mini-8). Although I've pushed a kW through RG58 into low-SWR loads at 30 MHz during tests, I don't recommend it as a general practice. Here's why: A friend of mine was running 1500 Watts through RG-8M with no problem until one leg of his dipole fell down in a wind. To his dismay, the elevated SWR increased the RF voltage past breakdown, frying the dielectric in the cable and taking several components in his amplifier along with it.

The flip side of the coin is weight. RG-58 and RG-8M causes a lot less sag than RG-8 or RG-219 for suspended antennas. So much so that I run 1000 Watts PEP into my 75 and 20 meter dipoles through RG-8M despite the increased risk. However, because of my friend's experience, I look out the window before I turn on the amp to make sure everything's still up. I also periodically check SWR with a handheld analyzer to confirm that nothing is full of water or deteriorating out there.

Rick K1BQT

3501. Re: Help - Hygain Trap Vertical plans

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <3A2A3C61.A4FAC186@qnet.com>
Source record: 175306

Hello Steve: Call Hy-Gain at 1-800-973-6572, MFJ bought them out, but
you can still buy antenna assembly manuals for 5 dollars.

Jay in the Mojave

"Steve W." wrote:
>
> Can anyone help, I'm looking for the assembly instructions for what I'm
> fairly sure is a Hygain 14AVQ/WB trap vertical I bought recently. what I'm
> looking for is the assembly instructions etc for reference. you can reply
> via e-mail,snail mail(I'm o.k. in QRZ, Callbook, RSGB et al)hope someone
> can help, I've tried Hygain/Telex with no success.

3502. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3a2a1106.941500@news.online.no>
Source record: 175307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On 01 Dec 2000 19:18:08 GMT, X@Y.Z.net (Jynx) wrote:

>On Fri, 1 Dec 2000 06:35:43 -0700, Jim Bromley, K7JEB scribbled:
>>Paul Keinanen, OH3LWR <keinanen@sci.fi> wrote:
>>
>>> That is not slashed zero, it is a vowel in at least Norwegian and
>>> Danish, the uppercase Ø is at U+00D8 and the lower case ø at U+00F8.
>>
>>I downloaded the font and installed it. Now my zero's are slashed.
>
>OK, now try to use it in a spreadsheet.
>
was it small or large zeroes?

73
jm

---
ide forum http://home.c2i.net/la2pj/ide/index.html

3503. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2A6573.7200A80F@IEEE.org>
Source record: 175308

Colin Marks wrote:
>
> I need to install new feedline about 70 feet long for my 20m antenna. No
> other band will be in use. . Leaving myself a large margin for error , I
> would like to feel it could safely handle 800 watts CW or about 700 SSB. (I
> normally run much less - legal limit here for SSB is 400 watts PEP). I am
> not worried about possible power loss. My concern is the power limitations
> of RG58 without causing damage or deterioration to the cable.
> I have previously used RG58 for part of my feedline for many years under
> similar operating conditions with no problems but this installation will be
> the whole feedline.
> I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost
> and rigid stiffness to work with.
> Any comments?

What I do is use heavy duty '450-ohm' ladder-line and make the feedline
either 62ft long (one wavelength) or 93ft long (1.5WL).
--
http://www.mindspring.com/~w6rca

3504. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <3A2A6EA1.F59FD1E9@berkshire.net>
Source record: 175309

i would not trust rg-58 with that much power. try rg-8x if you need a good
mid-range cable for higher power and flexibility.

Colin Marks wrote:
>
> I need to install new feedline about 70 feet long for my 20m antenna. No
> other band will be in use. . Leaving myself a large margin for error , I
> would like to feel it could safely handle 800 watts CW or about 700 SSB. (I
> normally run much less - legal limit here for SSB is 400 watts PEP). I am
> not worried about possible power loss. My concern is the power limitations
> of RG58 without causing damage or deterioration to the cable.
> I have previously used RG58 for part of my feedline for many years under
> similar operating conditions with no problems but this installation will be
> the whole feedline.
> I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost
> and rigid stiffness to work with.
> Any comments?
>
> Colin VK2LV Sydney

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

3505. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <u4AqOsTkasp0mzye85egKI0bFDUt@4ax.com>
Source record: 175310
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Sun, 03 Dec 2000 04:35:22 GMT, gbeaman@pei.sympatico.ca (Gord Beaman) wrote:

>>And still no one can respond to the discussion of currents and return,
>>or where this capacitance falls in the circuit.
>
>OK...the capacitance merely connects the braid of the feedline to the
>counterpoise, quite simple actually, I'd think that there'd be little difference
>between a magmount sitting on top of a car and a vertical antenna with four
>radials each fed with a capacitor of say 200 pf.
>
>Hey, there'd be very little difference (at VHF) between a direct mechanical
>connection and a 300pf or so capacitor. ~300 pf is for sure a dead short at VHF.
>

Hi Gord,

My mobile installations (we are talking about mag mounts typically in a mobile situation, are we not? Aside from the original question that is.) usually have at least 6 to 10 feet of coax running in very close proximity to the sheet metal of the chassis (certainly for the extent under the carpet for my rigs). Using RG-58, this presents a surface area of some 30 odd square inches located roughly .05 inch from the other plate presented by the sheet metal. By my rough calculations this presents about the same 300 pf as your offer of the mag mount.

If the mag mount's 300 pf is a dead short, then this must be in parallel with an already established dead short from the coax feeding it. The mag mount thus appears to be redundant and not a very notable distinction. Reductio ad absurdum would lead us to believe that aside from the grip of the magnet, there is no other benefit and if we could conspire to hold an antenna without it, it would be completely unnecessary. However, this is not my logic and experience indicates otherwise.

Again, to the general board: The logic of the arguments presented so far still far short of actually explaining the mechanics (much less the circuitry) and why the lack of benefit when compared to a direct connection. I still see discussion arranged around capacitors with dissipation factor unknown and dismissed simply for that reason.

73's
Richard Clark, KB7QHC

3506. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "hatzakis@u.washington.edu" <hatzakis@u.washington.edu>
Message-ID: <3A2A8A95.32189426@u.washington.edu>
Source record: 175311

Colin and Doc,

Thanks, I tried it and the RFI is certainly a bit better now, but still there. Would you ground then to the outlet ground then? With these new (<15yr) hourses, the grounds arent the most solid with all the plastic piping used these days.

Any suggestions on further reducing RFI? Does the quality of the shielding of the coax make much difference? I also have a 1/2 KW amp which kick up the RFI as well.

Again, thanks for your help.

Colin Marks wrote:

> I think the advice from Doc is worth a try. I operated in a similar location
> to yours and with a 20m dipole with centre balun for several years without
> an earth for the same reasons given by Doc. I never had any problems so far
> as my equipment was concerned and minimal RFI. I hope you might be so lucky!
> 73
> Colin VK2LV Sydney
> <hatzakis@u.washington.edu> wrote in message
> news:3A29F61C.4BD610E0@u.washington.edu...
> > I have a problem with RFI with a new dipole and looking for some
> > suggestions.
> >
> > 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> > by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> > long and radio (IC-735) on a second floor office with a large solid
> > ground wire directly to two 5 foot ground rods in a moist seattle soil.
> >
> > My RF audio is getting into everything electronic between my house and
> > the neighbors. I have a band pass filter, but this seems more like my
> > signal is getting rectified in the audio section of my stereo receivers
> > and my neighbors.
> >
> > Any ideas on how to get this under control?
> >
> > Thanks, Michael K3MH
> >
> > (echo to my e-mail, if possible, m_hatz@yahoo.com)
> >
> >
> >

3507. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "hatzakis@u.washington.edu" <hatzakis@u.washington.edu>
Message-ID: <3A2A8AD7.EAEB0644@u.washington.edu>
Source record: 175312

Colin and Doc,

Thanks, I tried it and the RFI is certainly a bit better now, but still there. Would you ground then to the outlet ground then? With these new (<15yr) hourses, the grounds arent the most solid with all the plastic piping used these days.

Any suggestions on further reducing RFI? Does the quality of the shielding of the coax make much difference? I also have a 1/2 KW amp which kick up the RFI as well.

Again, thanks for your help.

Colin Marks wrote:

> I think the advice from Doc is worth a try. I operated in a similar location
> to yours and with a 20m dipole with centre balun for several years without
> an earth for the same reasons given by Doc. I never had any problems so far
> as my equipment was concerned and minimal RFI. I hope you might be so lucky!
> 73
> Colin VK2LV Sydney
> <hatzakis@u.washington.edu> wrote in message
> news:3A29F61C.4BD610E0@u.washington.edu...
> > I have a problem with RFI with a new dipole and looking for some
> > suggestions.
> >
> > 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> > by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> > long and radio (IC-735) on a second floor office with a large solid
> > ground wire directly to two 5 foot ground rods in a moist seattle soil.
> >
> > My RF audio is getting into everything electronic between my house and
> > the neighbors. I have a band pass filter, but this seems more like my
> > signal is getting rectified in the audio section of my stereo receivers
> > and my neighbors.
> >
> > Any ideas on how to get this under control?
> >
> > Thanks, Michael K3MH
> >
> > (echo to my e-mail, if possible, m_hatz@yahoo.com)
> >
> >
> >

3508. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <90e3up$oa4$1@news.gate.net>
Source record: 175313

Michael...several years ago, my shack was in a room over the unattached garage outside my home up about 10'. Getting a good RF ground was a real challenge. I bought some 12" copper flashing (used on roofs) from the local lumber yard and ran it from the station down to three copper rods below. All of my RF feedback and hot microphone problems went away. Just remember to scrape away the protective coating used on the flashing before connecting it to your grounds.

Another thing I did in a similar situation a few years later was to take an old piece of rotor cable and cut three of the wires to a 1/4~ on 10-15-20mtrs (I didn't operate lower than those) and attach it to the ground lug on the rig. That also got rid of my hot microphone and rf feedback.

And last, are those metal poles you're using, well grounded too?

73,
David, K4ZZR
--
Please reply to: k4zzr@gate.net
REMOVE "NONSPAM"

> > I have a problem with RFI with a new dipole and looking for some
> > suggestions.
> >
> > 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> > by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> > long and radio (IC-735) on a second floor office with a large solid
> > ground wire directly to two 5 foot ground rods in a moist seattle soil.
> >
> > My RF audio is getting into everything electronic between my house and
> > the neighbors. I have a band pass filter, but this seems more like my
> > signal is getting rectified in the audio section of my stereo receivers
> > and my neighbors.
> >
> > Any ideas on how to get this under control?
> >
> > Thanks, Michael K3MH
> >
> > (echo to my e-mail, if possible, m_hatz@yahoo.com)
> >
> >
> >
>
>

3509. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <7s5l2ts1v5g2a1dai5dof1qafpqoodvk2o@4ax.com>
Source record: 175314
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark <rwclark@rwclark.seanet.com>
shared these priceless pearls of wisdom:

->Again, to the general board: The logic of the arguments presented so
->far still far short of actually explaining the mechanics

I doubt sincerely anybody who asks the dielectric constant of a steel magnet
would understand the mechanics if it were sung to him in a nursery rhyme.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3510. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <KaYqOvp8tg5qzN8Xi1Drl9wvmyRj@4ax.com>
Source record: 175315
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Sun, 03 Dec 2000 10:58:30 -0800, Jim Weir <jim@rst-engr.com> wrote:

>Richard Clark <rwclark@rwclark.seanet.com>
>shared these priceless pearls of wisdom:
>
>->Again, to the general board: The logic of the arguments presented so
>->far still far short of actually explaining the mechanics
>
>I doubt sincerely anybody who asks the dielectric constant of a steel magnet
>would understand the mechanics if it were sung to him in a nursery rhyme.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

Hi Jim,

The portion of the message you did not quote consists of:
> I still see discussion arranged around capacitors with
>dissipation factor unknown and dismissed simply for that reason.
As Air is NOT the di-electric in this capacitor, there must be some value other than 1.00. It also follows that there is a corresponding dissipation factor which still remains unstated - in rhyme or free verse.

In other unquoted material:
>Anyone know the dielectric constant of this magnet? Or, more
>importantly, its dissipation factor at resonance? Given that nearly
>every mag mount that I have observed appears to have the common
>ferrous magnetic material bound in a vinyl disk, it would do well to
>remember not all ferrites are benign substances transparent to the
>passage of RF.
I posited that this medium consisted of a magnetic material in a vinyl binder, others have posted that there was simply a vinyl protector. On a casual inspection of one of my own I found a foam plastic.

If that magnet is not one in a vinyl binder, but is rather the more ordinary ceramic permanent magnet, then the material of that ceramic, the ferrite could easily be VERY lossy if found between the plates of a capacitor.

Given there is a disconnect between the claims of adequacy on the part of mag mounts and the counter claims of improved performance by simple ohmic connection to the same sheet metal, it becomes apparent that the short fall of performance must be found in the difference of the two

methods of "coupling" to the sheet metal.

The argument of "capacitance" is not an answer for the difference, unless some loss is involved. The simplest source of loss in this regard would be dissipation of the dielectric. Whatever media that is used is suspect barring other discussion.

73's
Richard Clark, KB7QHC

3511. ANTENNE FRITZEL, r�flecteur incompatible

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: dutileul@club-internet.fr
Message-ID: <90e9i4$b0b$1@front3m.grolier.fr>
Source record: 175316
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.antenna

Je dispose d'une antenne 2 �l�ments FB 23. Elle me donne enti�re satisfaction. J'ai donc souhait� ne pas m'en s�parer et la transformer en FB 34 c'est � dire 3 �l�ments + kit40 m�tres (EWS 30 40). Malheureusement je ne parviens pas � r�gler la FB 34 r�alis�e � partir de ma FB 23. Il est vrai que ma FB 23 est ancienne et ne correspond pas au mod�le FB 23 actuel.

Caract�ristiques R�flecteur
Radiateur Diam�tre du boom au dessus du balun.

ma FB 23 r�gl�e CW 7.54 m fixe sans coulisse 7.40
m fixe sans coulisse 40 mm

FB 23 actuelle 7.8 m avec coulisse
7.40 m avec coulisse 50 mm

la transformation de ma FB 23 en FB 34

La FB 34 type a un �cartement de 2.85 m entre r�flecteur et le radiateur et 1.85 m entre radiateur et directeur. Le r�flecteur a une longueur de 7.75 m, le radiateur de 7.40 m et le directeur de 7.06 m. (� noter que ma FB 23 actuelle a des dimensions diff�rentes)Je souhaiterais par ailleurs pouvoir porter ces �cartements respectivement � 3 m et 1.80 m ayant un pyl�ne de section carr�e de 60 cm x 60 cm.

Je ne dispose pas de logiciel de calcul et donc ai d� faire de tr�s nombreux essais fatiguant mais aussi infructueux. S'il y avait une solution, elle me ferait grand plaisir.

F 5 AET

3512. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A2AAF2A.92FF0E47@eznec.com>
Source record: 175317

I think I'd crank reliability into the equation. I've used RG-58 for many years with up to 300 watts CW and PEP SSB with no problem. I don't think you'd have any problem at this power level if you keep the line SWR low (which should be possible with the single band dipole). I don't know about running it at twice this power for extended periods though. What I'd think about is how much of a pain a line failure would be. If it's a minor job to replace it, and you're not worried about failure during a critical contest or emergency, then I'd probably go ahead and push it. Otherwise, I'd opt for heavier cable. RG-8X might be a good compromise, since it should take a bit more power than RG-58 (if you don't bend it much) and still be reasonably light.

Roy Lewallen, W7EL

Colin Marks wrote:
>
> I need to install new feedline about 70 feet long for my 20m antenna. No
> other band will be in use. . Leaving myself a large margin for error , I
> would like to feel it could safely handle 800 watts CW or about 700 SSB. (I
> normally run much less - legal limit here for SSB is 400 watts PEP). I am
> not worried about possible power loss. My concern is the power limitations
> of RG58 without causing damage or deterioration to the cable.
> I have previously used RG58 for part of my feedline for many years under
> similar operating conditions with no problems but this installation will be
> the whole feedline.
> I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost
> and rigid stiffness to work with.
> Any comments?
>
> Colin VK2LV Sydney

3513. Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Curtis Bidulock <bidulock@hotmail.com>
Message-ID: <%4yW5.59$55.1790@news-rep.ab.videon.ca>
Source record: 175318

I am hoping that someone out there can answer this question for me. I am currently running a VHF/UHF mobile antenna mounted on my balcony and am getting approx. 35-50 mile range. I would like to extend that range. I unfortunately do not have access to the roof to mount an antenna. I have heard people recommending the crushcraft AR270 for its height and quality. Will this give me a large improvement over my mobile antenna ? My mobile is just fastened to the balcony using a lip mount. Also another recommendation I have heard of is to add a pre-amp to improve the reception of those far off signals. Any other recommendations or proven solutions are welcomed and thank-you ahead of time.

--
Curtis Bidulock
mailto:bidulock@powersurfr.com
http://www.bidulock.com
Amateur Radio Station VE6-AEW

3514. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90edee$751$1@plutonium.btinternet.com>
Source record: 175369

Hi Colin,

For performance of RG-58, under various ventillation conditions, at any RF power up to melting point of polyethylene, at any frequency up to 1 GHz, at any SWR, download (in a few seconds) program COAXRATE.

And the same for any other solid polyethylene coax cable.

You will find coax cables longer than 1/4-wavelength fail at HF due to overheating before they fail due to voltage breakdown.

It is entirely up to you to decide at what power the temperature rise is excessive. Nicely warm or when it becomes too hot to handle ?

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Colin Marks <cbm@zip.com.au> wrote in message news:3a2a42a6.b6a16@nancy.pacific.net.au...
> I need to install new feedline about 70 feet long for my 20m antenna. No
> other band will be in use. . Leaving myself a large margin for error , I
> would like to feel it could safely handle 800 watts CW or about 700 SSB. (I
> normally run much less - legal limit here for SSB is 400 watts PEP). I am
> not worried about possible power loss. My concern is the power limitations
> of RG58 without causing damage or deterioration to the cable.
> I have previously used RG58 for part of my feedline for many years under
> similar operating conditions with no problems but this installation will be
> the whole feedline.
> I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost
> and rigid stiffness to work with.
> Any comments?

>
> Colin VK2LV Sydney
>
>

3515. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <90eg7sgbc0@216.39.171.5>
Source record: 175370

On Sun, 3 Dec 2000 21:24:10 -0000, Reg Edwards wrote:
>Hi Colin,
>
>For performance of RG-58, under various ventillation
>conditions, at any RF power up to melting point of
>polyethylene, at any frequency up to 1 GHz, at any SWR,
>download (in a few seconds) program COAXRATE.
>
>And the same for any other solid polyethylene coax cable.
>
>You will find coax cables longer than 1/4-wavelength fail at
>HF due to overheating before they fail due to voltage
>breakdown.
>
>It is entirely up to you to decide at what power the
>temperature rise is excessive. Nicely warm or when it
>becomes too hot to handle ?

One possibility would be to use RG-400 (like RG-142, except with a stranded center conductor). It is about the same diameter as RG-58, has a teflon center conductor and is double-shielded). It's not necessarily a low-cost solution, however. I used it once for a 80 meter dipole to keep the weight down compared to RG-213 and it easily handles a KW or more.

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen

3516. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A2AC960.7A76@wt.net>
Source record: 175371

hatzakis@u.washington.edu wrote:
>
> I have a problem with RFI with a new dipole and looking for some
> suggestions.
>
> 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> long and radio (IC-735) on a second floor office with a large solid
> ground wire directly to two 5 foot ground rods in a moist seattle soil.
>
> My RF audio is getting into everything electronic between my house and
> the neighbors. I have a band pass filter, but this seems more like my
> signal is getting rectified in the audio section of my stereo receivers
> and my neighbors.
>
> Any ideas on how to get this under control?
>
> Thanks, Michael K3MH

I'd try Doc's idea first. Unhook the ground and see if that will help.
When using a dipole, a ground to the rig is not really needed anyway. If
you still have the RFI, you likely are whacking out your neighbors with
fundimental overload. If this is the case, and your antenna is as far
from them as you can get it, they will likely need some filtering to cut
the interference. A filter on your end will not effect fundimental
overload, only any spurious output. MK

--
http://web.wt.net/~nm5k

3517. 10M Fractal Quad Yagi : EU Run

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20001203174813.08951.00002685@ng-cd1.aol.com>
Source record: 175372

I did a shakedown today in preparation for the 10M Contest next weekend. Did a couple of hours of 250+ Q's per hour rates. Wicked QRN (from Aurora??) but signals were strong and noise blanker worked well.

The 10M Fractal Quad yagi did well with its new coax; SWR is better than 2:1 from 28.0 to 29.4. Technical details can be seen on the ham page of:

http://www.fractenna.com

NOTE the ham page will be removed in the next week and then migrated over to another link. I will provide an update when the transfer occurs.

Here is a 5 minute slice of the nice EU Q run, on 28505.0 KHz, with a JST 245 at 130 watts, from 1430-1435 UTC:

UA6CAP
I5LYJ
RZ1AK
DH9FAB
RZ3AHU
DL7UGO
DF2AGA
DK2DD
YT1LD
GI4WOX
IS0PVT
DK1FQ
DL6OJE
PY1AL (eU IN bRAZIL:-))
UA6JCC
OK2TT
HA6HIQ
RU3ZF
UR5TW
RU3OJ
US4IL

hOPE TO WORK YA'LL NEXT WEEKEND!

73,
Chip N1IR

3518. HP803A VHF Impedance Bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <90ek9d$9io$1@news.asu.edu>
Source record: 175373

This weekend I bought an HP-803A VHF impedance bridge at a local hamfest. It did not come with a manual, but looking inside, there doesn't seem to be much to it. The generator input is connected to what appears to be a dual differential adjustable waveguide attenuator each end of which then couples to one of the two ends of a transmission line loop with an adjustable tap which goes to the detector. I surmise that the way it works is that the generator drives a 50 ohm standard hidden inside the waveguide attenuator as well as the unknown. Each signal is separately attenuated and fed to one end of the transmission line. The differential attenuator adjustment is calibrated to give the impedance magnitude and the transmission line adjustment gives the phase.

My problem is that a good 50 ohm load connected to the unknown connector balances with a reading of 38 Ohms. Hooking various lengths of 50 ohm air line to the unknown connector, the bridge balances within a degree or 2 of a phase of plus or minus 90 degrees and if I remove and add a shorting cap across the airline the product of the open and shorted impedances are 38 plus minus 1 or 2 ohms squared. I have tested this from 60 to 500 MHz and the results are the same throughout that range. From the above results I can determine the effective length of the front panel transmission line, and the results are consistent with the bridge giving the true impedance multiplied by 38/50. From this I am assuming that the internal 50 ohm standard has changed value to 38 ohms presumably because someone damaged it by feeding it too much power.

My questions:
1. Am I correct in my guess as to how the HP803A works?
2. Am I likely correct in my guess as to what is wrong?
3. Does anyone know if this is repairable with available parts? That is, will something like a 50 ohm chip resistor fit in there. The coax from the generator cable has a solid outer conductor, and getting at the resistor which I assume is inside the wave guide attenuator would require undoing a fair amount of plumbing, so I would prefer not to take it apart until I know whether or not it can be fixed.

I can of course just multiply the impedance measurements by 50/38 and forget about it, but it would be nice to have it working as it was intended.

Thanks and 73, Kevin w9cf@ptolemy.la.asu.edu

3519. Pi Tank matching network for any PA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90ekb3lcv1@plutonium.btinternet.com>
Source record: 175374

Dear NewsGroup Readers,

Now available for the use and entertainment of armchair PA linear designers. To professionals and amateurs alike, all at the same ridiculous low price.

******** Program PI_TANK.exe ********

Input data : Frequency, RF power output, peak RF plate volts, external load resistance, phase shift through network, Q of coil.

Output data : Values of C1, C2 and L, reactances of C1 and C2, resistance of plate load, efficiency, watts lost in coil, network Q, Bandwidths at the 1dB and 3dB points, network rejection in dB of 2nd, 3rd and 4th harmonics.

Usual facilities available for sweeping input data over wide ranges in fine increments.

Will unbelievers please note that the internal resistance of the PA device is not needed.

Program PI_TANK proves that the ARRL Handbook table of C1, C2, L values for PA pi-match networks are accurate to within +/- 10% or better.

Fully tested before issue. No beta testing in this house.

Only 44 Kilobytes. Download PI_TANK in a few seconds from website below. Run immediately.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

3520. Re: 11 meter Moonraker 4 to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: fuzzybuzzard001@aol.com
Message-ID: <20001203184459.01695.00000399@ng-mc1.aol.com>
Source record: 175375

OK thanks for the input guys...I think its going to take some doing but it can be done. I have a MFJ 259b but it doesn't tell me what it will do in the air,,So we will have to just try it...

Dave

3521. Re: Nathan Cohen Public Figure Public Fool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2ADB0A.43F3C2E1@dvol.com>
Source record: 175376

Fractenna wrote:

> >Knock it the hell off willya? Everything in it's time, he's over, well past
> >time to move on.
> >>
> >w3rv
> >
>
> Excuse me; I am very much alive;
> just finished a fantastic JA run with the 10M FQY on 28487.0 KHz;getting rady
> for 10M contest; and so on.

>
Get back to me when you do JA runs on 80 cw like I have.
>

>
> Look: just be quiet--or is that too easy??

>
Yup.
>

>
>
> NC

3522. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90en6kqoj1@plutonium.btinternet.com>
Source record: 175377

American cable manufacturers appear to rate the power handling capability of coax in watts as that power which causes the temperature to rise to 85 degrees Celsius which is the softening temperature of polyethylene. It becomes runny at 120C. Actually, long term exposure of the pvc sheath to that temperature causes irreversible hardening and loss of flexibility.

On that basis the wattage capability of a length of coax depends on whether it is used in Florida on 4th July or outdoors in Alaska on Xmas Day. Its all very airy-fairy.

85C will raise blisters in a few seconds on your hands. Most people would derate their coax to a far lower temperature, not because they are scared of being blistered but because it is painful just to think of all that beautiful and expensively generated RF power running to waste.

It should not be forgotten that cable attenuation increases with frequency. This means that at 144 MHz a cable will handle only about 1/10th as much power as it will at 1.8MHz.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

3523. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2AF3AE.6177B10E@oio.net>
Source record: 175378

Using the ground at the convenience outlet is not a good
idea. When you do this you in affect make the house wiring
part of your antenna system. The last thing you want is
your antenna closer to the devices being interffered with.
Shielding of the feed line makes little difference in this
case.
What you might do is to use a counterpoise for a ground.
run it along the base-boards, across the floor, etc. If it
helps, then you can try hidding it. You want to make the
counterpoise out of insulated wire. It developes a high
voltage at the end, so be sure to insulate the end of the
counterpoise.
The amplifier is going to make everything worse, but if
done correctly, the counterpoise should handle it too.
Good luck...
'Doc

3524. www.untenna.com - any owners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: cgibbs@gcfn.org
Message-ID: <90evp1$qr8$1@acme.gcfn.org>
Source record: 175379

Just wondering if anyone out there has purchased the antennas offered
by this company out of Western New York....?

Comments, input, advice?

I'm looking for future reference regarding purchase of this type.

Thanks for anyone that knows something about them.

73s
KC8KQL

--
C. W. Gibbs <cgibbs@gcfn.org>
----------- "Laziness Breeds Efficiency" -------------

Psalm 119:112 also at <KC8KQL@juno.com>

3525. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <l1ql2tkf548iqh9s9b16eve044on2n27na@4ax.com>
Source record: 175380

On Sun, 3 Dec 2000 13:37:05 -0500, "David" <k4zzrNONSPAM@gate.net>
wrote:

>Michael...several years ago, my shack was in a room over the unattached
>garage outside my home up about 10'. Getting a good RF ground was a real
>challenge. I bought some 12" copper flashing (used on roofs) from the local
>lumber yard and ran it from the station down to three copper rods below.
>All of my RF feedback and hot microphone problems went away.

I'm glad you fixed your problem, but you still don't have an RF
"ground". You have a piece of copper flashing 10 feet long running TO
an RF ground. If you measure across the ten foot piece while
transmitting, you will find a voltage drop across it, and where you
have a voltage drop, you do NOT have a ground.

Just be glad it works. :-)

73, Bill W7TI

3526. Re: 10M Fractal Quad Yagi : EU Run

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90f1umst1@slb6.atl.mindspring.net>
Source record: 175381

Thread:

[snip]
> hOPE TO WORK YA'LL NEXT WEEKEND!
>
> 73,
> Chip N1IR
[snip]

Chip is not from the South, I wish to correct his grammer here, it's y'all,
not ya'll. What?!!!

-Peter K1PO [Morrisville, NC]

3527. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90f2gh$64u$1@nntp9.atl.mindspring.net>
Source record: 175382

Ed:

I always thought that it was your call letters that got you "that job", heh, heh.

-Peter K1PO

"W1RFI" <w1rfi@aol.com> wrote in message news:20001127075012.28490.00001651@ng-cr1.aol.com...
> >From: "John P. Franklin" jpfrankl@teleport.com
>
> >Tweak, I get the feeling that you are looking at the amateur Extra class
> >license as if it were an endorsement for a job........ It's NOT.
>
> I think my Extra helped me get my job. :-)
>
> 73,
> Ed Hare, W1RFI

3528. Re: GAP Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A2AFA5E.B6BDE844@tir.com>
Source record: 175383

If you wish to read how the GAP antenna is thought to work, look at US
patent 5592183. Not a simple structure.

Of even more potential interest to this group might be their last
patent (5796369). It appears to show a structure that has been
extensively discussed.

73 Mac

Emil Vukasovic wrote:
>
> I'm thinking of buying and installing a GAP Titan DX antenna.
>
> Can someone tell me aboout their success (or troubles) with the GAP Titan
> DX?
>
> Thanks.

--
J. Mc Laughlin n8tt@tir.com Michigan ~

3529. Re: 10M Fractal Quad Yagi : EU Run

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A2B1A5C.4050004@hiwaay.net>
Source record: 175384

Peter- You are right, of course, but trying to get him educated is hopeless. I dont think common English is his native tongue. And- you were supposed to end with--

Hope this helps.

Bill-W4BSG

Peter O. Brackett wrote:

> Thread:
>
> [snip]
>
>> hOPE TO WORK YA'LL NEXT WEEKEND!
>>
>> 73,
>> Chip N1IR
>
> [snip]
>
> Chip is not from the South, I wish to correct his grammer here, it's y'all,
> not ya'll. What?!!!
>
> -Peter K1PO [Morrisville, NC]

3530. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <cl7m2t8hs8npqhk03ce48ksl9v5vg86udr@4ax.com>
Source record: 175385
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

gbeaman@pei.sympatico.ca (Gord Beaman)
shared these priceless pearls of wisdom:

->Richard Clark <rwclark@rwclark.seanet.com> wrote:

->Richard, 73 means 'best regards', when you say '73s' you're saying 'best
->regardses'...if you use the apostrophe you're indicating that something (which
->you haven't named) belongs to the '73'. If you don't believe me then check
with
->an English teacher. Experienced hams don't use _73s_ much less _73's_ :)

Even more experienced hams use 73 on cw and Best Wishes in other modes.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3531. Re: Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Gary Sanford <sanford1@sprynet.com>
Message-ID: <im8m2t4bu8hab39vj818njgjqf89hphqja@4ax.com>
Source record: 175386

On Sun, 3 Dec 2000 13:31:46 -0700, "Curtis Bidulock"
<bidulock@hotmail.com> wrote:

>I am hoping that someone out there can answer this question for me. I am
>currently running a VHF/UHF mobile antenna mounted on my balcony and am
>getting approx. 35-50 mile range. I would like to extend that range. I
>unfortunately do not have access to the roof to mount an antenna. I have
>heard people recommending the crushcraft AR270 for its height and quality.
>Will this give me a large improvement over my mobile antenna ? My mobile is
>just fastened to the balcony using a lip mount. Also another recommendation
>I have heard of is to add a pre-amp to improve the reception of those far
>off signals. Any other recommendations or proven solutions are welcomed and
>thank-you ahead of time.

I've built a 1/2" copper pipe version of the antenna mentioned here:
http://www.cebik.com/moxbld.html
with excellent results on my balcony. The gaps on mine are made from
CPVC pipe and fitting which fit the CU exactly. I've also made a brass
tube and Cu corners version for 70cm which uses wood dowels to define
the element spacing. There was also a QST article, earlier this year
on this neat antenna, the Moxon beam.
KG4DAG

~~~~~~~~~~~~~~~~
Gary Sanford
sanford1@spectradyne.com (pgp public key available)
~~~~~~~~~~~~~~~~

3532. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <2v6m2t8vg34rkcpo860fu7k6nm4cgu0a9f@4ax.com>
Source record: 175387
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Mon, 04 Dec 2000 03:51:28 GMT, in rec.radio.amateur.antenna Gord, VE1EO wrote:

>if you use the apostrophe you're indicating that something (which >you haven't named) belongs to the '73'.

Not necessarily. The apostrophe is often used to indicate a plural of a non-standard word such as an acronym, i.e. QSL's or even "73's". This may be "right" or "wrong" depending on your biases, but it's pretty common.

And if I send you Best Regards and do it more than once (say to your whole family), isn't that "73's"?

IOW, get off your high horse. Go count the dimpled chad in Florida.

73, Bill W7TI

3533. 70cm J On Top Of 2m J-Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 02:56:09 UTC
From: KF4LAT <kf4lat@hotmail.com>
Message-ID: <dDiW5.1$pH3.8357@ratbert.tds.net>
Source record: 175293

I have a VERY well tuned 2m j-pole antenna on my roof and now want to expand to 70cm. I don't have room for another mast so the only option I really have is to make a 'cactus j-pole', BUT, I don't want to cut any off my 2m as all the building instructions have said.
The question I have - would it work if I just removed the end cap off the long element and sweat a threaded adapter and then screw in a PVC coupler (to insulate between the two antennas) then screw in a copper adapter in the top end then fasten my 70cm j-pole to it with the stub turned 180 degrees from the 2m stub?

Alex
KF4LAT

3534. RADIO SHACK logperiodic ant VHF-UHF..Possible to use 6 es 2 Mtrs..??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 03:10:09 UTC
From: earlve3ab@igs.net
Message-ID: <3a29b80f.222640239@news.igs.net>
Source record: 175292

I have a Radio Shack Log Periodic Antenna for VHF and UHF TV..It is
the small one for a trailer ect..I wonder if anyone has tried using TV
antennas..Particularly a Log-Periodic type for 6 and 2 or even higher.
One problem right off the bat is the 300 ohm feed requirement. I would
need a broadband low loss balun and Im not sure ive ever seen such
a balun design for ham radio. The TV Balun would probably not work
on transmit over 1 watt..and might be lossy. Any help on this aspect?
The antenna is all ready to go and maybe someone would email me and
let me know if Id be wasting my time to hook some coax to it!!...73
Earl VE3AB

3535. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 03:46:56 UTC
From: dragnet2@aol.com
Message-ID: <20001202224656.18096.00003165@ng-fh1.aol.com>
Source record: 175294

I totally agree with the following statement by Mike from post #20 ."If I had only one antenna that I could use and wanted multi band performance from a Vertical I would choose one of the Butternut models. They have extensively tested and written their results for all to read.. (no magic Just plain proof). " I totally agree with this.
I can honestly say that I have own and operated a Butternut HF6V on 10 through 75 meters for the six years. My Butternut vertical has been roof mounted with only 4 radials and I have no trouble tuning through the internal radio tuner or with a MFJ949D versa tuner. I am only putting out 100 watts but this Butternut vertical. It works absolutley great on all bands 10-75 meters. Dan KE6TDT

3536. Re: hustler 6-btv any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 03:54:00 UTC
From: dragnet2@aol.com
Message-ID: <20001202225400.18096.00003166@ng-fh1.aol.com>
Source record: 175295

I agree, go with the Butternut vertical.

3537. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 04:35:22 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a29cc99.31733553@news1.pei.sympatico.ca>
Source record: 175296
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark <rwclark@rwclark.seanet.com> wrote:

>On Sat, 02 Dec 2000 23:00:38 GMT, gbeaman@pei.sympatico.ca (Gord
>Beaman) wrote:
>
>snip
>>
>>You don't need a direct connection (DC) when dealing with RF you see, ever
>>notice those 'through the glass' antennas?.
>
>Hi Gord,
>
>Yet those who describe replacing a thru-glass or mag mount with a
>solid metallic connection invariably attends reports of better
>performance. (It also matches my experience.)
>

That could be Richard, I have used magmounts for many years but never have tried comparing them with a direct connection.

>The following is a general response to those various posters that
>responded to my queries.
>
>And still no one can respond to the discussion of currents and return,
>or where this capacitance falls in the circuit.

OK...the capacitance merely connects the braid of the feedline to the counterpoise, quite simple actually, I'd think that there'd be little difference between a magmount sitting on top of a car and a vertical antenna with four radials each fed with a capacitor of say 200 pf.

Hey, there'd be very little difference (at VHF) between a direct mechanical connection and a 300pf or so capacitor. ~300 pf is for sure a dead short at VHF.

> A capacitor with one
>lead open does not exhibit very much capacitance except through a
>third body (which also remains un discussed).

Open?...it's not open Richard, the braid is connected THROUGH the capacitance to the counterpoise. Very little difference than connecting it directly. imo.

> At best, the sheet
>metal presents an intermediate plate, and by common experience this
>appears to be a poor solution ranking down there with the radiating
>dummy load that "always" matches.
>

Not really, magmounts work quite well I've found.

>Anyone know the dielectric constant of this magnet?

Oh, it's made of what, nickel/iron?, not much dielectric there at all I'd say.

>Or, more
>importantly, its dissipation factor at resonance?

Dissipation factor?...at resonance?...it's just a chunk of iron, what dissipation?, what resonance?.

>Given that nearly
>every mag mount that I have observed appears to have the common
>ferrous magnetic material bound in a vinyl disk, it would do well to
>remember not all ferrites are benign substances transparent to the
>passage of RF.
>

Transparent to the passage of RF?... geez, it's just a big chunk of metal, why wouldn't it pass RF?...or do you mean something else here?

>73's
>Richard Clark, KB7QHC

73,
Gord Beaman, VE1EO.

--
Gord Beaman
PEI Canada.

3538. Re: NEED HELP TO ID THIS SIGNAL !!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 04:36:24 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a29cd82.31967135@news1.pei.sympatico.ca>
Source record: 175297
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,aus.radio.amateur.digital,aus.radio.amateur.misc,es.rec.radio.amateur,fr.rec.radio.amateur,free.uk.amateur-radio,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.ho

"Jim Bromley, K7JEB" <w5gyj@primenet.com> wrote:

>> >On Wed, 29 Nov 2000 19:54:45 -0800, Lloyd posted
>> >
>> >>begin 666 Unknown.wav
>> >>M4DE&1N3+!0!7059%9FUT(! ````!``$`1*P``$2L```!``@`9&%T8<#+!0"4
>> >
>
>> Alan Hackett <hacketta@iinet.net.au> wrote
>>
>> Sounds like a aircraft omni-directional beacon "YVR".
>>
>> Do you have an airport closeby??
>>
>> By the way its probably transmitting somewhere between 108 & 118 MHz.
>
>It's probably TACAN, the military version of VHF Omni Range. In
>the states the FAA co-locates both VOR and TACAN stations and gives
>them a common ID. Also, the 1120 MHz frequency he reported jibes
>perfectly with the allocation for TACAN.
>
>And I agree with Jynx, we really didn't need to have a half
>megabyte of .WAV file attached and so widely broadcast.
>
>--
>Jim Bromley, K7JEB k7jeb@arrl.net
>Glendale, Arizona
>
>
Also YVR jibes with Vancouver British Columbia Canada, all Canadian ICAO
identifiers begin with 'Y' and 'YVR' is Vancouver International.

Gord, VE1EO.

--
Gord Beaman
PEI Canada.

3539. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-03 14:33:00 UTC
From: Colin Marks <cbm@zip.com.au>
Message-ID: <3a2a59c8.c24e6@nancy.pacific.net.au>
Source record: 175388

I think the advice from Doc is worth a try. I operated in a similar location
to yours and with a 20m dipole with centre balun for several years without
an earth for the same reasons given by Doc. I never had any problems so far
as my equipment was concerned and minimal RFI. I hope you might be so lucky!
73
Colin VK2LV Sydney
<hatzakis@u.washington.edu> wrote in message
news:3A29F61C.4BD610E0@u.washington.edu...
> I have a problem with RFI with a new dipole and looking for some
> suggestions.
>
> 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> long and radio (IC-735) on a second floor office with a large solid
> ground wire directly to two 5 foot ground rods in a moist seattle soil.
>
> My RF audio is getting into everything electronic between my house and
> the neighbors. I have a band pass filter, but this seems more like my
> signal is getting rectified in the audio section of my stereo receivers
> and my neighbors.
>
> Any ideas on how to get this under control?
>
> Thanks, Michael K3MH
>
> (echo to my e-mail, if possible, m_hatz@yahoo.com)
>
>
>

3540. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <3A2BEC02.79B91CCD@agilent.com>
Source record: 175219

Regarding that QST article describing the large kite used to suspend a vertical radiator, the Dupont Tyvek material used for the kite isn't sold (or needed, for that matter) in Southern California! I found it in a Home Depot on a business trip to Portland, but it was only sold in very large 100-foot rolls that were way expensive.

What are folks in warm climates to do? What do the rest of you do when you only need ten feet of the stuff?

R,

Al W6LX

3541. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A2BF8C4.8A1D99BB@netscape.net>
Source record: 175220

Al Lorona wrote:
>
>
>
> Regarding that QST article describing the large kite used to suspend a
> vertical radiator, the Dupont Tyvek material used for the kite isn't
> sold (or needed, for that matter) in Southern California! I found it in
> a Home Depot on a business trip to Portland, but it was only sold in
> very large 100-foot rolls that were way expensive.
>
> What are folks in warm climates to do? What do the rest of you do when
> you only need ten feet of the stuff?
>
> R,
>
> Al W6LX

I drive up to Boulder and buy it by the yard from Into The Wind.
They have a Web site and take mail orders.
http://www.IntotheWind.com/ Look under "Supplies".

The Tyvek that they sell is not the same as the housewrap. It is
lighter and is 60" wide. I haven't built a kite using it,-- I use it
backpacking as a ground cloth under my tarp.

--
Jim Fuller

3542. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Badkitty <castleridge1@icqmail.com>
Message-ID: <tmun2t8rc3rgschbipesc8cu91gd9099fp@4ax.com>
Source record: 175221

Been an avid kiter over the years and having built kites up into the
150+ sq ft. range I've always used my local kite shop for materials.
The "Into the wind" catalog also has supplies aplenty if you lack a
local source.

On Mon, 04 Dec 2000 11:09:54 -0800, Al Lorona <al_lorona@agilent.com>
wrote:

>
>
>Regarding that QST article describing the large kite used to suspend a
>vertical radiator, the Dupont Tyvek material used for the kite isn't
>sold (or needed, for that matter) in Southern California! I found it in
>a Home Depot on a business trip to Portland, but it was only sold in
>very large 100-foot rolls that were way expensive.
>
>What are folks in warm climates to do? What do the rest of you do when
>you only need ten feet of the stuff?
>
>R,
>
>Al W6LX

John KD7KBL
Bothell, WA
USA
ICQ# 25096533
castleridge1@icqmail.com
http://www.radiohound.net
"What do you mean you can't solder with a propane torch and a butter knife?"

3543. New STUFF - www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <kUSW5.45826$nh5.3295490@newsread1.prod.itd.earthlink.net>
Source record: 175222
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
Drop by and have a look at the all new 3D Art Gallery !!
These are brand new landscape images very suitable for
desktop wallpaper.

Downloadable IOTA list last update 04-Dec-2000

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
---------------------------
Downloadable IOTA List
Live DX Cluster Telnet Links
Online DX Logbook
http://www.ab7sl.com
```

3544. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <90guu8$148av$1@ID-52642.news.dfncis.de>
Source record: 175223

And...how are you getting along with those new tires, Cecil?

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A287BC7.A7ABC96F@IEEE.org...
> Wes Stewart wrote:
> > When I reconciled the monthly statement, I noted an extra $20 charge
with the
> > same merchant number and a transaction number one digit removed from the
gas
> > purchase.
>
> Someone charged a whole set of new tires to my credit card.
> --
> http://www.mindspring.com/~w6rca

3545. Re: FM Auction Details Finally Posted...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <ZcTW5.72$d5.613123@news.ntplx.net>
Source record: 175224

MonsterFM.com <engineering@MonsterFM.com> wrote:

> It's not really a conspiracy, per se. It's just that, with an
> $1,850.00 (mandatory) application fee and a $20,000.00 (as an example)
> UP-FRONT "minimum oening bid" to even be considered as a contender in
> the auction, PLUS the cash required for construction... I believe you
> can see, based on this, exactly why Mr. and Mrs. Average Citizen
> America have abdicated the throne of broadcast ownership and nearly
> every "possibly profitable" (as in "making the payments and financially
> solvent") property in the country is being bought up by what will soon
> be the "United States Broadcasting Company".

If the government lowered the fee to $1.00, the broadcasters would quickly up the ante to whatever the spectrum was worth, which would certainly be >$20,000.00.

> Licensed by the government, made possible by the government's extreme
financial
> manuvering and (most probably) heavily controlled by the government as
> a monopoly made possible by the government.

It is not being "made possible by the government." It is being made possible by the fact that only those who are in the broadcast business are willing to pay the money it takes to win the spectrum auction. It would be nice to buy a new car for $1.00, too, but "they" run the price up to the point where it takes real money to buy one (and to build it, too).

> This may not bother you but, there are some who feel it is NOT in the
> best interests of US citizens as our news media (and even our
> entertainment media) should NOT be "government controlled" any more
> than it should be controlled by some outside political faction.

This is not governement control, it is capitalism at work.

> And, by making it economically unviable for the average citizen to
consider
> the debt load of a broadcast property, the government IS making sure that
> we only see news, information and entertainment as presented by the
"chosen few"
> and, contrary to what you may believe, there IS an after effect on our
> population and, most importantly, on our children who've never known a
> true "free media".

What makes in economically unviable wrt broadcast licenses is that those that are in the broadcast business are willing to pay the money. If the minimum bid were $1.00, they would bid it up to the same level that it is now.

And, IMHO, the concept that we see only news, information and entertainment presented by the "chosen few" is preposterous. There are hundreds of newspapers in this country, perhaps more if you count all the newsletters and local rags. There are hundreds of local broadcast stations, both TV and radio. The internet has given even the more outlandish amongst us the opportunity to stand on our soapbox before millions of people. We have never been more free, or had more outlets of expression and information.

This is really off topic for rec.radio.amateur.antenna; perhaps we should take it to one of the broadcasting newsgroups. Please forgive my off-topic post; the Devil made me do it. :-)

73,
Ed Hare, W1RFI

3546. Antenna Question/Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20001204153511.19889.00002629@ng-ft1.aol.com>
Source record: 175225

I live in an antenna restricted area. I am thinking of putting up my 8' whip
to use on the hf bands. It seems that the group prefers ladder line and/or twin
lead for most feeds. Can I use this for a vertical? How would I feed it?
Would it be better to use rg58?

Please respond to redberdberd95@aol.com.

Randy

3547. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <3A2C0D00.77315CCF@agilent.com>
Source record: 175226

Thanks, guys. I will pay a visit to the Into the Wind web site and see what they can do for me in small quantities.

R,

Al W6LX

3548. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <90h3psmle1@nnrp1.deja.com>
Source record: 175227
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew

In article <qtRT5.2270$nh5.218077@newsread1.prod.itd.earthlink.net>,
"Charles Johnston" <ctj92@earthlink.net> wrote:
> About once a month I post the availability of this font that I had
> modified by a commercial font designer. It is a true slashed-zero
Andale
> Mono fixed-width font extremely suitable for DXBase 2000 / 2001 and
really
> any logging software. It's advantages are two-fold
>
> 1. It allows for easy discernment between O's and 0's with the
slashed zero
>
> 2. Because it is a fixed width font it provides perfectly aligned
columns in
> the DX cluster windows.
>
> Available as a 47K zip file download with installation
instructions.
> Last month there were over 230 downloads of this font.
> It is on the Software Download Page of my site directly beneath the
text
> that describes DXBase 2001. Enjoy.....it's FREE.
> --
>
> Charles Johnston
> charles@ab7sl.com
>

Much ado about nothing. ;-)

73, Hans, K0HB
--
Observation the morning after the contest:

"A computer lets you make more mistakes faster than
any invention in human history -- with the possible
exception of a quart of tequila and a borrowed
Vibroplex key." -K0HB

Sent via Deja.com http://www.deja.com/
Before you buy.

3549. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <hxUW5.4657$Ur5.498051@monger.newsread.com>
Source record: 175228

I used the old brown paper grocery bags cut to form sheets. Use Elmer's glue and at least an inch overlap on the joints

I used 1/2 inch thinwall conduit for the frame and bindertwine for the string around the frame. The thing was about 7 or 8 feet tall.

Careful and launch only in light winds and don't get caught in the string <:-)) A kite this size is usually more than one person can hold in anything over a light breeze.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Al Lorona" <al_lorona@agilent.com> wrote in message news:3A2BEC02.79B91CCD@agilent.com...
>
>
> Regarding that QST article describing the large kite used to suspend a
> vertical radiator, the Dupont Tyvek material used for the kite isn't
> sold (or needed, for that matter) in Southern California! I found it in
> a Home Depot on a business trip to Portland, but it was only sold in
> very large 100-foot rolls that were way expensive.
>
> What are folks in warm climates to do? What do the rest of you do when
> you only need ten feet of the stuff?
>
> R,
>
> Al W6LX

3550. Re: Darwin in action

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <NDUW5.4658$Ur5.499399@monger.newsread.com>
Source record: 175229

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:3A2BEC02.79B91CCD@agilent.com...
>
>
> Regarding that QST article describing the large kite used to suspend a
> vertical radiator, the Dupont Tyvek material used for the kite isn't
> sold (or needed, for that matter) in Southern California! I found it in
> a Home Depot on a business trip to Portland, but it was only sold in
> very large 100-foot rolls that were way expensive.

Most any larger hardware store sells it and other window covering material
that will work, but I still like the old large, brown paper grocery bags.

Roger (K8RI)
>
> What are folks in warm climates to do? What do the rest of you do when
> you only need ten feet of the stuff?
>
> R,
>
> Al W6LX

3551. B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Bill Hiscox K7WRH <hiscox@proaxis.com>
Message-ID: <90h59lomv1@hpcvnews.cv.hp.com>
Source record: 175230

Does anyone have experience to share with the B&W braodband folded dipole? Positive or negative? I am considering one for use primarily on 160/80m (but would use it on other bands as well.) I run only 100W with a IC737 (internal tuner).

Comments?

de K7WRH/AE

3552. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2C1954.F4D8CD9B@oio.net>
Source record: 175231

Dennis wrote:
>
> Will it work?

Yes, it ~can~ work, but it'll be terrible.
'Doc

3553. Re: Where to get QSL cards as gift

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2C19CD.A15107DB@oio.net>
Source record: 175232
Cross-posted to: alabama.birmingham.radio.amateur,alt.radio.amateur,alt.radio.amateur.club,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

AG wrote:
>
> My father is an avid ham radio operator. He recently passed an advanced
> license exam and I would like to get him either new QSL cards or a gift
> certificate for him to design his own for Christmas.
>
> Can anyone recommend a good QSL card dealer? US only please.
>
> Thanks!
>
> Lee

Lee,
Try "W4MPY", or "The Little Print Shop". Both can/will
be happy to tell you all about what they offer.
'Doc

3554. Re: power to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2C1D72.CB6E0D06@IEEE.org>
Source record: 175233

hasan schiers wrote:
> And...how are you getting along with those new tires, Cecil?

Unfortunately, someone else got the new tires. Mine are worn
out. Are you feeling charitable?
--
http://www.mindspring.com/~w6rca

3555. Re: True "slashed-zero" font available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2C1DC5.AFEADECD@IEEE.org>
Source record: 175234
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew

K0HB wrote:
> Much ado about nothing. ;-)

Are you saying that 'ï¿½' is nothing? :-)
--
http://www.mindspring.com/~w6rca

3556. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2C1E60.39A59437@IEEE.org>
Source record: 175235

'Doc wrote:
>
> Dennis wrote:
> > Will it work?
>
> Yes, it ~can~ work, but it'll be terrible.

Now wait just a minute! It wouldn't be terrible on 12m. :-)
--
http://www.mindspring.com/~w6rca

3557. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <uSEsOmV7t2Xf5IsBeeVld88rvUom@4ax.com>
Source record: 175236

"Bill Hiscox K7WRH" <hiscox@proaxis.com> wrote:

>Does anyone have experience to share with the B&W braodband folded dipole?
>Positive or negative? I am considering one for use primarily on 160/80m
>(but would use it on other bands as well.) I run only 100W with a IC737
>(internal tuner).
>
>Comments?
>
>de K7WRH/AE
>

It's been discussed a whole lot here. Do a Deja-News search for the antenna and you'll find plenty of long discussions on the antenna here. It was also reviewed by QST back in the early 80s, and if you join the ARRL, you can access that review at the ARRL members-only web site. Bottom line, the B&W more or less equals a dipole above 14 megacycles. Doesn't do too well at on the lower bands.

Bob
k5qwg

3558. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <t2oalgkjdd2v29@corp.supernews.com>
Source record: 175237

Go to www.cebik.com/radio.html and under the heading
"Practical Antenna Notes: Lower HF (Mainly) Horizontal Antennas"
you will find two articles on the T2FD antenna, and lots of
information. You can draw your own conclusion.

73,

John, K6QQ

3559. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Photo Museum <PhotoMuseum@hotmail.com>
Message-ID: <3A2C30E9.6281@hotmail.com>
Source record: 175238

Andy Dufresne wrote:
>
> Gordon West is the best I ever used.

I would also recommend the Gordon West books to anyone.

The ARRL book for the Advanced test I used in 1993 was a horror. It was presumptuous and condescending; useful only because the test questions were included. My feeling at the time was that the ARRL did not want anyone to pass the test.

I am unaware of a Gordon West League. How is it that our national amateur radio organization can not provide more helpful study material then a single individual?

In 1993 I wrote the ARRL asking that very question. I presume they are still drafting a reply.

Michael, N9OGC

3560. Re: No such thing, was: Where does reflected power go?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A2C3B9D.44F65DFD@uci.edu>
Source record: 175239

Rick Littlefield wrote:
>
> I can vouch for N1XIM's existance, but not for the voracity of his Physics.
> Anybody comment on that?
>
> Rick K1BQT

The physics experiment he described demonstrates that wavelength is a function of the medium it traverses (the propagation velocity is different for each of the two ropes), and also that a reflection occurs at the boundary and again at the termination - in this case, a short circuit analogy. A sliding ring termination could be used instead of a doorknob to demonstrate the open circuit analogy.

jim ac6xg

3561. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2C3F7F.55B0B2DD@dvol.com>
Source record: 175240

Bill Hiscox K7WRH wrote:

> Does anyone have experience to share with the B&W braodband folded dipole?
> Positive or negative? I am considering one for use primarily on 160/80m
> (but would use it on other bands as well.) I run only 100W with a IC737
> (internal tuner).
>
> Comments?

>
Somebody around here once quipped that it has about 3dBdl gain over a dummy
load (the dBdl being defined as the gain over an isotropic Heath Cantenna).
>

>
> de K7WRH/AE

>
w3rv

3562. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2C4195.732D3480@dvol.com>
Source record: 175241

Cecil wrote:

> Brian Kelly wrote:
> > MFJ has a widget called an "artificial ground", which might be useful
> > for tweaking out stray RF.
>
> Actually an artificial ground might make the problem worse because the
> artificial ground wire carries common mode RF currents.
>
> I haven't been following this thread. Has anyone suggested choking the
> feedline? Seems common mode currents may be the rest of the problem.

>
Yes, several times, the old second floor shack problem, no decent RF ground
in sight 'cept maybe a counterpoise. He's flooding his neighbor's consumer
electronics crap with RF, "not his problem". Yeah; right.
>

>
> --
> http://www.mindspring.com/~w6rca

>
w3rv

3563. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2C7173.D1C7E09C@oio.net>
Source record: 175242

Dennis Edey wrote:
>
> Hello fellas,just finished assembling a new R 8. stood it up,and put the MFJ
> 259 on to have a look,got no reaction,like a short,
> something to do with the matching box maybe ??
> any ideas,will revisit the antenna tomorrow,just looking for any tips and
> tricks,
> Kind Regards Dennis Vk4sx.

Dennis,
I'd recheck the connections on the R-8. The '259 should work
fine with the R-8.
'Doc

3564. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2C7334.DCEBF0A8@oio.net>
Source record: 175243

Bill Hiscox K7WRH wrote:
>
> Does anyone have experience to share with the B&W braodband folded dipole?
> Positive or negative? I am considering one for use primarily on 160/80m
> (but would use it on other bands as well.) I run only 100W with a IC737
> (internal tuner).
>
> Comments?
>
> de K7WRH/AE

Bill,
Save yourself a lot of time/effort/money, don't bother with
either of the B&W antennas. Been there, done that, wore the
"T"-shirt out! Seriously, don't waste your money.
'Doc

3565. Re: Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <3A2C652F.479CA4D0@tpi.net>
Source record: 175244

Curtis,
We (Elk Antennas) make a small (24 inch boom length, 5 elements) 2M log periodic antenna that should improve your situation. It also works well on the 440 band, but we also make a 440 log (21 1/2 inch boom length, 7 elements) that many people use in apartments and homes where they are not allowed to put up outside antennas.
If interested, e-mail me and I'll send performance data and photos.

Happy holidays and best wishes from ray, w6fya for Elk Antennas

Curtis Bidulock wrote:

> I am hoping that someone out there can answer this question for me. I am
> currently running a VHF/UHF mobile antenna mounted on my balcony and am
> getting approx. 35-50 mile range. I would like to extend that range. I
> unfortunately do not have access to the roof to mount an antenna. I have
> heard people recommending the crushcraft AR270 for its height and quality.
> Will this give me a large improvement over my mobile antenna ? My mobile is
> just fastened to the balcony using a lip mount. Also another recommendation
> I have heard of is to add a pre-amp to improve the reception of those far
> off signals. Any other recommendations or proven solutions are welcomed and
> thank-you ahead of time.
>
> --
> Curtis Bidulock
> mailto:bidulock@powersurfr.com
> http://www.bidulock.com
> Amateur Radio Station VE6-AEW

3566. Comet, Larsen or Diamond for moble?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: tjp <tjp@pobox.com>
Message-ID: <p6jm2ts8icgpqnkk5pa4eed1v5q5srch1r@4ax.com>
Source record: 175403

Are all of these brands pretty much equal?

3567. Re: Looking for recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <3A2B4DD0.3D0CD624@amsat.org>
Source record: 175404
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Damnitt!!! I just GOTTA learn how to type!
Jim

3568. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A2B88F9.5714@wt.net>
Source record: 175405

Colin Marks wrote:
>
> I need to install new feedline about 70 feet long for my 20m antenna. No
> other band will be in use. . Leaving myself a large margin for error , I
> would like to feel it could safely handle 800 watts CW or about 700 SSB. (I
> normally run much less - legal limit here for SSB is 400 watts PEP). I am
> not worried about possible power loss. My concern is the power limitations
> of RG58 without causing damage or deterioration to the cable.
> I have previously used RG58 for part of my feedline for many years under
> similar operating conditions with no problems but this installation will be
> the whole feedline.
> I prefer to avoid RG213 or similar heavy-duty co-ax because of high-cost
> and rigid stiffness to work with.
> Any comments?
>
> Colin VK2LV Sydney

As long as you have a good match to the antenna rg-58 will handle 400
watts no problem. If you were under 2:1 "IE dipole etc" you could
probably run twice that much on 20m. 213 will have a bit less loss. Not
drastic on 20m though. MK
--
http://web.wt.net/~nm5k

3569. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001204075749.28445.00003274@ng-cr1.aol.com>
Source record: 175406

>From: "Peter O. Brackett"

>I always thought that it was your call letters that got you "that job", heh,
>heh.

Actually, it was the other way around. I was KA1CV when I was hired by ARRL HQ. After a few years, I started my RFI thing, and, when the vanity program came along, at first I poo-pooed the idea. Then one day, I jokingly said that the only call I would consider getting would be W1RFI. Then I realized I really WOULD consider it. Still, I vacillated. Then, I asked myself, which I would regret more when I retired, giving up KA1CV, or not getting W1RFI when I had the chance. The Extra window was open, so I sent in the app, with one callsign on the list. I got it. :-)

73,
Ed Hare, W1RFI

3570. Re: 10M Fractal Quad Yagi : EU Run

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001204075841.28445.00003275@ng-cr1.aol.com>
Source record: 175407

>From: "Peter O. Brackett"

>Chip is not from the South, I wish to correct his grammer here, it's y'all,
>not ya'll. What?!!!

Chip is from the North, so he should be using the Yankee equivalent -- youze
guys. :-)

73,
Ed Hare, W1RFI

3571. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2BA74E.E524BCFB@IEEE.org>
Source record: 175408
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Gord Beaman wrote:
> ...if you use the apostrophe you're indicating that something (which
> you haven't named) belongs to the '73'.

This is a common myth. The apostrophe indicates more than possessive case.
From Webster's: "apostrophe - a mark ' used to indicate the omission of
letters or figures, the possessive case, OR THE PLURAL OF LETTERS OR
FIGURES." (emphasis mine) "Figures" in this case means numbers.

So if someone wants to pluralize 73, it would be 73's.
--
http://www.mindspring.com/~w6rca

3572. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Andy Dufresne <andydufresne@innocent.com>
Message-ID: <up4m2t402get8frmiqogsb6c52vff73urg@4ax.com>
Source record: 175409

Gordon West is the best I ever used.

On Wed, 22 Nov 2000 15:00:27 -0800, "Tweak" <mazhar@nmt.edu> wrote:

>Can anyone recommend books to study for the Amateur Extra exam. I'm a
>complete newbie, and I want to start with this certification. I did see a
>book from ARRL that preps for the extra exam but I don't know if it requires
>knowledge from previous certifications.
>
>Thanks.
>

3573. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2BA8B8.3AFADFFD@IEEE.org>
Source record: 175410

Brian Kelly wrote:
> MFJ has a widget called an "artificial ground", which might be useful
> for tweaking out stray RF.

Actually an artificial ground might make the problem worse because the
artificial ground wire carries common mode RF currents.

I haven't been following this thread. Has anyone suggested choking the
feedline? Seems common mode currents may be the rest of the problem.
--
http://www.mindspring.com/~w6rca

3574. Where to get QSL cards as gift

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: AG <germain@scr.siemens.com>
Message-ID: <UbOW5.3809$SI.196903@iad-read.news.verio.net>
Source record: 175411
Cross-posted to: alabama.birmingham.radio.amateur,alt.radio.amateur,alt.radio.amateur.club,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

My father is an avid ham radio operator. He recently passed an advanced license exam and I would like to get him either new QSL cards or a gift certificate for him to design his own for Christmas.

Can anyone recommend a good QSL card dealer? US only please.

Thanks!

Lee

3575. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a2bb5e2.41623818@news.akorn.net>
Source record: 175412

Hi All,

One thing you have to remember is with fixed antennas you need to be able to rotate phase in the phase shifting unit at least 360 degrees to get a null in every possible case. At the same, amplitude (gain or loss) should be stable and fully adjustable.

Most units do a poor job of this, including the Timewave. The MFJ unit is by far superior to all other units on the market. It has less than a few dB ripple as phase is adjusted, and allows phase to be rotated almost 360 degrees.

To save you a little homebrewing time, I looked at this site:

>of Man. A good summary with some QST and CQ magazine references and a
>homebrew design can be found at: http://207.108.137.61/n5ar/n5ar.htm

The noise canceller in figure 2 won't hardly shift phase. The phase control will change amplitude from zero to maximum, and at the zero crossing point phase will flip abbruptly 180 degrees. It looks like the DeMaw phasing unit, which has a similar action.

The slight phase shift you can get is due to changing load impedance on the small capacitors by the transformer. That shift is a few degrees at best, and so what you have is basically an abbrupt phase-flip.

The unit in figure 3 can only shift phase 0-90 degrees.

The unit in figure 4 is a mess. On some frequencies, it should shift phase pretty well...but it will be amplitude and frequency sensitive.

I use several phasing units here, not to cancel noise but to steer nulls and lobes on large receiving arrays. My design is similar to the MFJ unit's design. I can rotate phase 360 degrees with less than 1dB of amplitude shift with that system, so I can null any unwanted signal from any direction.

Most of the stuff in articles just doesn't work well, or at all.

73 Tom

3576. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: john derrico <johnd@cts.analog.com>
Message-ID: <3A2BB9DE.BF4B4A3F@cts.analog.com>
Source record: 175413

Here's a link that might help a little bit. Hope it helps

http://www.arrl.org/tis/info/rfigen.html

"hatzakis@u.washington.edu" wrote:

> I have a problem with RFI with a new dipole and looking for some
> suggestions.
>
> 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> long and radio (IC-735) on a second floor office with a large solid
> ground wire directly to two 5 foot ground rods in a moist seattle soil.
>
> My RF audio is getting into everything electronic between my house and
> the neighbors. I have a band pass filter, but this seems more like my
> signal is getting rectified in the audio section of my stereo receivers
> and my neighbors.
>
> Any ideas on how to get this under control?
>
> Thanks, Michael K3MH
>
> (echo to my e-mail, if possible, m_hatz@yahoo.com)

3577. Re: FM Auction Details Finally Posted...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <S_OW5.69$d5.602528@news.ntplx.net>
Source record: 175414

MonsterFM.com <engineering@MonsterFM.com> wrote:

> Unfortunately, I'm sure that you'll soon realize (by looking at the
"Minimum Opening
> Bid" and "Upfront Payment" amounts) that this is just another way that our
beloved
> government is making absolutely sure that each and every citizen can
afford to reach
> into their pocket and compete with the "big-boys".

If the allocations are not worth what those minimum bids are, no one will bid. If they are worth it, even if the minimum bid was $1.00, the bidding would very soon be up to that level, so the net effect would be the same.

I don't see any consipiracy here.

73,
Ed Hare, W1RFI

3578. Re: Pi Tank matching network for any PA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90gestmfr1@uranium.btinternet.com>
Source record: 175415

Ian, you misquote me.

I checked the accuracy of a *Table* of L & C values - not a formula.

The Pi-match L & C table is in the 1992 edition of the ARRL Handbook and was donated by a ham. Some of the entries in the table are 10% in error but are quite accurate enough for their intended purpose. I was not complaining - just a reminder that radio amateur publications are not infallible bibles to be religiously quoted from.

If your Excel spread sheet (I was unaware of its existence) ignores the intrinsic Q of the inductors then it must be less accurate than program Pi_Tank which takes it fully into account when calculating the network Q.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Ian White, G3SEK wrote
> For an alternative approach, anyone with access to Excel can download a
> spreadsheet from my website which implements the ARRL formulae for
> designing both Pi- and Pi-L networks.
>
> It doesn't have some of the bells and whistles of Reg's program, but has
> a few extras of its own, including:
>
> * Both Pi- and Pi-L networks calculated from the same input data
> * A number of different ways to estimate the anode load impedance
> * Allowances for stray inductances and capacitances
> * Allowance for parasitic suppressors
> * Calculation of VHF parasitic frequency (if you click "Enable macros"
> when the spreadsheet loads)
>
> Being a spreadsheet, the "What if?" feature is built-in,

and the
> formulae and internal workings are there for all to see.
>
> What really prompted me to mention this is Reg's statement
about
> agreement with the Handbook formulae within 10% or better.
> The network design formulae in all recent ARRL handbooks
(since 1995)
> give *exactly* accurate impedance transformations - as
determined by
> reverse analysis - if you ignore the unloaded Q of the
coil.
>
> Earlier Handbooks contained formulae which became
progressively more
> inaccurate with decreasing loaded Q. They were tolerable
for output
> tanks, but useless for cathode input circuits with a
design loaded Q of
> 2-3.
>
> For the record, which Handbook formulae did you compare
against, Reg?
> Do you get exact agreement if the coil Q is infinite?

3579. A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Dennis <dennis1449@dcwis.com>
Message-ID: <B6511B4D.C88E%dennis1449@dcwis.com>
Source record: 175416

Will it work?

3580. Re: Hy-Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a2be34a.0@oracle.zianet.com>
Source record: 175417

Hy-Tower has been found & purchased. Thanks...

Ed

"Ed Juge/NM" <ed_juge@zianet.com> wrote in message
news:3a14a155.0@oracle.zianet.com...
> I think I am interested in finding another used (or new) Hy-Gain Hy-Tower
> (18HT) to phase with the one I have. All metal fittings must be included
> and antenna in good condition. Please EMAIL me with price, condition,
> location.
>
> Thanks... Ed, W5EJ
>
>

3581. Re: FM Auction Details Finally Posted...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:00:00 UTC
From: "MonsterFM.com" <engineering@MonsterFM.com>
Message-ID: <90gr44emk1@nnrp1.deja.com>
Source record: 175418

In article <S_OW5.69$d5.602528@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:

> If the allocations are not worth what those minimum bids are, no one
will
> bid. If they are worth it, even if the minimum bid was $1.00, the
bidding
> would very soon be up to that level, so the net effect would be the
same.
>
> I don't see any consipiracy here.
>

It's not really a conspiracy, per se. It's just that, with an
$1,850.00 (mandatory) application fee and a $20,000.00 (as an example)
UP-FRONT "minimum oening bid" to even be considered as a contender in
the auction, PLUS the cash required for construction... I believe you
can see, based on this, exactly why Mr. and Mrs. Average Citizen
America have abdicated the throne of broadcast ownership and nearly
every "possibly profitable" (as in "making the payments and financially
solvent") property in the country is being bought up by what will soon
be the "United States Broadcasting Company". Licensed by the
government, made possible by the government's extreme financial
manuvering and (most probably) heavily controlled by the government as
a monopoly made possible by the government.
This may not bother you but, there are some who feel it is NOT in the
best interests of US citizens as our news media (and even our
entertainment media) should NOT be "government controlled" any more
than it should be controlled by some outside political faction.
Some of us prefer "truth" to "propaganda" (which our government is
just as prone to dish out as any other). And, by making it economically
unviable for the average citizen to consider the debt load of a
broadcast property, the government IS making sure that we only see
news, information and entertainment as presented by the "chosen few"
and, contrary to what you may believe, there IS an after effect on our
population and, most importantly, on our children who've never known a
true "free media". (As an example, look at the results of the Florida
newsmedia "jumping the gun" while covering this years presidential
election... It DOES make a difference!)
--
Terry Keith Hammond
President/Technical Director

Broadcast Services
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Mount Vernon, Texas 75457

http://MonsterFM.com

(903) 562-1978

The radio business is a cruel and shallow money trench, a long plastic
hallway where thieves and pimps run free, and
good men die like dogs.
There's also a negative side."
- Hunter S. Thompson

Sent via Deja.com http://www.deja.com/
Before you buy.

3582. Re: Pi Tank matching network for any PA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 00:43:56 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <2nc$FYBMjuK6EwEu@ifwtech.plus.net>
Source record: 175401

Reg Edwards wrote:
>Dear NewsGroup Readers,
>
>Now available for the use and entertainment of armchair PA
>linear designers. To professionals and amateurs alike, all
>at the same ridiculous low price.
>
>******** Program PI_TANK.exe ********
>
>Input data : Frequency, RF power output, peak RF plate
>volts, external load resistance, phase shift through
>network, Q of coil.
>
>Output data : Values of C1, C2 and L, reactances of C1 and
>C2, resistance of plate load, efficiency, watts lost in
>coil, network Q, Bandwidths at the 1dB and 3dB points,
>network rejection in dB of 2nd, 3rd and 4th harmonics.
>
>Usual facilities available for sweeping input data over wide
>ranges in fine increments.
>
>Will unbelievers please note that the internal resistance of
>the PA device is not needed.
>
>Program PI_TANK proves that the ARRL Handbook table of C1,
>C2, L values for PA pi-match networks are accurate to within
>+/- 10% or better.
>
>Fully tested before issue. No beta testing in this house.
>
>Only 44 Kilobytes. Download PI_TANK in a few seconds from
>website below. Run immediately.
>--
>**********************************
>Regards from Reg, G4FGQ
>For free radio modelling software go to:
>http://www.btinternet.com/~g4fgq.regp
>
>**********************************
>
>
For an alternative approach, anyone with access to Excel can download a
spreadsheet from my website which implements the ARRL formulae for
designing both Pi- and Pi-L networks.

It doesn't have some of the bells and whistles of Reg's program, but has a few extras of its own, including:

* Both Pi- and Pi-L networks calculated from the same input data
* A number of different ways to estimate the anode load impedance
* Allowances for stray inductances and capacitances
* Allowance for parasitic suppressors
* Calculation of VHF parasitic frequency (if you click "Enable macros" when the spreadsheet loads)

Being a spreadsheet, the "What if?" feature is built-in, and the formulae and internal workings are there for all to see.

What really prompted me to mention this is Reg's statement about agreement with the Handbook formulae within 10% or better.
The network design formulae in all recent ARRL handbooks (since 1995) give *exactly* accurate impedance transformations - as determined by reverse analysis - if you ignore the unloaded Q of the coil.

Earlier Handbooks contained formulae which became progressively more inaccurate with decreasing loaded Q. They were tolerable for output tanks, but useless for cathode input circuits with a design loaded Q of 2-3.

For the record, which Handbook formulae did you compare against, Reg?
Do you get exact agreement if the coil Q is infinite?

(I'll download the program tomorrow.. right now my eyes are crossing.)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3583. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 01:15:48 UTC
From: n2ey@aol.com
Message-ID: <20001203201548.09052.00001692@nso-ck.aol.com>
Source record: 175390

In article <3A29F61C.4BD610E0@u.washington.edu>, "hatzakis@u.washington.edu"
<hatzakis@u.washington.edu> writes:

>I have a problem with RFI with a new dipole and looking for some
>suggestions.
>
>20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
>by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
>long and radio (IC-735) on a second floor office with a large solid
>ground wire directly to two 5 foot ground rods in a moist seattle soil.

Sounds pretty good so far, Mike.
>
>My RF audio is getting into everything electronic between my house and
>the neighbors. I have a band pass filter, but this seems more like my
>signal is getting rectified in the audio section of my stereo receivers
>and my neighbors.

Quite possible - in which case nothing you do at the transmitter will make much
difference.

The ground wire ideas suggested by Colin and Doc are good ones. But the
affected devices probably need help, too. One thing to do is to "toroid" all of
the speaker wires and audio cables, and try changing their length if practical.
Power cables should get this treatment too - the house wiring may be hot with
RF. Sometimes the cables are exactly the right length to be resonant in the ham
bands.

Sometimes replacing the audio cables with homemade ones of real coax helps,
because the manufactured ones are often not well shielded for RF.

Hope all is well! You are definitely missed here in Delco.

73 de Jim, N2EY
>
>Any ideas on how to get this under control?
>

3584. Re: RG-58 co-ax cable v. RG213?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 01:15:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90er0u$t3e$1@uranium.btinternet.com>
Source record: 175389

COAX TYPE RG-58

At 10 MHz : -

1.23 dB per 100 feet (per 30 metres).

300 watts continuous through power.

SWR = 1.5

Ambient temperature = 20C

In still air.

Sheath temperature rises to 45C which is quite hot.

At 30 MHz sheath temperature will rise to about 65C at which higher temperature long term effects might cause sheath to harden and crack, let in water, although polyethlylene would remain undamaged.

On a still, hot, midsummer heatwave, in direct sunlight, the sheath temeperature could rise another 20 or 25C. The inner conductor would be even hotter. The polyethylene would soften and immediate failure could ensue.

But shift your QTH to the Antarctic and with 300 watts at 30 MHz with an SWR of 1.5 to 1 you would be OK.

Alternatively, confine your transmissions to the 160 metre band, keep off FM, and you could go up to 500 watts for short periods.

Its an interesting thought that at 50 Hz and 230 volts, RG-58 would carry 3 Kwatts without any appreciable rise in temperature.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
>

3585. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 02:19:41 UTC
From: John Kennedy <jkenned1@rochester.rr.com>
Message-ID: <1bDW5.365332$JS3.54050121@typhoon.nyroc.rr.com>
Source record: 175391

Do you have a choke in the feedline?
make a coil of the feedline as close to the feedpoint as possible. 5 or 6 turns about 6inches in diam.
This may help. Also make a resonant line to attach to the antenna connection, This will help to compansate for inadequate rf ground (rf ground is not the same as ground ground)
ARRL has several good books on the subject. Try the Radio bookstore they have a website
John

3586. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 03:51:24 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a2b135d.8749278@news1.pei.sympatico.ca>
Source record: 175392
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Cecil <Cecil.A.Moore@IEEE.org> wrote:
--cut--
>
>It certainly depends on frequency. Big problem on 160m. No problem at
>all on 70cm.

Of course, but if you plan to operate at 160M using a magmount then you got one helluva lot more problems than worrying about coupling to the counterpoise!!...like maybe getting clearance from the FAA/IC for the Airways Clearances you'll need!. :)

>--
>http://www.mindspring.com/~w6rca

--
Gord Beaman
PEI Canada.

3587. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 03:51:28 UTC
From: gbeaman@pei.sympatico.ca
Message-ID: <3a2b11fe.8397993@news1.pei.sympatico.ca>
Source record: 175393
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark <rwclark@rwclark.seanet.com> wrote:
--cut--

>>
>>Hey, there'd be very little difference (at VHF) between a direct mechanical
>>connection and a 300pf or so capacitor. ~300 pf is for sure a dead short at VHF.
>>
>
>Hi Gord,
>
>My mobile installations (we are talking about mag mounts typically in
>a mobile situation, are we not? Aside from the original question that
>is.) usually have at least 6 to 10 feet of coax running in very close
>proximity to the sheet metal of the chassis (certainly for the extent
>under the carpet for my rigs). Using RG-58, this presents a surface
>area of some 30 odd square inches located roughly .05 inch from the
>other plate presented by the sheet metal. By my rough calculations
>this presents about the same 300 pf as your offer of the mag mount.
>

As I see it, after the coax enters the vehicle then it's no longer coupling to the counterpoise, therefore there's only a couple of feet that's lying on the counterpoise and is capable of doing any coupling at all. I'd judge that if you didn't have the RF coupling as close as you do (by the magnet) then you'd have some swr introduced because you don't have the coupling close enough to the base of your radiator, also the coupling will be unstable because of wind movement of the coax on the car roof.

>If the mag mount's 300 pf is a dead short, then this must be in
>parallel with an already established dead short from the coax feeding
>it.

But imo the couple of feet of RG-58 lying loosely on the roof is, although in parallel with the magnet's capacitance, much much less that it's capacitance so for all practical purposes won't matter.

>The mag mount thus appears to be redundant and not a very notable
>distinction. Reductio ad absurdum would lead us to believe that aside
>from the grip of the magnet, there is no other benefit and if we could
>conspire to hold an antenna without it, it would be completely
>unnecessary.

I don't agree at all...

>However, this is not my logic and experience indicates
>otherwise.
>

Mine doesn't...

>Again, to the general board: The logic of the arguments presented so
>far still far short of actually explaining the mechanics (much less
>the circuitry) and why the lack of benefit when compared to a direct
>connection.

Cripes, there's almost no mechanics involved here at all...gee... The magnet merely holds the bloody antenna on the roof and acts as a capacitive coupling to the counterpoise. How could it be simpler?. The 'benefit' is (clearly) no requirement for drilling holes in your new shiny car, as well as avoidance of pissing the little woman off.

>I still see discussion arranged around capacitors with
>dissipation factor unknown and dismissed simply for that reason.
>

Say what?...

Who cares what the 'dissipation factors' are?...this is an overkill DEAD SHORT so who cares what the dissipation is?...I seriously doubt that you'll heat up that great hunk of iron stuck onto your metal roof.

>73's
>Richard Clark, KB7QHC

Richard, 73 means 'best regards', when you say '73s' you're saying 'best regardses'...if you use the apostrophe you're indicating that something (which you haven't named) belongs to the '73'. If you don't believe me then check with an English teacher. Experienced hams don't use _73s_ much less _73's_ :)

Gord VE1EO.

--
Gord Beaman
PEI Canada.

3588. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 04:31:42 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A2B1D73.119CAE9C@earthlink.net>
Source record: 175394

There's a chance you may still have some RF on your coax shield.

(A balun should have reduced this, so you might have a problem there, maybe withthrouting of your coax. You might check to make sure the shield and cetner conductor are still conected adn tehre's no stress on t4eh coax, and that both halves of eh dipole are connected.).

If you STILL have RF in teh house, try coiling up about 8 feet of your coax in a coil about a foot across, taped so the turns don't come apart. This should act as a choke for any remaining RF that your balun is not decoupling from the coax shield.

Cortland

"hatzakis@u.washington.edu" wrote:

> Colin and Doc,
>
> Thanks, I tried it and the RFI is certainly a bit better now, but still there.
> Would you ground then to the outlet ground then? With these new (<15yr)
> hourses, the grounds arent the most solid with all the plastic piping used these
> days.
>
> Any suggestions on further reducing RFI? Does the quality of the shielding of
> the coax make much difference? I also have a 1/2 KW amp which kick up the RFI
> as well.
>
> Again, thanks for your help.
>
> Colin Marks wrote:
>
> > I think the advice from Doc is worth a try. I operated in a similar location
> > to yours and with a 20m dipole with centre balun for several years without
> > an earth for the same reasons given by Doc. I never had any problems so far
> > as my equipment was concerned and minimal RFI. I hope you might be so lucky!
> > 73
> > Colin VK2LV Sydney
> > <hatzakis@u.washington.edu> wrote in message
> > news:3A29F61C.4BD610E0@u.washington.edu...
> > > I have a problem with RFI with a new dipole and looking for some
> > > suggestions.
> > >
> > > 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
> > > by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
> > > long and radio (IC-735) on a second floor office with a large solid
> > > ground wire directly to two 5 foot ground rods in a moist seattle soil.
> > >

> > > My RF audio is getting into everything electronic between my house and
> > > the neighbors. I have a band pass filter, but this seems more like my
> > > signal is getting rectified in the audio section of my stereo receivers
> > > and my neighbors.
> > >
> > > Any ideas on how to get this under control?
> > >
> > > Thanks, Michael K3MH
> > >
> > > (echo to my e-mail, if possible, m_hatz@yahoo.com)
> > >
> > >
> > >

3589. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 05:09:18 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <90f8sk$1n3o$1@news.gate.net>
Source record: 175395

Bill....irrelevant at this point...that was about 15 years ago and the
bottom line is it worked liked a charm for whatever reason.

73,
David,K4ZZR

> >Michael...several years ago, my shack was in a room over the unattached
> >garage outside my home up about 10'. Getting a good RF ground was a
real
> >challenge. I bought some 12" copper flashing (used on roofs) from the
local
> >lumber yard and ran it from the station down to three copper rods below.
> >All of my RF feedback and hot microphone problems went away.
> ----------
>
> I'm glad you fixed your problem, but you still don't have an RF
> "ground". You have a piece of copper flashing 10 feet long running TO
> an RF ground. If you measure across the ten foot piece while
> transmitting, you will find a voltage drop across it, and where you
> have a voltage drop, you do NOT have a ground.
>
> Just be glad it works. :-)
>
> 73, Bill W7TI

3590. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 05:09:32 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <90f8uc$3qe$8@bashir.peak.org>
Source record: 175397

hatzakis@u.washington.edu <hatzakis@u.washington.edu> wrote:

: 20 meter dipole well tuned, <1.5:1 SWR, new balun up 40 feet suspended
: by steel poles. 50 ohm decent quality feed line (RG-8X) approx 60 feet
: long and radio (IC-735) on a second floor office with a large solid
: ground wire directly to two 5 foot ground rods in a moist seattle soil.

: My RF audio is getting into everything electronic between my house and
: the neighbors. I have a band pass filter, but this seems more like my
: signal is getting rectified in the audio section of my stereo receivers
: and my neighbors.

I suspect that your problem is that long "rf ground" run from the second
floor. It will be anything BUT an rf ground on 40 meters. Try using an
rf counterpoise instead of the physical earth ground.

: Any ideas on how to get this under control?

Moving the rig to the ground floor would help. Using wide copper flashing
for that ground "wire" would help some - it would greatly reduce the
impedance.

--
Bill Nelson (billn@peak.org)

3591. For sale - 80 meters Kit Antena

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 05:12:03 UTC
From: Rui Nascimento <rui.nascimento@netvisao.pt>
Message-ID: <975906734.327183@news>
Source record: 175396

I have one kit for the Cushcraft R7000 vertical antena, a Kit for 80mts.

3592. Re: Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 05:12:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <90f93b$3qe$9@bashir.peak.org>
Source record: 175398

Curtis Bidulock <bidulock@hotmail.com> wrote:
: I am hoping that someone out there can answer this question for me. I am
: currently running a VHF/UHF mobile antenna mounted on my balcony and am
: getting approx. 35-50 mile range. I would like to extend that range. I
: unfortunately do not have access to the roof to mount an antenna. I have
: heard people recommending the crushcraft AR270 for its height and quality.
: Will this give me a large improvement over my mobile antenna ? My mobile is
: just fastened to the balcony using a lip mount. Also another recommendation
: I have heard of is to add a pre-amp to improve the reception of those far
: off signals. Any other recommendations or proven solutions are welcomed and
: thank-you ahead of time.

I doubt if you will get much more range - even if you put the antenna on
a 100 foot tower. You are pushing line-of-sight (including defraction
effects) already.

--
Bill Nelson (billn@peak.org)

3593. Re: Dipole Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 06:39:50 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2B3C35.55597F92@dvol.com>
Source record: 175399

'Doc wrote:

> What you might do is to use a counterpoise for a ground.
> run it along the base-boards, across the floor, etc. If it
> helps, then you can try hidding it. You want to make the
> counterpoise out of insulated wire. It developes a high
> voltage at the end, so be sure to insulate the end of the
> counterpoise.

>
MFJ has a widget called an "artificial ground", which might be useful
for tweaking out stray RF.
>

>
> The amplifier is going to make everything worse, but if
> done correctly, the counterpoise should handle it too.
> Good luck...
> 'Doc

>
w3rv

3594. Re: Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 07:01:10 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2B4136.4C4BAC4C@dvol.com>
Source record: 175400

Curtis Bidulock wrote:

> I am hoping that someone out there can answer this question for me. I am
> currently running a VHF/UHF mobile antenna mounted on my balcony and am
> getting approx. 35-50 mile range. I would like to extend that range. I
> unfortunately do not have access to the roof to mount an antenna. I have
> heard people recommending the crushcraft AR270

>
Is that the Ringo Ranger? Great antenna.
>

> for its height and quality.
> Will this give me a large improvement over my mobile antenna ? My mobile is
> just fastened to the balcony using a lip mount. Also another recommendation
> I have heard of is to add a pre-amp to improve the reception of those far
> off signals. Any other recommendations or proven solutions are welcomed and
> thank-you ahead of time.

>
Height is everything on vhf. Mount any decent gain antenna atop a ten foot
Radio Slack TV mast, tilt the whole structure away from the building enough to
clear the balcony above yours and clamp it in place. Bend the TV mast if
necessary. More distance away from the balcony above if it has a metal fence is
better.
>--

> Curtis Bidulock
>

>
w3rv

3595. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-04 07:37:43 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2B49C7.21E7E059@dvol.com>
Source record: 175402

Bill Turner wrote:

>
> Can you cite any cases where 50 watts of 2M/440 energy has actually
> done a "world of hurt" to anyone? Names, dates and places? Or is
> this just urban legend?

>
EPA political correctness never mind the lack of data.
>

>
> 73, Bill W7TI

>
w3rv

3596. Re: New STUFF - www.k7on.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.14964aee5e650129896d7@news.earthlink.net>
Source record: 175249
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <kUSW5.45826$nh5.3295490@newsread1.prod.itd.earthlink.net>,
ctj92@earthlink.net says...
> Drop by and have a look
> http://www.k7on.com

--
http://www.k7on.com/
--

3597. Re: www.untenna.com - any owners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Brew99 <bruce-icq@home.com>
Message-ID: <oi%W5.30027$3j.3819828@news1.gvcl1.bc.home.com>
Source record: 175250

We are currently evaluating a CR109ARD model at 46 MHz. The manufacturer says they are vertically polarized, omni-directional, and provide much better efficiency than a rubber duck. We will be doing range tests on this model at the end of the week, and preliminary field strength probing indicates a large null (approx. 40 degrees), but this may be site/installation specific.

I can tell you one thing though, it seems to stay tuned at various ambient surrounding air temperatures, where the rubber duck would fall out of tune with a temperature increase (i.e. from 25 celsius to 60 celsius). This can be attributed to the larger radiating element, where the rubber duck has the fine wire..

Cheers,
Bruce

"Carl Gibbs" <cgibbs@gcfn.org> wrote in message
news:90evp1$qr8$1@acme.gcfn.org...
>
> Just wondering if anyone out there has purchased the antennas offered
> by this company out of Western New York....?
>
> Comments, input, advice?
>
> I'm looking for future reference regarding purchase of this type.
>
> Thanks for anyone that knows something about them.
>
> 73s
> KC8KQL
>
> --
> C. W. Gibbs <cgibbs@gcfn.org>
> ----------- "Laziness Breeds Efficiency" -------------
>
> Psalm 119:112 also at <KC8KQL@juno.com>

3598. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Neil King <va7dx@rac.ca>
Message-ID: <3A2CA907.AD7B787B@rac.ca>
Source record: 175251

Dennis,

I used my MFJ259 on my R8 this weekend and it worked fine on all bands. Checked the SWR again with the meter on my FT1000MP a little later and it showed much the same as the 259 did.

Neil
VA7DX

Dennis Edey wrote:

> Hello fellas,just finished assembling a new R 8. stood it up,and put the MFJ
> 259 on to have a look,got no reaction,like a short,
> something to do with the matching box maybe ??
> any ideas,will revisit the antenna tomorrow,just looking for any tips and
> tricks,
> Kind Regards Dennis Vk4sx.

3599. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2CADE0.5378C18C@oio.net>
Source record: 175252

```
Cecil wrote:
>
> 'Doc wrote:
> >
> > Dennis wrote:
> > > Will it work?
> >
> > Yes, it ~can~ work, but it'll be terrible.
>
> Now wait just a minute! It wouldn't be terrible on 12m. :-)
> --
> http://www.mindspring.com/~w6rca

Or on 10 meters, but... He said 10-80 meters. It
would be terrible on more bands than it would work on.
Right?
'Doc
```

3600. FS:L@@K Equipment for sale in time for Holidays!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: David <kb9lpk@telocity.com>
Message-ID: <3A2CB2E2.F8B1473A@telocity.com>
Source record: 175253

Happy Holidays

please visit

http://kb9lpk-2.ampr.org/sale.html

Thanks for reading this message!
--

73 de David--kb9lpk <><

The Box said "Win95,Win98,NT40 Win2000 or better" So I installed Linux

email- kb9lpk@telocity.com
Ham email- kb9lpk@kb9lpk.ampr.org
Homepage- http://members.telocity.com/kb9lpk
TNOS BBS- http://kb9lpk.ampr.org

My Equipment Sale page is http://kb9lpk-2.ampr.org/sale.html

Shop at our wonderful gift shop on the web! http://www.giftsheavensent.com

3601. Re: Your taking all the signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: David <rangin@hotmail.com>
Message-ID: <90ievheui1@ftp.curtin.edu.au>
Source record: 175254

Yep, I think that's what it basically boils down to. The apertures would have to exactly overlap to extract all (or would it be half?) the power. As far as I can see that would mean the two antennas would have to be exactly coincident in space. But anywhere the apertures of two antennas overlap, a little of the energy in the field should be extracted if there is any resistance in the receiving antenna termination (as there will always be).
End of thread I think?

"Cortland Richmond" <ka5s@earthlink.net> wrote in message news:3A296070.D8E53481@earthlink.net...
> Tthe aperture of one person's antenna rarely overlaps the aperture of another.
>
> Cortland
>
> David wrote:
>
> > This is a not-so-stupid question I have often idly pondered myself. My
> > reasoning is as follows. An antenna placed in an electric field and
> > terminated so that it extracts power from the field would be expected to
> > make that field non-uniform, more so in the close vicinity of the antenna.
> > If this happens over a volume much larger than that physically taken up by
> > the antenna then power is being "stolen" from other areas in the field and
> > the neighbour gets less signal.
>

3602. Oops!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Sri Billy Bob <nulport@home.com>
Message-ID: <konp2ts8j1vlokld68hg7kloa8n81mo5ab@4ax.com>
Source record: 175255

Somehow in moving I lost my reference book with all the LC resonance formulas and inductor design formulas.

Like, how many turns of #22 on a 1" form for a 1mH inductor.

Any pointer to websites or whatever would be greatly apreciated.

I hate moving
I hate telephones too
But not as much as I hate moving

Thanks

SBB

3603. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <gE5X5.42750$GU1.8135@news.siol.net>
Source record: 175256

Hello Dennis,

Used to have the R7, way back. If I do remember right, the cushcraft point
in their manual, upfront, that you coul not use any rf meter as the mfj,
autek, aea whatever..
Therefore check the actual swr in the shack and then act accordingly.
Happy hamming,
Nermin S58DX

3604. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20001205082327.07617.00003637@ng-fy1.aol.com>
Source record: 175257

>From: Brian Kelly kelly@dvol.com

>Somebody around here once quipped that it has about 3dBdl gain over a dummy
>load (the dBdl being defined as the gain over an isotropic Heath Cantenna).

The quip, of course, is really not very accurate. The gain can approach a normal dipole on the higher bands, and my finger-in-the-wind guess is that it will drop to about -10 dBd on the lower bands. I believe ARRL did a Product Review on it at one point.

The antenna can have advantages. The resistive loading tends to tame down the otherwise high SWR that could exist on some frequencies. I would, however, personally not use it; as a QRPer, I need every dB I can get. My wire antenna choice is a dipole, of any length, fed approximately in the center with ladder line, used with an antenna tuner. Purists will cringe, but I usually do not connect the ladder line to the balun in my tuner, but rather to the coaxial output (one conductor to the center conductor of the coax connector; the other to the shield of the connector). That way, I do not have to wonder whether the balun is lossy on some bands. In many cases, the loss caused by some of the RF being radiated by the feedline will be less than the loss of a badly mismatched balun.

73,
Ed Hare, W1RFI

3605. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2CEE56.7397C09B@IEEE.org>
Source record: 175258

'Doc wrote:
> Or on 10 meters, but... He said 10-80 meters. It
> would be terrible on more bands than it would work on.
> Right?

I was just pulling your leg. However, I ran a 12ft mobile
whip with an SGC-230 autotuner and it worked pretty well
20m-10m. It was one S-unit down from a homemade bugcatcher
on 40m.
--
http://www.mindspring.com/~w6rca

3606. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2D139E.AF17645C@ecs.syr.edu>
Source record: 175259

Cecil wrote:

> Roy Lewallen wrote:
> > I'd be surprised if you'll see any difference in RF pickup by using the
> > double shielded cable. I've seen a noticeable difference, but only when
> > looking at very small signals using extremely well shielded test
> > equipment. You should connect both shields at both ends of the cable
> > just as you would a single shield.
>
> Not really applicable to antenna systems, but, to reduce noise, control
> systems use double-shielded cable with the outer shield tied to earth
> ground and the inner shield tied to system common.
> --
> http://www.mindspring.com/~w6rca

That's what I thought..... it doesn't make much sense to have two shields if they both carry the same current!!! Go get a good physics 2 book to see why if you don't believe that!!!

--
Drew Northup, N1XIM

3607. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Bob Tomas <tomas@monsoon.colorado.edu>
Message-ID: <3A2D07F3.83328F9C@monsoon.colorado.edu>
Source record: 175260

Tom W8JI wrote:

> Hi All,
>
> One thing you have to remember is with fixed antennas you need to be
> able to rotate phase in the phase shifting unit at least 360 degrees
> to get a null in every possible case. At the same, amplitude (gain or
> loss) should be stable and fully adjustable.
>
> Most units do a poor job of this, including the Timewave. The MFJ unit
> is by far superior to all other units on the market. It has less than
> a few dB ripple as phase is adjusted, and allows phase to be rotated
> almost 360 degrees.
>
> To save you a little homebrewing time, I looked at this site:
>
> >of Man. A good summary with some QST and CQ magazine references and a
> >homebrew design can be found at: http://207.108.137.61/n5ar/n5ar.htm
>
> The noise canceller in figure 2 won't hardly shift phase. The phase
> control will change amplitude from zero to maximum, and at the zero
> crossing point phase will flip abbruptly 180 degrees. It looks like
> the DeMaw phasing unit, which has a similar action.
>
> The slight phase shift you can get is due to changing load impedance
> on the small capacitors by the transformer. That shift is a few
> degrees at best, and so what you have is basically an abbrupt
> phase-flip.
>
> The unit in figure 3 can only shift phase 0-90 degrees.
>
> The unit in figure 4 is a mess. On some frequencies, it should shift
> phase pretty well...but it will be amplitude and frequency sensitive.
>
> I use several phasing units here, not to cancel noise but to steer
> nulls and lobes on large receiving arrays. My design is similar to the
> MFJ unit's design. I can rotate phase 360 degrees with less than 1dB
> of amplitude shift with that system, so I can null any unwanted signal
> from any direction.
>
> Most of the stuff in articles just doesn't work well, or at all.
>
> 73 Tom

Hi Tom,

For a few years now I have been thinking about putting together some sort of phased array for receiving on the lower HF bands (160m, 80m and 40m). I have seen design plans for arrays of phased loops with the phasing accomplished using feed lines of different lengths. The arrays I've seen are limited to one or two bands and have somewhat limited bandwidth within a band. They are also somewhat complicated to construct. They would, however, fit into the somewhat limited space I have in my backyard (~120' x 60').

I am thinking now that I may be able to construct an array that meets my needs as well as being simpler to construct and more versatile (i.e., multi-band, unlimited bandwidth) by erecting two small vertical elements (~10') and phasing them using the MFJ noise canceling unit.

I would appreciate if you would comment on this idea.

Thanks.

Bob

Bob Tomas
Program in Atmospheric and Ocean Sciences
Univ of CO
Campus Box 311
Boulder, CO 80309-0311
Duane Physics Building, D-341
voice (303) 492-2654
fax (303) 492-3524
tomas@monsoon.colorado.edu

3608. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2D1E9F.E9800D8E@ecs.syr.edu>
Source record: 175261

Crazy George wrote:
<snip>
>Today, the problem tends to be something like CAT-5 signal
cables running along receive coax runs, and it doesn't take many
feet >of that to start showing up in the receiver input. A few
feet of RG-58 running in the vicinity of some of the poorer
computers will >also produce measurable (and hearable) signals in
a HF receiver.
>--
>Crazy George</snip>

Hey bud, I've got news for ya..... I've worked as a Network
Admin before, and on of the major things that I've run into is
that often the CAT5 cables are not connected properly (thus
defeating the purpose of using STP or UTP cable). If you are
sending signals along CAT5 (CAT5+,CAT6,CAT4,CAT3...., ETC.)cables
then they should be paired. For instance in the Ethernet specs
(802.1-802.3) UTP with matched pairs is the minimum called for
data-carring cable configuration. (For instance in 10/100Mbit
copper wire UTP/STP Ethernet orange-white/orange [RX+/-] and
green-white/green [TX+/-] on a patch [computer-to-hub/switch]
cable are spaced out into the series
"orange-white,orange,green-white,blue,blue-white,green,brown-white,brown"

so that the RX/TX pairs remain intact. This is pretty
standard.) Obviously, if you use standard (poorly shielded)
equipment, properly grounded STP is worlds better as far as
intermod (external to the network) and packet loss (internal to
the network) are concerned (less common-mode garbage).
Also, if your computers are making RF noise (quite likely), then
you should start to demand PFC (Power Factor Correcting) power
supplies be shipped in all of you equipment (they make much less
RF noise--Rick, K1BQT & I carried out a test which confirmed
this; and they are safer because they draw less current from the
mains--and spit less back onto them also). One of the biggest
problems in the computing industry is that computers have
horrible power supplies in them. Also, as the clock speed is
ramped up the dV/dt inside of the microchips increases (nearly
exponentially--hence low-voltage BiCMOS chips these days in
almost everything) and thus two things happen: more power is
dissipated as heat during the switching phase of the internal
transistors, and more RF noise is generated by poorly designed
(not paired & properly terminated/balnced) circuit board/internal
microchip tracks.

In any case, so long as the cable (rg-58 or otherwise) is
connected properly _on_both_ends_ you should not be getting any
interferance from anything--period (except for what your
antenna--which is designed to receive--picks up). SO, the moral
of this story is to make sure that your transmission lines are
properly connected & that they are well designed.
--
Drew Northup, N1XIM

3609. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2D1F7A.C3AA9612@ecs.syr.edu>
Source record: 175262

Jim Pennino wrote:

> Tweak <mazhar@nmt.edu> wrote:
> > Thanks to everyone who replied to this post. I found your replies quite
> > useful. I've decided on a set of books to study for the tech, general and
> > extra exam. After, I get the extra certification I would like to start
> > designing and building RF circuits. I've found two books (one which is
> > quite old) on rf design. Could anyone recommend these or other books taht
> > talks about RF design for a person with an extra cert?
>
> <snip>
>
> Though not just about RF, anyone doing circuit design should have a copy of
> "The Art of Electronics" by Horowitz and Hill and pay special attention to
> the sections titled "Bad circuits".
>
> Jim Pennino

If only computer designers in general would pay more attention to that!!!!!

--
Drew Northup, N1XIM

3610. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2D1FD1.8E4F977E@ecs.syr.edu>
Source record: 175263

Photo Museum wrote:

> Andy Dufresne wrote:
> >
> > Gordon West is the best I ever used.
>
> I would also recommend the Gordon West books to anyone.
>
> The ARRL book for the Advanced test I used in 1993 was a horror. It was
> presumptuous and condescending; useful only because the test questions
> were included. My feeling at the time was that the ARRL did not want
> anyone to pass the test.
>
> I am unaware of a Gordon West League. How is it that our national
> amateur radio organization can not provide more helpful study material
> then a single individual?
>
> In 1993 I wrote the ARRL asking that very question. I presume they are
> still drafting a reply.
>
> Michael, N9OGC

No, they are more busy trying to defend spectrum that nobody would be using
if they couldn't pass that test!

--
Drew Northup, N1XIM

3611. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: Dennis <dennis1449@dcwis.com>
Message-ID: <B652763E.CB19%dennis1449@dcwis.com>
Source record: 175264

in article ps3p2t85ek4csijktp926v2u7j0stnadve@4ax.com, Poofbutt Daddy at poofbutt@eudoramail.com wrote on 12/5/00 12:57 AM:

> Hi Dennis!
>
> I've talked with alot of hams claining that the A99 (a GREAT deal
> ($40ish) and easy to setup NO GROUND PLANE vertical designed for use
> on 10/11m) works on 10-12-15-17-20 meters. The lower the band, the
> worst they claim it works, but one fellow claimed he worked 40 or 50
> countries on 20m.
>
> I suspect simple dipoles would work better and for 15-17-20m do not
> require much wire and/or room at all.
>
> *I* have a 5/8 wave ground plane vertical on my roof, and before I got
> the tribander I had good result on 10-12-15 and really poor results on
> 17-20m.
>
> I was thinking it would be nice if they came out with an A99 like
> antenna that simply screwed together and worked on the other bands
> without a tuner.
>
> 73 - Ed - KF6YKM
>
> On Mon, 04 Dec 2000 09:58:37 -0600, Dennis <dennis1449@dcwis.com>
> wrote:
>
>> Will it work?
>

Thanks to everyone for your replies. Let me elaborate on why I asked the question I did:

I'm an SWL who is studying for his ticket. I have the opportunity to buy some used equipment from a neighbor: Kenwood TS-570S, A99 & Hy-Gain 18V-S. I have a 70' random wire & MFJ-16010 random wire tuner (which I don't really need for my Drake R8B.) The Kenwood tunes up on ALL bands with the random wire tuner, how can I test the efficiency? (With the wattmeter on the radio measure efficiency?)

OK, I believe that the A99 is a great 10M antenna, obviously that's where I'll have to start. But I've also seen that the Hy-Gain 18V-S tunes up well on several bands and seems to work almost as well as the neighbor's dipole on 40M. However I don't have the yard to utilize a dipole, antenna needs to be somewhat hidden. Have had no complaints about my random wire, though.

Can set up A99 or Hy-Gain 18V-S when I use it and take it down when I'm done.

The neighbor also has an Alpha Delta OutBacker & tripod but it is pricey. Do they work well? Again, will the wattmeter on the radio measure efficiency?

Thanks in advance for your new replies.

3612. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: dinoal7lz@aol.com
Message-ID: <20001205120727.07533.00008125@ng-cs1.aol.com>
Source record: 175265

Bill---there is another side of the story....I've also "been there and done that" and am totally satisfied with my B&W as it gives me the ability to work anywhere between 160 and 10 without tuning. For MARS operators that's a good deal as some MARS frequencies are not adjacent to the ham bands. Sure, I know and agree it's NOT an optimal antenna; it will not outperform a tuned dipole but it's close enough for government work. As long as people realize that the degraded performance is the "cost of doing business" to get the wide-band capability then no one should be disappointed. For me it works great on 75m and the MARS freqs just above 4 MHz; also gives me access to the WARC bands that I don't have on my TH7DX.

GL -- Dino KL0S/4 (AAT3BE)

3613. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: dinoal7lz@aol.com
Message-ID: <20001205121103.07533.00008127@ng-cs1.aol.com>
Source record: 175266

One last note....The B&W is the antenna my brigade here at Ft Bragg uses to maintain HF comms with my higher headquarters in Atlanta...never have any problems talking to them.

Dino KL0S/4

3614. Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: S Reeves <kleptein@hotmail.com>
Message-ID: <5t8q2tkb2l8b9mr2s5ret4blq5922t6f30@4ax.com>
Source record: 175267

I am in the process of installing a transmitter which is designed to communicate primarily with aircraft. In a case like this does it make more sense to use a 0dB omni antenna as opposed to a gain antenna in order to better cover the air?

I don't know a whole lot about coverage patterns and plots, but by looking at them it seems to me that most commercial UHF antennas don't radiate up from the horizon very well.

Can anyone shed some light on this for me please?

3615. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <bu9X5.78$d5.680815@news.ntplx.net>
Source record: 175268

Photo Museum <PhotoMuseum@hotmail.com> wrote:

> The ARRL book for the Advanced test I used in 1993 was a horror. It was
> presumptuous and condescending; useful only because the test questions
> were included. My feeling at the time was that the ARRL did not want
> anyone to pass the test.

I have a copy of that book, and do not believe that it is presumptuous and condescending. I just selected a page with "scannable" formulae and OCR'ed it. It is appended to this post. If you would like to select a page that you feel is presumptuous and understanding, I will gladly post it here, too. If one is interested in just the questions, they are available from a number of sites, including the ARRL web pages.

I am curious; why do you think ARRL not want not anyone to pass the test?

> I am unaware of a Gordon West League. How is it that our national
> amateur radio organization can not provide more helpful study material
> then a single individual?

Gordon's material is tailored, for the most part, specifically toward passing the tests. ARRL's study guides are tailored toward teaching the concepts that the test material represents. ARRL did finally bow to public sentiment and published more concise Q&A study guides. The League also publishes video study guides, although I don't think all of those are ready for the restructured exams.

> In 1993 I wrote the ARRL asking that very question. I presume they are
> still drafting a reply.

I would presume that the question was asked in a way that made it appear rhetorical. Part of the reasons there is a wide range of study guide material, from questions-only to Q&A to the more "formal" study guides is that there is a wide variation in the way people like to learn. I am glad you found one that works for you.

73,
Ed Hare, W1RFI

Sample of the 1990 Advanced study guide:

3616. R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 01:46:13 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <3a2c47ed$0$18135$7f31c96c@news01.syd.optusnet.com.au>
Source record: 175245

Hello fellas,just finished assembling a new R 8. stood it up,and put the MFJ 259 on to have a look,got no reaction,like a short,
something to do with the matching box maybe ??
any ideas,will revisit the antenna tomorrow,just looking for any tips and tricks,
Kind Regards Dennis Vk4sx.

3617. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 02:58:49 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <JRYW5.284586$g6.127511952@news2.rdc2.tx.home.com>
Source record: 175246

It will work well on 10 thru 17 meters (surprisingly well for a $40
vertical). You might be able to match the lower bands but with poor results,
even on 20.
73 Cliff N0HC
"Dennis" <dennis1449@dcwis.com> wrote in message
news:B6511B4D.C88E%dennis1449@dcwis.com...
> Will it work?
>

3618. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 05:16:44 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <3a2c873f$0$19432$7f31c96c@news01.syd.optusnet.com.au>
Source record: 175247

thats what i thought to Doc,but the 259 showed off the scale VSWR on all
bands
i will check everything tomorrow.
Rgds Dennis

'Doc <w5lz@oio.net> wrote in message news:3A2C7173.D1C7E09C@oio.net...
>
>
> Dennis Edey wrote:
> >
> > Hello fellas,just finished assembling a new R 8. stood it up,and put the
MFJ
> > 259 on to have a look,got no reaction,like a short,
> > something to do with the matching box maybe ??
> > any ideas,will revisit the antenna tomorrow,just looking for any tips
and
> > tricks,
> > Kind Regards Dennis Vk4sx.
>
> Dennis,
> I'd recheck the connections on the R-8. The '259 should work
> fine with the R-8.
> 'Doc

3619. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-05 06:57:34 UTC
From: Poofbutt Daddy <poofbutt@eudoramail.com>
Message-ID: <ps3p2t85ek4csijktp926v2u7j0stnadve@4ax.com>
Source record: 175248

Hi Dennis!

I've talked with alot of hams claining that the A99 (a GREAT deal ($40ish) and easy to setup NO GROUND PLANE vertical designed for use on 10/11m) works on 10-12-15-17-20 meters. The lower the band, the worst they claim it works, but one fellow claimed he worked 40 or 50 countries on 20m.

I suspect simple dipoles would work better and for 15-17-20m do not require much wire and/or room at all.

I have a 5/8 wave ground plane vertical on my roof, and before I got the tribander I had good result on 10-12-15 and really poor results on 17-20m.

I was thinking it would be nice if they came out with an A99 like antenna that simply screwed together and worked on the other bands without a tuner.

73 - Ed - KF6YKM

On Mon, 04 Dec 2000 09:58:37 -0600, Dennis <dennis1449@dcwis.com> wrote:

>Will it work?

3620. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: S Reeves <kleptein@hotmail.com>
Message-ID: <a6vs2tka2j5ek6fmtong58m99mooku1nnp@4ax.com>
Source record: 175169

On Wed, 6 Dec 2000 14:36:41 -0000, "YADJ" <nospam@thanks.com> wrote:

>I still don't think that, had I had the same sort of request, that this
>would be my 1st choice of a place to ask!

Perhaps you come from a place where everyone knows everything.. The
land of Luke Skywalker and Obie Wan.. here those of us that aren't as
"enlightened" as you ask questions. As well, we read the questions
carefully before we answer....

>As I say, how will the guy who asked know who is giving the right answer?
>Some of the answers might just be completely wrong, but look plausible.

The question was about antennas.. and later clarified to point out
that it was for SLOW SCAN TELEVISION. Last time I checked, IN
AMERICA THAT IS, slow scan television was not used to control aircraft
in any manner. You make it sound as if I asked how to do open heart
surgery. Calm down a bit. The question was about ANTENNAS, Not
about building a control tower at JFK or LaGuardia..

>I do hope that peoples safety is not involved in any way, given the way that
>it appears that people seem to be more willing to sue if things go wrong
>these days. If an accident did happen, I wonder what would the attitude be
>to the defence "Well, the people in rec.radio.amateur.antenna said it would
>be OK"?

An accident? People's safety? Are you actually reading these
messages or are you just spouting off to relieve internal pressure?
I'll say it again, slowly... "SLOW SCAN TELEVISION"... Not an ILS at
an airport. Lawsuits? What?!

>to my self training. I certainly wouldn't like to give advice on aviation
>communications without some form of indemnity insurance, and the relevant
>professional training, and I'd hope that even a private airfield wouldn't
>expect that equipment installation was being carried out by unqualified
>people. Especially ones that appear to be reliant on advice given in a
>Usenet NG!

Reliant? Airfields? I've just searched around for the thread you
appear to be dissecting but alas I've not found it. Indemnity
insurance? My god man.. people like you are the reason lawyers have
work. If everyone was so afraid to ask questions, and people were as
afraid to answer as you seem, Amateur Radio would not be what it is
today. A newsgroup is a place to field questions, and give answers.
Nothing says I have to believe, or even execute for that matter, every
tidbit which I receive on here. I take them all in, evaluate them for
what they are worth, and apply the information which I deem useful.

As well, I consider previous posts from the same writer as to how credible they seem.

>What happens if it's something for peoples safety whilst flying and it's not
>right? At best someone is inconvenienced, at worst..... Well, like my 11kV
>switchgear point, let's not even think about it.

What happens if you were to read the messages? Hmm.. perhaps you would know what you were talking about? I'll quote myself, "The setup is being installed to receive slow scan TV pictures from a Civil Air Patrol aircraft of accident sites and disaster areas".. the only transmit part of it is to say "Got it".. So it's not for their safety, and I promise I won't say something like "Clear for the ILS approach", and I'll strike the phrases "Descend and Maintain" and "Turn Left Heading 270" from my vocabulary in the hopes that it will let you get a good nights sleep... which it seems is something you desperately need.

And your switchgear point. Who said anything about electricity, and why must you make such an insignificant question about an antenna into such a monumental issue? If it will put your mind, and you keyboard to ease:

"I, Shane Reeves, do solemnly swear to call a professional electrical contractor should I ever need an 11kV switchgear installed in my 2 bedroom house. Here, in America that is, we be smart enuf to kno to do dis."

3621. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2E81D9.5DE38AD8@IEEE.org>
Source record: 175170

Drew Northup wrote:
> Therefore the two shields must be able to carry
> different currents at times (while there is no restriction that they never carry
> the same current). The physics bears this explanation out. This is why the
> proper connection of your coax at both ends really does matter. Do you think
> that Cecil's advice would make any sense if this weren't true?

The double shielded coax I was talking about has the two shields isolated
from each other and is common in control systems applications. It is not
the same coax as a second shield wound directly upon the first shield
where the shields are not isolated from each other. I'm not sure which
type of double shielded coax is being discussed.
--
http://www.mindspring.com/~w6rca

3622. Re: Oops!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <90m1jt$ln3$1@nnrp1.deja.com>
Source record: 175171

Ah, OK...Maybe the following will help a bit... I'm going to assume you can manipulate the formulas to get your particular unknowns in terms of the things you do know. If not, ask for specific rearrangements, I guess..

Resonance in an LC tank occurs for

2*pi*f = 1/sqrt(L*C)

To a good approximation (a percent or so for coils whose l/r is between about 1 and 4), inductance for a single-layer solenoid coil is given by

L(uH) = n^2 * r^2 / (9*r + 10*l)

where n is number of turns, r is coil radius in inches (generally taken to the center of the wire), and l is the length of the coil. A good rule of thumb is to wind the coil with turns spaced two wire diameters turn to turn, for good unloaded Q. You'll run across people saying that formula doesn't work for very small coils, but the inductance of a coil really does scale exactly with linear size. Scale all dimensions by 1/2 and the inductance of the coil itself will be half. But beware of self-resonance, parasitic capacitances, lead lengths, nearby shields or other metal, and the like.

For a coil with diameter equal to length and wound with turns spaced as suggested above, unloaded Q will be approximately

Q = 100 * d * sqrt(f)

where d is coil diameter in inches and f is frequency in MHz. Q increases somewhat for longer coils and decreases for shorter, though it's not a huge effect.

Inductance drops if the coil is put in a shield. Q drops similarly. A coil inside a cylindrical shield twice the diameter of the coil will have inductance about 15% lower than if it's unshielded.

For more complicated matching networks...I'd suggest you go spring for one of the ARRL books, or use one of the programs or spreadsheets that's been offered free here recently.

Cheers,
Tom

In article <55os2tg1c92jfv2uf8hqdr3oiui1in8b0b@4ax.com>,
Sri Billy Bob <nulport@home.com> wrote:
> On Wed, 06 Dec 2000 07:36:51 GMT, tom_bruhns@agilent.com enlightened
> us with:

>
> >Besides the program Reg mentioned, you'll probably find some other
> >useful ones on his site as well, quite a welcome set of programs.
For
> >a nice coil program that works in inches and makes it very easy to
> >calculate for coils wound on standard US machine screws to form and
> >space the turns, visit www.saratogasoftware.com. There's a nice
> >program there that I use much of the time. -- There was an
> >interesting article in a recent issue of Microwave Journal or similar
> >mag about a "new" view of coil inductance and self-resonance calcs.
> >Perhaps someone will reduce that to a nice program one of these days,
> >if it turns out to be significantly more useful than the progs
already
> >out.
> >
> >Cheers,
> >Tom
> >
> >
> >
> Thanks Tom and Reg,
>
> What I was looking for was the formulas themselves.
>
> I have this caffiene powered calculator that I like to use once in a
> while.
>
> It's not terribly fast but given proper amounts of caffiene, or nice,
> dark, ale on occasion, it does a pretty good job with little more than
> a pencil and paper for periferal devices. Log tables are nice to have
> too ;)
>
> Interesting programs though.
>
> SBB
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3623. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a2e9694$1$vtanpl$mr2ice@news.uga.edu>
Source record: 175172

>And just how much additional loss would there be in say 4-5 feet of coax?

It would be an extra 150 pF to tune out. Perhaps not too important on 160-40m. On higher bands, it is likely that a tuner won't match some bands.

It is likely that a capacitance of the ladder line (with Ga 18 wire) to metal objects an inch away for a few feet practically won't matter.

>Danny, K6MHE

Ignacy, NO9E

3624. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: JJ&A <w7ls@blarg.net>
Message-ID: <3A2E8B79.977C8208@blarg.net>
Source record: 175173

The LDG probably won't go all the way. I'm assuming I'll need to chuck some L at the base. Thanks for the reply. 73 de Jim, W7LS

Rudy Marcelletti wrote:

> I have done this and although it will work--it is not very effecteve--but is
> practical for off-road. Right now I have the 8' ss whip on top of my
> vehicle using an Icom AH-4 coupler. The antenna whacks trees all the time.
> The Icom coupler has specs only down to 7 MHz with this whip and works OK.
> Not as good as my SGC. The Icom will match on 80 but signal is way down.
> Finally got this up an running yesterday. Today I could not find my other
> Hustler QD so I was not able to try the 4' Hustler mast and 80 coil on this
> setup.
>
> Last summer I compared the 4' Hustler mast, 8' ss whip and SGC-303 whip
> using SGC 235 coupler with a friend 45 miles away. On 80 meters with this
> set up, the SS whip was about 1 needle width better on 80 than the other 2,
> and the SGC antenna had a measurably better signal on the higher bands than
> the others. If am going to seriously beat some trees, I put the SS whip on.
> If I am just going to drive down some place with low limbs, I will leave the
> SGC antenna on and go slow.
>
> Isn't the LDG an unbalanced "tuner" rated only for a 3:1 to 1 mismatch? I
> don't think it will match an 8' whip as low as 80, and likely not well even
> below 30 meters.
>
> JJ&A wrote in message <3A2DF7F4.6BB4F2BE@blarg.net>...
> >Hi.I'm considering putting a terrible antenna on the car. I have a
> >Screwdriver, which works great, but mechanically, it's too fragile for
> >banging around off the pavement.
> > I would like to use a simple 8' whip with an autotuner (LDG). This
> >ends up looking like a base loaded whip, which is usually a poor choice,
> >electrically speaking, since it is a poor current radiator. The reason
> >for the bad antenna, is that it is the best antenna, mechanically
> >speaking.
> > Question: (and this is directed to those that have first hand
> >experience with this)
> > Does this work well enough to bother with on 80 meters? Thanks.
> >Jim W7LS
> >

3625. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <6e2t2tkj2uljv18nvphuou9k9hl2lbaqjk@4ax.com>
Source record: 175174

S Reeves <kleptein@hotmail.com>
shared these priceless pearls of wisdom:

-> The question was about antennas.. and later clarified to point out
->that it was for SLOW SCAN TELEVISION. Last time I checked, IN
->AMERICA THAT IS, slow scan television was not used to control aircraft
->in any manner. You make it sound as if I asked how to do open heart
->surgery. Calm down a bit. The question was about ANTENNAS, Not
->about building a control tower at JFK or LaGuardia.

Then ask the question the way it should have been asked. Surely if it is to
RECEIVE slowscan your title "transmit" set off a few bells. "Aircraft" set off
a few more.

Now, to hell with what it is being used for. What is your frequency band,
polarization, and a very short description of intended use.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3626. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: JJ&A <w7ls@blarg.net>
Message-ID: <3A2E8DA8.1F7D774E@blarg.net>
Source record: 175175

Thanks to all who responded. In short, it should be an extremely poor radiator, probably not even useable.
I pose the next question: Use a Hamstick for 40 or 20 meters in place of the simple whip. Feed the base with an autotuner. Doesn't SGC do this? I seem to remember that they use a helical loaded whip resonant to around 14 MHz to cover most of HF.
Can any program model the radiation efficience of this setup? Further twist: Tilt the Hamstick at 45 degrees so I can get NVIS radiation, which is the goal for 75 meters, anyway. I think it will radiate both more efficiently as well as in a better direction (straight up). Comments? 73 de Jim, W7LS

JJ&A wrote:

> Hi.I'm considering putting a terrible antenna on the car. I have a
> Screwdriver, which works great, but mechanically, it's too fragile for
> banging around off the pavement.
> I would like to use a simple 8' whip with an autotuner (LDG). This
> ends up looking like a base loaded whip, which is usually a poor choice,
> electrically speaking, since it is a poor current radiator. The reason
> for the bad antenna, is that it is the best antenna, mechanically
> speaking.
> Question: (and this is directed to those that have first hand
> experience with this)
> Does this work well enough to bother with on 80 meters? Thanks.
> Jim W7LS

3627. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <90m4re$41l$0@216.39.171.5>
Source record: 175176

On Wed, 06 Dec 2000 12:13:45 -0600, Cecil wrote:
>Drew Northup wrote:
>> Therefore the two shields must be able to carry
>> different currents at times (while there is no restriction that they never carry
>> the same current). The physics bears this explanation out. This is why the
>> proper connection of your coax at both ends really does matter. Do you think
>> that Cecil's advice would make any sense if this weren't true?
>
>The double shielded coax I was talking about has the two shields isolated
>from each other and is common in control systems applications. It is not
>the same coax as a second shield wound directly upon the first shield
>where the shields are not isolated from each other. I'm not sure which
>type of double shielded coax is being discussed.

Apparently both, which is why the thread has become somewhat confusing.

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen

3628. Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: john@homebrew.free-online.co.uk
Message-ID: <3a2e983d.4373702@news.free-online.net>
Source record: 175177

Has anyone built a CFA "crossed field antenna"
What is the typical radiation efficiency and bandwith for a small 160m
operating antenna?
Are they any better than other antennas?
Do they really work?

3629. Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: wa7aw@bentonrea.com
Message-ID: <3a2e9815.89323994@news.bentonrea.com>
Source record: 175178

Some of you are reading this for the first time,
to others it is "old hat". Basically my story is
simple, Feb 1999 I paid over $5,000.00 For A
Mosley Pro-96-S antenna, The shipments were sporadic
and all the parts did not arrive until September of
99 at which time it was assembled (according to the
very shabby instruction manual) it was was raised to
70 feet and didn't resonate in any of the amateur bands.
SWR in the amateur bands were above 3:1 and higher in
most of the bands. Mosley was no help in trying to resolve
this problem and actually accused me of incorrectly
assembling the antenna. Any idiot can match color code to
color code and install screws into the pre-drilled holes.
Only problems were that not all the elements were color
coded correctly (most of the red elements were orange
colored while the remainder were red) the other elements
were color coded ok so with the left over pieces and a
tape measure the remaining orange pieces were found to be
actually part of the red element. The manual is so poorly
done that i had installed the 18" traps in the wrong location.
there was no mention in the instruction manual where the 18"
traps were to go, but did state that the shorter traps were to
be installed. because of the omission in the manual the 18" traps
were put in the wrong place. upon closer inspection of the itsy
tiny drawings in the manual i was able to discover that the small
traps went near the boom and the 18" traps went toward the tips.
after counting the number of turns in all the traps and verifying
that they were in the correct position and pointing the correct
direction, still no working antenna, still no assistance from
Mosley. Mosley did add to the confusion when they sent me the
engineers
drawing of the antenna showing measurements for the Pro-96-S.
That drawing showed a big difference between what I had in my back
yard versus what was drawn in their manual and what the engineer
drawings
stated. Some of the elements were short by as much as 12" overall,
some
were too long by as much as 12" overall. Finally in Feb. 2000 Mosley
agreed to accept the antenna back for "warrantee repair" which they
have had in their posession for over 9 months now.
To this date Mosley has refused to refund the original purchase price
for the defective product, refused to replace the Pro-96-S with a
different
model that has shown to work correctly (without a request for refund

for the difference in price), Refused to accept my settlement offer of a partial refund of the purchase price and refused to return the antenna
which they say has been tested and found to be working perfectly unless I
sign an order stating that i will no longer say anything about this antenna.
In other
words, as I understand it, they are blackmailing me by saying, either I
shut up or I don't get the antenna back. Do i regret my purchase of this
antenna from Mosley, YES, but based on previous dealings with Mosley and
using and knowing about their other products I felt I was making an informed buying decision. I had been very satisfied with the products i used with the Mosley name. This product and this time around though, there was no support, a very shabby manual, and accusations from the manufacturer that anything and everything that was wrong was my fault exclusively. Mosley flatly stated that there was nothing wrong with the
antenna and in fact their web page states that this particular antenna was assembled and tested prior to shipping. there are a couple of flaws
in that statement for the sporadic shipping of parts could not have allowed Mosley to assemble and test the parts at their location.
The absence of screw marks in the pre drilled holes indicated that the elements had never been screwed together. I have spent an addition sum

of money by trying to resolve this issue through the use of an attorney
in Missouri. While he has been most helpful, Mosley refuse to co-operate
and refuses to refund or return the product. i cannot afford to spend more money on this dead horse and cannot sue for attorney fees so the legal part is over.
one note of interest at this point is that Mosley did agree on 2 separate
occasions to refund the purchase price, once in november 99 when i first
had the problems. At that time I still had trust in the Mosley Name and
refused the refund offer because I wanted "multiple mono-banders" on one
boom. The other instance of a refund offer was when Mosley requested that
all material I had posted be removed from the internet and I agree to sign
a "gag-order". i requested that all information be removed from various

web pages and it was removed. Mosley immediately retracted their offer of a refund once i had complied with the 1st of their two conditions.
I will be glad to answer any questions you may have.
I will be glad to entertain any ideas you may have on how to resolve this situation with only one exception, I will not give up my right to free speech.
Do i wish to cause harm to Mosley, No, Not really, my sole intention is to inform others of MY Situation with Mosley's "Top of the Line" antenna.
Thanks in advance for your comments and if you know of others who may be considering the purchase of any commercially available antenna system, please advise them to do their homework so they won't end up in my situation. Tower Talk is a great source for information,eham.net is another, and of course most of the reflectors have something to say as well.
thank you for listening and if you want to forward this to others please feel free to do so.
73's & 88's to all
happy holidays
wa7aw
John H.
ps you can visit my web page for additional info
http://users.bentonrea.com/~wa7aw/tower/page14.html

3630. Re: Antenna Question/Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20001206152400.23321.00003607@ng-fv1.aol.com>
Source record: 175179

Oops, Sorry remove the no spam for the correct email address
(redberd95@aol.com)

Randy

3631. Re: Loops - Pro & Con

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A2EA109.E502F475@bellatlantic.net>
Source record: 175180

I use a 270 foot horizontal (roughly square) loop up about 25 feet,
fed with ladder line. There's a balun at the bottom of the ladder line,
then coax to the tuner. Works great 180 thru 10 with a Daiwa
CNW-419 tuner.

Siddhartha wrote:

> Looking for information on Loop Antennas to cover 80 - 10 Meter. Library
> books in transit. But if YOU have first hand knowledge ref. to loop
> antennas, I would appreciate your impute. Thanks, W2JRM. 73

3632. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A2ECCC3.E90309C3@att.com>
Source record: 175181

Mark Keith wrote:

> > Via the coax shield, the scanner chassis, the neutral (white) power
> > supply wire, and the neutral to utility grounding rod connection
> > inside the breaker box ?
>
> Well, yes, thats the way it is now if it's not grounded. "the mast". And
> is not good. You want the mast and ground wire to the good ground to be
> the return for the lightning, not the rig with its lousy or no ground.

Understand the mast is presently mounted to my wooden chimney frame
and therfore not grounded itself.

> Also you want all outside grounds tied together to keep all at the same
> potential.

I just buried an 8' grounding rod near the antenna. (The location of
utility ground rod it on the opposite end of the house.) Any comments?

> You will need a a suppressor for the rig or just unhook the coax during
> bad weather.

Where might I find one of these? I've checked radio shack, and several
local hardware stores (in the cable TV hardware section).

> > This surprises me given this is perhaps 30A rated wire. I suppose
> > the lightning induced current (hundreds of amps?) would be
> > transistory in nature and not result in sufficient heat generation ??
>
> Yep. It's over before it gets a chance to do much. In effect what you
> are doing is using the antenna as a lightning rod. If grounded well it
> can actually protect your house if the strike would have hit your house
> anyway at some other point. MK

Thanks again for taking the time to comment.

3633. Re: Oops!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Sri Billy Bob <nulport@home.com>
Message-ID: <4e6t2tgti0ujpgl8fegsarqt65f7tec3qq@4ax.com>
Source record: 175182

On Wed, 06 Dec 2000 18:47:26 GMT, tom_bruhns@agilent.com enlightened
us with:
Thanks, that's what I was looking for though I did download most of
Reg's programs and have the page you suggested bookmarked and will
check it out later.

Thanks again

SBB
>Ah, OK...Maybe the following will help a bit... I'm going to assume you
>can manipulate the formulas to get your particular unknowns in terms of
>the things you do know. If not, ask for specific rearrangements, I
>guess..
>
>Resonance in an LC tank occurs for
>
> 2*pi*f = 1/sqrt(L*C)
>
>To a good approximation (a percent or so for coils whose l/r is between
>about 1 and 4), inductance for a single-layer solenoid coil is given by
>
> L(uH) = n^2 * r^2 / (9*r + 10*l)
>
>where n is number of turns, r is coil radius in inches (generally taken
>to the center of the wire), and l is the length of the coil. A good
>rule of thumb is to wind the coil with turns spaced two wire diameters
>turn to turn, for good unloaded Q. You'll run across people saying that
>formula doesn't work for very small coils, but the inductance of a coil
>really does scale exactly with linear size. Scale all dimensions by 1/2
>and the inductance of the coil itself will be half. But beware of
>self-resonance, parasitic capacitances, lead lengths, nearby shields or
>other metal, and the like.
>
>For a coil with diameter equal to length and wound with turns spaced as
>suggested above, unloaded Q will be approximately
>
> Q = 100 * d * sqrt(f)
>
>where d is coil diameter in inches and f is frequency in MHz. Q
>increases somewhat for longer coils and decreases for shorter, though
>it's not a huge effect.
>
>Inductance drops if the coil is put in a shield. Q drops similarly. A
>coil inside a cylindrical shield twice the diameter of the coil will
>have inductance about 15% lower than if it's unshielded.

>
>For more complicated matching networks...I'd suggest you go spring for
>one of the ARRL books, or use one of the programs or spreadsheets that's
>been offered free here recently.
>
>Cheers,
>Tom
>
>
>
>
>
>In article <55os2tg1c92jfv2uf8hqdr3oiui1in8b0b@4ax.com>,
> Sri Billy Bob <nulport@home.com> wrote:
>> On Wed, 06 Dec 2000 07:36:51 GMT, tom_bruhns@agilent.com enlightened
>> us with:
>>
>> >Besides the program Reg mentioned, you'll probably find some other
>> >useful ones on his site as well, quite a welcome set of programs.
>For
>> >a nice coil program that works in inches and makes it very easy to
>> >calculate for coils wound on standard US machine screws to form and
>> >space the turns, visit www.saratogasoftware.com. There's a nice
>> >program there that I use much of the time. -- There was an
>> >interesting article in a recent issue of Microwave Journal or similar
>> >mag about a "new" view of coil inductance and self-resonance calcs.
>> >Perhaps someone will reduce that to a nice program one of these days,
>> >if it turns out to be significantly more useful than the progs
>already
>> >out.
>> >
>> >Cheers,
>> >Tom
>> >
>> >
>> >
>> Thanks Tom and Reg,
>>
>> What I was looking for was the formulas themselves.
>>
>> I have this caffiene powered calculator that I like to use once in a
>> while.
>>
>> It's not terribly fast but given proper amounts of caffiene, or nice,
>> dark, ale on occasion, it does a pretty good job with little more than
>> a pencil and paper for periferal devices. Log tables are nice to have
>> too ;)
>>
>> Interesting programs though.
>>

>> SBB
>>
>>

3634. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Znospam+noZs_0100@hpb13799Z.Zboi.hpZ.com.invalid
Message-ID: <slrn92t1g3.1rm.Znospam+noZs_0100@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 175183

On Tue, 5 Dec 2000 22:41:55 -0500, Fred Hambrecht <Fred@w4jle.com> wrote:
>electronics for over 40 years with an MSEE and I found nothing condescending

If you had been following along, you should have no trouble
identifying the problem.

>Sylvan Butler wrote:
>> On Tue, 5 Dec 2000 12:21:38 -0500, Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>> >[If you worked all of these problems along with the text, you should have
>no
>> >trouble with the phaseï¿½angle questions on the Advanced class exam. Just
>to
>> >prove that to yourself, turn to Chapter 10 now. Study the questions with
>>
>> that's condescending.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
"Don't Tread On Me!"

3635. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <90mauc$jv8$1@nnrp2.phx.gblx.net>
Source record: 175184

john@homebrew.free-online.co.uk wrote:
: Has anyone built a CFA "crossed field antenna"
: What is the typical radiation efficiency and bandwith for a small 160m
: operating antenna?
: Are they any better than other antennas?
: Do they really work?

John,
Yes, they do in deed work. There are at least two under
construction here in the US, as well as a couple in Brazil and one in
Mexico. And there's a dedicated testing unit being constructed in
Britain for field strength evaluations and demonstration.

For a list of published literature on the subject, see the
technical bibliography on my web page at:

http://www.primenet.com/~ctrask

Everything published on the subject, both pro and con, is listed
there.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

3636. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <90mcagdlg1@iac5.navix.net>
Source record: 175185

Perhaps a lot of panties would be in less of a wad had you given the full info in your original post. You left much to be imagined and you can be sure on here, if it can, it will!

"S Reeves" <kleptein@hotmail.com> wrote in message news:a6vs2tka2j5ek6fmtong58m99mooku1nnp@4ax.com...
> On Wed, 6 Dec 2000 14:36:41 -0000, "YADJ" <nospam@thanks.com> wrote:
>
> >I still don't think that, had I had the same sort of request, that this
> >would be my 1st choice of a place to ask!
>
> Perhaps you come from a place where everyone knows everything.. The
> land of Luke Skywalker and Obie Wan.. here those of us that aren't as
> "enlightened" as you ask questions. As well, we read the questions
> carefully before we answer....
>
> >As I say, how will the guy who asked know who is giving the right answer?
> >Some of the answers might just be completely wrong, but look plausible.
>
> The question was about antennas.. and later clarified to point out
> that it was for SLOW SCAN TELEVISION. Last time I checked, IN
> AMERICA THAT IS, slow scan television was not used to control aircraft
> in any manner. You make it sound as if I asked how to do open heart
> surgery. Calm down a bit. The question was about ANTENNAS, Not
> about building a control tower at JFK or LaGuardia..
>
> >I do hope that peoples safety is not involved in any way, given the way
that
> >it appears that people seem to be more willing to sue if things go wrong
> >these days. If an accident did happen, I wonder what would the attitude
be
> >to the defence "Well, the people in rec.radio.amateur.antenna said it
would
> >be OK"?
>
> An accident? People's safety? Are you actually reading these
> messages or are you just spouting off to relieve internal pressure?
> I'll say it again, slowly... "SLOW SCAN TELEVISION"... Not an ILS at
> an airport. Lawsuits? What?!
>
> >to my self training. I certainly wouldn't like to give advice on
aviation
> >communications without some form of indemnity insurance, and the relevant
> >professional training, and I'd hope that even a private airfield wouldn't

> >expect that equipment installation was being carried out by unqualified
> >people. Especially ones that appear to be reliant on advice given in a
> >Usenet NG!
>
> Reliant? Airfields? I've just searched around for the thread you
> appear to be dissecting but alas I've not found it. Indemnity
> insurance? My god man.. people like you are the reason lawyers have
> work. If everyone was so afraid to ask questions, and people were as
> afraid to answer as you seem, Amateur Radio would not be what it is
> today. A newsgroup is a place to field questions, and give answers.
> Nothing says I have to believe, or even execute for that matter, every
> tidbit which I receive on here. I take them all in, evaluate them for
> what they are worth, and apply the information which I deem useful.
> As well, I consider previous posts from the same writer as to how
> credible they seem.
>
> >What happens if it's something for peoples safety whilst flying and it's
not
> >right? At best someone is inconvenienced, at worst..... Well, like my
11kV
> >switchgear point, let's not even think about it.
>
> What happens if you were to read the messages? Hmm.. perhaps you
> would know what you were talking about? I'll quote myself, "The
> setup is being installed to receive slow scan TV pictures from a Civil
> Air Patrol aircraft of accident sites and disaster areas".. the only
> transmit part of it is to say "Got it".. So it's not for their
> safety, and I promise I won't say something like "Clear for the ILS
> approach", and I'll strike the phrases "Descend and Maintain" and
> "Turn Left Heading 270" from my vocabulary in the hopes that it will
> let you get a good nights sleep... which it seems is something you
> desperately need.
>
> And your switchgear point. Who said anything about electricity, and
> why must you make such an insignificant question about an antenna into
> such a monumental issue? If it will put your mind, and you keyboard
> to ease:
>
> "I, Shane Reeves, do solemnly swear to call a professional electrical
> contractor should I ever need an 11kV switchgear installed in my 2
> bedroom house. Here, in America that is, we be smart enuf to kno to
> do dis."
>
>

3637. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3aa8a611.3628652987@news.seanet.com>
Source record: 175186

On Wed, 06 Dec 2000 20:33:18 GMT, Pervert_Extraordinaire
<valued_customer1@att.com> wrote:

>
>I just buried an 8' grounding rod near the antenna. (The location of
>utility ground rod it on the opposite end of the house.) Any comments?
>

Hi OM,

Code requires you to now connect your new ground to the service
ground.

73's
Richard Clark, KB7QHC

3638. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <3a2ea923.363822@news.mcn.org>
Source record: 175187

On Wed, 06 Dec 2000 13:37:13 -0600, ignacy@num.ads.uga.edu wrote:

>>And just how much additional loss would there be in say 4-5 feet of coax?
>
>It would be an extra 150 pF to tune out. Perhaps not too important on
>160-40m. On higher bands, it is likely that a tuner won't match some
>bands.
>
>It is likely that a capacitance of the ladder line (with Ga 18 wire) to
>metal objects an inch away for a few feet practically won't matter.
>
>>Danny, K6MHE
>
>Ignacy, NO9E

I don't know how you came up with the 150 pf figure but, adding a
small section (4') of 100 Ohm line in series with 400 Ohm line on a HF
tuned fed antenna system will have very *little* effect. Possibly
there could be some tuning problem on the higher frequencies, but
that's more the result of adding 4 feet to the transmission line
length rather than the line's characteristic impedance.

I have used short runs of parallel coax for bring tuned feeders into
the shack for years and have never seen any ill effects for doing so.

Danny, K6MHE

3639. Re: A-99 Won't Work, How About:

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3aa7794b.3617190635@news.seanet.com>
Source record: 175188

On Wed, 06 Dec 2000 11:41:36 -0600, Dennis <dennis1449@dcwis.com>
wrote:

>
>The neighbor also has an Alpha Delta OutBacker & tripod but it is pricey.
>Do they work well? Again, will the wattmeter on the radio measure
>efficiency?
>
>Thanks in advance for your new replies.

Hi Dennis,

The wattmeter will measure heat and radiated power the same way (this can be confirmed by noting how many watts are applied to a dummy load - all are going to heat and none to efficiency).

Don't worry about efficiency if you seek to improve it by 10-20% (not worth it). Worry about efficiency if all you have is 10-20%. But even here, this recommendation presumes you can determine that figure through instrumentation (not a good first choice) or through discussion in this group (far better, but you still have to separate the wheat from the chaff).

On review of the material that I did not quote, I would say that you are easily on the road to a reasonable solution and that efficiency will not kill you, nor will it's improvement bring significant results. Actually, if you look for further improvement, you might want to consider ground (RF) instead and not the sky-hook.

73's
Richard Clark, KB7QHC

3640. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2EB72E.312DD90@dvol.com>
Source record: 175189

Bill Turner wrote:

>
> Even better than Vertload is Reg's new program Loadcoil, available
> from the same website. It is specifically designed for HF mobile
> antennas as opposed to home station verticals.

>
He cranks out those great litle chunks of code faster than I can keep up with
them!
>

>
> 73, Bill W7TI

>
w3rv

3641. Re: Diamond CP6

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Ray Wilson <RAY.WILSON@DTN.NTL.COM>
Message-ID: <yQyX5.2204$uC6.31253@news6-win.server.ntlworld.com>
Source record: 175190

Adam,

You don't hear too much about them do you? I took a chance and put up a CP-6 about a month ago. I like it. Previously, I was using a random wire and tuner. The CP-6 is a quantum leap. Too bad all these verticals are so expensive, though.

Regards,

Ray
N3XO, M0CVY ...about 60 miles north of London

"Adam" <digipoint@hotmail.com> wrote in message news:90jv4a$2bus$1@news.kabelfoon.nl...
> Does anyone have experience with the Diamond CP6 antenna for HF and 6 meter?
> I would like to hear your opinions as I consider buying one.
>
> Adam
>
>

3642. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2EBAC5.3BFA9B42@oio.net>
Source record: 175191

john@homebrew.free-online.co.uk wrote:
>
> Has anyone built a CFA "crossed field antenna"
> What is the typical radiation efficiency and bandwith for a small 160m
> operating antenna?
> Are they any better than other antennas?
> Do they really work?

John,
To date, the 'CFA' antennas that had been built in AU have
all been scrapped. The stations returning to the original
antennas. Just from what I've seen, I think I'd pass.
'Doc

3643. Re: A-99 Won't Work, How About:

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2EBBF1.90E07F@oio.net>
Source record: 175192

Dennis,
The Alpha-Delta does work, and your right, they are not cheap. I don't know if I think it's worth that much.
The meter on the radio does not measure efficiency, but you can use it to get an idea of an antenna's efficiency. That sounds like a contradiction, but it really isn't. You'd be using the meter for comparisons.
-'Doc

3644. Re: Loops - Pro & Con

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2EBD9A.BCAE0E32@oio.net>
Source record: 175193

Siddhartha wrote:
>
> Looking for information on Loop Antennas to cover 80 - 10 Meter. Library
> books in transit. But if YOU have first hand knowledge ref. to loop
> antennas, I would appreciate your impute. Thanks, W2JRM. 73

"Sid",
I'll add my two-cents. I've used a few full-wave loops
and am using one now. I feed it with ladder-line, through
a tuner, and can use it on all bands. In a comparison with a
1/2 wave dipole, I'd rather use the loop. Of course, that
depends on a lot of things and results may not be the same
at a different location...
'Doc

3645. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A2EBF1D.720A04A0@oio.net>
Source record: 175194

Jim,
You're probably right about the use of a Ham stick
with the tuner. About the 'tilt', try it both ways, I
don't think you'll see much difference...
'Doc

3646. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A2E639F.3C6C@bellsouth.net>
Source record: 175195

I'm just wondering why your screwdriver is too "fragile" for banging around off pavement. If it is properly installed, braced somewhere near the center of the bottom mast, it should be OK. It would be the whip that would take the beating, not the screwdriver unit itself.

As to efficiency of the whip/tuner combo, I doubt you would get much satisfaction from that.

Jerry
K4KWH

JJ&A wrote:
>
> Hi.I'm considering putting a terrible antenna on the car. I have a
> Screwdriver, which works great, but mechanically, it's too fragile for
> banging around off the pavement.
> I would like to use a simple 8' whip with an autotuner (LDG). This
> ends up looking like a base loaded whip, which is usually a poor choice,
> electrically speaking, since it is a poor current radiator. The reason
> for the bad antenna, is that it is the best antenna, mechanically
> speaking.
> Question: (and this is directed to those that have first hand
> experience with this)
> Does this work well enough to bother with on 80 meters? Thanks.
> Jim W7LS

3647. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A2EC09A.48E18DBD@eznec.com>
Source record: 175196

I guess any antenna "works". How well is another question, and the evidence from the present installations in Egypt hasn't been terribly convincing. In over ten years, the inventors have yet to convince any but a few remote broadcasters that the antennas are a viable alternative to their standard tower systems. Independent measurements of one antenna in Egypt shows remarkable field strength if one makes certain assumptions about the ground quality. But it appears that even a very inefficient antenna could produce these strengths if, for example, there were a high water table or significant radiation from the feedline. But over all these years and despite the eagerness of the inventors to sell their system, to my knowledge (Chris, please correct me if I'm wrong about this), no A/B measurements have been made between a cross field antenna and a simple vertical radiator from the same location. This, in my mind, should be enough to trigger a good deal of skepticism. Quite a few people are awaiting results from the new sites under construction. I heard that one was being built in England, but wasn't aware of the others. Where are the installations in the U.S. being done, and when are they expected to be completed?

Roy Lewallen, W7EL

Christopher Trask wrote:
>
> john@homebrew.free-online.co.uk wrote:
> : Has anyone built a CFA "crossed field antenna"
> : What is the typical radiation efficiency and bandwith for a small 160m
> : operating antenna?
> : Are they any better than other antennas?
> : Do they really work?
>
> John,
> Yes, they do in deed work. There are at least two under
> construction here in the US, as well as a couple in Brazil and one in
> Mexico. And there's a dedicated testing unit being constructed in
> Britain for field strength evaluations and demonstration.
>
> For a list of published literature on the subject, see the
> technical bibliography on my web page at:
>
> http://www.primenet.com/~ctrask
>
> Everything published on the subject, both pro and con, is listed
> there.
>
> Chris

```
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Member #40274515
> . ( ) \
> '-| )__| :. \ Email: ctrask@primenet.com
> | | | | \ '. http://www.primenet.com/~ctrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
```

3648. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20001206182756.10943.00000299@ng-cu1.aol.com>
Source record: 175197

Jim Wier, a regular columnist for a popular aviation magazine, teaches this stuff for a living and is your best resource. And, I believe Jim is right about needing a General Class Commercial Radio License to set up aviation radio sites (you don't need one to set up radios for the cops or the local radio station anymore, but you do need one when dealing with communication involving anything large and licensed that flies through the air). A ham ATV link, on the other hand, is just that--and doesn't fall under FCC rulemaking for the Commerical Radio Service. However, the aircraft's pilot in command may veto your plan if he or she perceives a threat to safety created by a ATV transmitter working on board the aircraft (concern need not be rational--the pilot is the boss, period). Am I wrong??

Rick K1BQT

3649. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3A2ECF22.A706A1FD@sympatico.ca>
Source record: 175198

S Reeves wrote:

>
> The question was about antennas.. and later clarified to point out
> that it was for SLOW SCAN TELEVISION. Last time I checked, IN
> AMERICA THAT IS, slow scan television was not used to control aircraft
> in any manner. You make it sound as if I asked how to do open heart
> surgery. Calm down a bit. The question was about ANTENNAS, Not
> about building a control tower at JFK or LaGuardia..
>

I would be very interested to know when was the last time you checked,
and who you checked with? In America (I presume you mean the U.S.A.)
that is.

Dave

3650. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a2eefee_1@news3.prserv.net>
Source record: 175199

Cecil:

I and the people I used to work with always referred to that as Triax, and I believe the connector manufacturers who make suitable connectors also call it Triax. Double shielded, as RG-223, RG-214, and RG-177, normally take standard connectors, center pin and shell only, with no third isolated conductor. It gets really confusing when many in the government use Triax connectors for Twinax cable, for what reason I cannot fathom, since Twinax connectors are cheaper. Hmmm, maybe that's it.
--
Crazy George

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A2E81D9.5DE38AD8@IEEE.org...

<snip>
>
> The double shielded coax I was talking about has the two shields isolated
> from each other and is common in control systems applications. It is not
> the same coax as a second shield wound directly upon the first shield
> where the shields are not isolated from each other. I'm not sure which
> type of double shielded coax is being discussed.
> --
> http://www.mindspring.com/~w6rca

3651. antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: james <xtc1999@hotmail.com>
Message-ID: <FtCX5.4832$9O6.93070@e420r-sjo2.usenetserver.com>
Source record: 175200

i have a simple question but i have been unable to find the answer
what is the formula for length of a simple 1/4 wave verticle and
what is the formula for lenght of a simple 5/8 wave verticle

or a chart would be wonderful

thanks

3652. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A2EF603.5038@rpi.edu>
Source record: 175201

Rick Littlefield wrote:
>
> Jim Wier, a regular columnist for a popular aviation magazine, teaches this
> stuff for a living and is your best resource. And, I believe Jim is right
> about needing a General Class Commercial Radio License to set up aviation radio
> sites (you don't need one to set up radios for the cops or the local radio
> station anymore, but you do need one when dealing with communication involving
> anything large and licensed that flies through the air). A ham ATV link, on
> the other hand, is just that--and doesn't fall under FCC rulemaking for the
> Commerical Radio Service. However, the aircraft's pilot in command may veto
> your plan if he or she perceives a threat to safety created by a ATV
> transmitter working on board the aircraft (concern need not be rational--the
> pilot is the boss, period). Am I wrong??
>
> Rick K1BQT

Ir seems as if people are missing the point here -- the guy said that he
was doing this on an authorized CAP or ham band (that's why it made
sense that he was UHF instead of VHF, like civilian air band). I'm not
even sure that it would be illegal for an airport FBO operator to set up
a Unicom rig on their authorized frequency by themselves either...

Curt Breneman
RPI Chemistry
KC2EBP

3653. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A2EF8D1.64C6@rpi.edu>
Source record: 175202

What is the deal here anyway? I've never seen such a bunch of "frequency cops" or "regulation freaks" than in this thread! A reaction of horror when someone merely inquires about transmitting to an aircraft? Even when the band was stated as "UHF"? I'm afraid there is a "Roger Regulation" OCD syndrome going on here... Even still, it's no big thing: I've got an aviation handheld that we sometimes use to communicate between my plane and people on the ground using "multicomm" on 122.9 MHz during coordinated operations. Big deal.

Curt Breneman
RPI Chemistry
KC2EBP

3654. Re: A-99 Won't Work, How About:

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2EFBB3.78E684B@dvol.com>
Source record: 175203

Dennis wrote:

> Thanks to everyone for your replies. Let me elaborate on why I asked the
> question I did:
>
> I'm an SWL who is studying for his ticket. I have the opportunity to buy
> some used equipment from a neighbor: Kenwood TS-570S, A99 & Hy-Gain 18V-S.
> I have a 70' random wire & MFJ-16010 random wire tuner (which I don't really
> need for my Drake R8B.) The Kenwood TS-570S tunes up on ALL bands with the
> random wire tuner, how can I test the efficiency? (With the wattmeter on
> the radio measure efficiency?)
>
> OK, I believe that the A99 is a great 10M antenna, obviously that's where
> I'll have to start. But I've also seen that the Hy-Gain 18V-S tunes up well
> on several bands and seems to work almost as well as the neighbor's dipole
> on 40M. However I don't have the yard to utilize a dipole, antenna needs to
> be somewhat hidden. Have had no complaints about my random wire, though.
> Can set up A99 or Hy-Gain 18V-S when I use it and take it down when I'm
> done.
>
> The neighbor also has an Alpha Delta OutBacker & tripod but it is pricey.
> Do they work well? Again, will the wattmeter on the radio measure
> efficiency?
>
> Thanks in advance for your new replies.

>
I suspect you're overfocused on the hardware which is newbie SOP. Concentrate on getting your ticket, then do the 570 and ONE antenna. The 18V or put your existing wire to work and get on the air on as many bands as you can. Don't get wrapped around a lot of axles, "efficency" issues, yadda, yadda, just get a signal on the air and think KISS theory. 10m is a lousy place to get started because it's transient hot nature goes away and there ya are, stuck with 40 being the only band open and ya wind up wondering what the hell happened to ham radio. Let me count the times . .
>
w3rv

3655. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A2EFE82.1464A662@ix.netcom.com>
Source record: 175204

As long as the radio equipment is type certified or stepped for A/C use there will not be a liability problem for the insurance carrier responsible for covering the A/C and occupants from risk. All equipment installed on my three airplanes are certified/stp'ed by a local airport avionics facility and FAA inspected for 1, reduced exposure to any personal liability and 2, for reduced insurance premium cost. If it isn't certified, it doesn't fly with me regardless. 73, Ed - N5NUG

--

Edward A. Goodman
(214-505-6835)
(214-352-4623)
ICQ 31510047

3656. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A2F0163.DAFA922D@dvol.com>
Source record: 175205

Jim Weir wrote:

> Brian Kelly <kelly@dvol.com>
> shared these priceless pearls of wisdom:
>
> ->It's perfectly legal for an unlicensed individual to install a type-accepted
> and
> ->licensed aviation base station at an uncontrolled airport, grass strip or
> ->whatever for use on the Unicom freqs.
>
> That does not happen to be true.

>
I've seen it happen many times but never actually got into any details. Kindly
expand on your comment and straighten me out if you will. Tnx.
>

> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

>
w3rv, Rotax & Ragwing Jock, IFR = I Follow (Exxon) Roadmaps. To hell with spam
cans, they'll kill ya.

3657. Re: Loops - Pro & Con

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: "Steve Yates, AA5TB" <aa5tb@swbell.net>
Message-ID: <DyDX5.690$qj3.80188@nnrp1.sbc.net>
Source record: 175206

Hi W2RJM,

You didn't specify what kind of loop antennas but if you are interested in small transmitting loop antennas (magnetic loops) I have a lot of first hand information on the following Web site:

http://www.geocities.com/aa5tb/loop.html

73,
Steve Yates - AA5TB
Fort Worth, TX - EM12gs
http://www.geocities.com/aa5tb

3658. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: ik7565@erols.com
Message-ID: <3A2F05D2.F24B472E@erols.com>
Source record: 175207

I passed the Extra Class exam yesterday and only used the ARRL Extra
Class License Manual. Worked for me!

73 de KG4JLK
Ian

n9ogc@my-deja.com wrote:
>
> Sorry, I can't trade pages with you. After three or four weeks with it
> I passed the test, tossed the book in an alley trashcan, and kicked the
> dust off my shoes.
>
> But that was a long time ago. I'm glad to hear that the ARRL study
> material has improved.
>
> Michael, N9OGC
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3659. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3A2F07EF.5FD4967D@nettally.com>
Source record: 175208

My comments below:

Pervert_Extraordinaire wrote:

> Given my utility grounding rod and my antenna location
> are at opposite corners of my house. I had intended to
> install (big hammer!) an additional grounding rod adjacent
> to the antenna. I suppose this may cause a potential difference
> between two two grounding rods given the soil resistance and the
> likleyhood of very high currents. Under these conditions the
> potential of the antenna grounding rod could increase relative to
> the utility grounding rod. My poor scanner may be the only 'conductor'
> to fight this potential difference. (Though the neutral wire to
> utility gounding rod connection, present in my breaker box)
>

The unbonded ground rod is better than none. Are you sure you can't run a solid copper wire through the crawlspace or basement to the rod on the other side of the house, or at least to the cold water pipe on the near side of the house? Make sure the cold water pipe is grounded to the earth somewhere. Mine wasn't because the main pipe to the meter at the street is PVC. So I used the coldwater pipe to "bus" the utility ground and my equipment ground rods. It was interesting to note that my electric stove's safety ground was connected to this previously unbonded water pipe.

By the way, use a fence post tool (heavy single ended slip pipe with handles) to drive the ground rod into the ground, a hammer might be tough.

> I purchased this grounding block from a reputable local electical
> (construction type) supply house. However, I have no confirmation this
> block inlcudes the "surge protector tube" you refer to. Is this
> 'protector tube' intended to protect again lighting hits to the
> ungrounded side of the discone? It's hard to imagine this 'protector
> tube' could shunt/block the incoming current.

I am not sure what device that you bought, but look at the ones Polyphazer and Alpha-Delta make. The gas protector tubes fire at about 80 volts to shunt the induced voltage from getting into the receiver front end. Most front ends have a coil or capacitor that will handle the remaining surge. A direct hit to a discone antenna might be more challenging, but most nearby strikes won't bother it.

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

"Whats he building in there?"- Tom Waits

WARNING TO UNSOLICITED SPAMMERS!!!

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"Any and all non-solicited commercial E-mail (SPAM) sent to
this address is subject to a download and archival fee of
$500.00 U.S."! E-mailing denotes acceptance of these terms.

3660. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A2F117D.56F78FF1@IEEE.org>
Source record: 175209

james wrote:
> i have a simple question but i have been unable to find the answer
> what is the formula for length of a simple 1/4 wave verticle and

234/f

> what is the formula for lenght of a simple 5/8 wave verticle

585/f
--
http://www.mindspring.com/~w6rca

3661. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A2F22F2.7327A1FA@haertig.com>
Source record: 175210

It was announced last month that the joint venture of Hatfield and Dawson and duTreil Lundin and Rackley, two of the most prestigious MW consulting firms in the US, has been invited by the CFA folks to make comprehensive measurements of a test antenna being constructed in GB.

At last report, the measurement protocol has been designed and measurements will take place "soon". It is my understanding that the measurements will be made by or under the direct supervision of Ben Dawson. He bore primary responsibility for designing the measurement protocol with extensive input from the other engineers in the joint venture.

It is also my understanding that they have been assured by the CFA principles that they will be given full access to the antenna, matching/phasing equipment and transmitter during the testing.

Gray

Roy Lewallen wrote:
>
> I guess any antenna "works". How well is another question, and the
> evidence from the present installations in Egypt hasn't been terribly
> convincing. In over ten years, the inventors have yet to convince any
> but a few remote broadcasters that the antennas are a viable alternative
> to their standard tower systems. Independent measurements of one antenna
> in Egypt shows remarkable field strength if one makes certain
> assumptions about the ground quality. But it appears that even a very
> inefficient antenna could produce these strengths if, for example, there
> were a high water table or significant radiation from the feedline. But
> over all these years and despite the eagerness of the inventors to sell
> their system, to my knowledge (Chris, please correct me if I'm wrong
> about this), no A/B measurements have been made between a cross field
> antenna and a simple vertical radiator from the same location. This, in
> my mind, should be enough to trigger a good deal of skepticism. Quite a
> few people are awaiting results from the new sites under construction. I
> heard that one was being built in England, but wasn't aware of the
> others. Where are the installations in the U.S. being done, and when are
> they expected to be completed?
>
> Roy Lewallen, W7EL
>
> Christopher Trask wrote:
> >
> > john@homebrew.free-online.co.uk wrote:
> > : Has anyone built a CFA "crossed field antenna"
> > : What is the typical radiation efficiency and bandwith for a small 160m

> > : operating antenna?
> > : Are they any better than other antennas?
> > : Do they really work?
> >
> > John,
> > Yes, they do in deed work. There are at least two under
> > construction here in the US, as well as a couple in Brazil and one in
> > Mexico. And there's a dedicated testing unit being constructed in
> > Britain for field strength evaluations and demonstration.
> >
> > For a list of published literature on the subject, see the
> > technical bibliography on my web page at:
> >
> > http://www.primenet.com/~ctrask
> >
> > Everything published on the subject, both pro and con, is listed
> > there.
> >
> > Chris
> >
> > ,----------------------. High Performance Mixers and
> > / What's all this \ Amplifiers for RF Communications
> > / extinct stuff, anyhow? /
> > \ _______,--------------' Chris Trask / N7ZWY
> > _ |/ Principal Engineer
> > oo\ Sonoran Radio Research
> > (__)\ _ P.O. Box 25240
> > \ \ .' `. Tempe, Arizona 85285-5240
> > \ \ / \
> > \ '" \ IEEE Member #40274515
> > . ( ) \
> > '-|)__| :. \ Email: ctrask@primenet.com
> > | | | | \ '. http://www.primenet.com/~ctrask
> > c__; c__; '-..'>.__
> >
> > Graphics by Loek Frederiks

--
Telecommunications Engineering
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503-282-2989
503-282-3181 FAX
gfh@haertig.com

3662. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-06 00:00:00 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <quc4BEAuQrL6Ew$2@pickmere.demon.co.uk>
Source record: 175211

In article <RVxX5.703$fd2.1085554@nnrp6.proxad.net>, Gilbert Mouget
<gilbert.mouget@waika9.com> writes
>
> Wed, 06 Dec 2000 19:52:39 GMT dans l'article
> <3a2e983d.4373702@news.free-online.net>
> l'honorable john@homebrew.free-online.co.uk
><john@homebrew.free-online.co.uk> escrivit :
>
>>Has anyone built a CFA "crossed field antenna"
>
>Yes
>
>>What is the typical radiation efficiency and bandwith for a small
>>160m operating antenna?
>
>Very poor.
>
>>Are they any better than other antennas?
>
>Yes, they are better than frectal antennas.
>
>>Do they really work?
>
>Yes, as a dummy load.

There are at least 8 installed as BC antennae in Europe. In Italy at San
Remo one gives same coverage as old 1/4 wave with half the original Tx
power. Another proposed for high power LW Tx in isle of Man. Another
being built near Birmingham, UK for test purposes. Another in use in
Egypt for at least five years without problems.

Mike
--
M.J.Powell

3663. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 00:00:08 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <i8jt2tg5fek1nfer6m6d6r2r8u0tq71f6r@4ax.com>
Source record: 175212

On Mon, 04 Dec 2000 02:37:43 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>
>Bill Turner wrote:
>
>>
>> Can you cite any cases where 50 watts of 2M/440 energy has actually
>> done a "world of hurt" to anyone? Names, dates and places? Or is
>> this just urban legend?
>
>>
>EPA political correctness never mind the lack of data.
>>
>

Isn't the agency regulating RF the FCC?

3664. Re: Loops - Pro & Con

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 00:19:44 UTC
From: carkenord@juno.com
Message-ID: <90ml2q$7f7$1@nnrp1.deja.com>
Source record: 175213

I have used an equilateral triangle 1 wavelength loop on 20 meters many
years. Apex of the triangle is up......base is down, fed with coax at
the center of the base.

I have snagged a lot of good DX with 100 watts.......this ant. is
mounted on a single uprite pole, rotates by hand.

Lee Carkenord KA0FPJ

In article <90lfn0ncu1@node17.cwnet.frontiernet.net>,
"Siddhartha" <jrm7287@frontiernet.net> wrote:
> Looking for information on Loop Antennas to cover 80 - 10 Meter.
Library
> books in transit. But if YOU have first hand knowledge ref. to loop
> antennas, I would appreciate your impute. Thanks, W2JRM. 73
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3665. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 00:40:55 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A2EDBF7.98EDA89D@netdoor.com>
Source record: 175214

Tom,
You can simplify you're predicament by going to http://www.radioworks.com
check into their 4:1 external baluns. lets you run coax from shack outside and
then ladder line from balun to antenna. You won't have rf in the shack and you
will put out a decent signal with little physical or mental effort. My favorite
mode of operation!

Butch KF5DE

tom wrote:

> I am planning on putting up a simple dipole before the weather gets too
> cold. From the various posts here I have concluded that feeding it with
> ladderline and using my MFJ-986 tuner should allow multi-band operation (the
> 986 has a bulit in balun and accepts a balanced open-wire input.)
>
> My problem is having the line enter the shack. I have a 3 foot section of 4"
> PVC coming thru my basement wall. The radio desk is right next to the inside
> opening of this pipe. I have coax from 2 verticals going thru the pipe, as
> well as a copper pipe I use as a grounding bus. At the outdoor end of the
> pipe the copper is connected to a10' ground rod, and at the indoor end it
> goes right to the radio desk where the equipment is individually grounded to
> the copper pipe.
>
> OK, I realize I can't just thread ladder-line thru the PVC pipe....it would
> be too close to my copper pipe grounding bus. As I see it, I have 2
> alternatives:
>
> 1) Forget the balun inside the tuner. Use an outdoor balun and run about 5
> feet of coax from the balun to the tuner...(using the regular unbalunced
> input.) Will this short distance of coax severely limit my multi-band tuning
> capability? What about losses?
>
> 2) Bring the ladder-line down to the PVC pipe...then use 2 parallel pieces
> of RG8-U coax ...connecting each end of the ladderline to each center
> conductor, tape the 2 pieces of coax together in parallel, run thru the
> pipe...then connect the 2 center conductors to the open-wire input of the
> MFJ tuner/balun. Will this shield the line from interference from proximity
> to the copper pipe? What about losses and tuning effects??
>
> Any advice is appreciated!
>
> Tom
> N2LDE

3666. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 00:58:10 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A2EE000.C345D3D@netdoor.com>
Source record: 175216

Yea,...been feeling for you for some time now and that Mosley. You will
get the shaft if you can't settle out with them on a better aggrement than
that which you have. Push for a "gimme my money and I'll giveya du
antenna, no questions, no talk back, not one word against your FINE
product after we sign this agreement:"

gl, 73, Season's Greetings,

Butch Magee KF5DE

wa7aw@bentonrea.com wrote:

> Some of you are reading this for the first time,
> to others it is "old hat". Basically my story is
> simple, Feb 1999 I paid over $5,000.00 For A
> Mosley Pro-96-S antenna, The shipments were sporadic
> and all the parts did not arrive until September of
> 99 at which time it was assembled (according to the
> very shabby instruction manual) it was was raised to
> 70 feet and didn't resonate in any of the amateur bands.
> SWR in the amateur bands were above 3:1 and higher in
> most of the bands. Mosley was no help in trying to resolve
> this problem and actually accused me of incorrectly
> assembling the antenna. Any idiot can match color code to
> color code and install screws into the pre-drilled holes.
> Only problems were that not all the elements were color
> coded correctly (most of the red elements were orange
> colored while the remainder were red) the other elements
> were color coded ok so with the left over pieces and a
> tape measure the remaining orange pieces were found to be
> actually part of the red element. The manual is so poorly
> done that i had installed the 18" traps in the wrong location.
> there was no mention in the instruction manual where the 18"
> traps were to go, but did state that the shorter traps were to
> be installed. because of the omission in the manual the 18" traps
> were put in the wrong place. upon closer inspection of the itsy
> tiny drawings in the manual i was able to discover that the small
> traps went near the boom and the 18" traps went toward the tips.
> after counting the number of turns in all the traps and verifying
> that they were in the correct position and pointing the correct
> direction, still no working antenna, still no assistance from
> Mosley. Mosley did add to the confusion when they sent me the
> engineers
> drawing of the antenna showing measurements for the Pro-96-S.
> That drawing showed a big difference between what I had in my back

> yard versus what was drawn in their manual and what the engineer
> drawings
> stated. Some of the elements were short by as much as 12" overall,
> some
> were too long by as much as 12" overall. Finally in Feb. 2000 Mosley
> agreed to accept the antenna back for "warrantee repair" which they
> have had in their posession for over 9 months now.
> To this date Mosley has refused to refund the original purchase price
> for the defective product, refused to replace the Pro-96-S with a
> different
> model that has shown to work correctly (without a request for refund
> for the difference in price), Refused to accept my settlement offer of
> a partial refund of the purchase price and refused to return the
> antenna
> which they say has been tested and found to be working perfectly
> unless I
> sign an order stating that i will no longer say anything about this
> antenna.
> In other
> words, as I understand it, they are blackmailing me by saying, either
> I
> shut up or I don't get the antenna back. Do i regret my purchase of
> this
> antenna from Mosley, YES, but based on previous dealings with Mosley
> and
> using and knowing about their other products I felt I was making an
> informed buying decision. I had been very satisfied with the products
> i used with the Mosley name. This product and this time around though,
> there was no support, a very shabby manual, and accusations from the
> manufacturer that anything and everything that was wrong was my fault
> exclusively. Mosley flatly stated that there was nothing wrong with
> the
> antenna and in fact their web page states that this particular antenna
> was assembled and tested prior to shipping. there are a couple of
> flaws
> in that statement for the sporadic shipping of parts could not have
> allowed Mosley to assemble and test the parts at their location.
> The absence of screw marks in the pre drilled holes indicated that the
> elements had never been screwed together. I have spent an addition sum
>
> of money by trying to resolve this issue through the use of an
> attorney
> in Missouri. While he has been most helpful, Mosley refuse to
> co-operate
> and refuses to refund or return the product. i cannot afford to spend
> more money on this dead horse and cannot sue for attorney fees so the
> legal part is over.
> one note of interest at this point is that Mosley did agree on 2
> separate
> occasions to refund the purchase price, once in november 99 when i

> first
> had the problems. At that time I still had trust in the Mosley Name
> and
> refused the refund offer because I wanted "multiple mono-banders" on
> one
> boom. The other instance of a refund offer was when Mosley requested
> that
> all material I had posted be removed from the internet and I agree to
> sign
> a "gag-order". i requested that all information be removed from
> various
> web pages and it was removed. Mosley immediately retracted their offer
> of a refund once i had complied with the 1st of their two conditions.
> I will be glad to answer any questions you may have.
> I will be glad to entertain any ideas you may have on how to resolve
> this situation with only one exception, I will not give up my right
> to free speech.
> Do i wish to cause harm to Mosley, No, Not really, my sole intention
> is to inform others of MY Situation with Mosley's "Top of the Line"
> antenna.
> Thanks in advance for your comments and if you know of others who may
> be considering the purchase of any commercially available antenna
> system, please advise them to do their homework so they won't end up
> in my situation. Tower Talk is a great source for information,eham.net
> is another, and of course most of the reflectors have something to say
> as well.
> thank you for listening and if you want to forward this to others
> please feel free to do so.
> 73's & 88's to all
> happy holidays
> wa7aw
> John H.
> ps you can visit my web page for additional info
> http://users.bentonrea.com/~wa7aw/tower/page14.html

3667. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 01:15:01 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <90moal$j3d$1@nnrp1.phx.gblx.net>
Source record: 175215

On 6 December 2000 Roy Lewallen <w7el@eznec.com> radiated the following:

:
: I guess any antenna "works". How well is another question, and the
: evidence from the present installations in Egypt hasn't been terribly
: convincing. In over ten years, the inventors have yet to convince any
: but a few remote broadcasters that the antennas are a viable alternative
: to their standard tower systems.
:

<<SNIP>>

:
: But over all these years and despite the eagerness of the inventors to
: sell their system, to my knowledge (Chris, please correct me if I'm
: wrong about this), no A/B measurements have been made between a cross
: field antenna and a simple vertical radiator from the same location.
:

One of the papers I've listed does have a comparison, but I'm
not sure which one (I think it's the one from the Royal Signals
Institution, the British equivalent of the Signal Corps). I'm on a
business trip back east right now, but when I get home I'll look and make
certain. I don't want to misquote anything as this is a highly volitale
subject.

:
: I heard that one was being built in England, but wasn't aware of the
: others. Where are the installations in the U.S. being done, and when are
: they expected to be completed?
:

Exact details, I can't say for now as per the reasons given
above. I do know for certain that a major contractor for broadcast
antennas here in the US now has an exclusive contract to install CFA
antennas in the western hemisphere. As with all such things, providing
information for the general public is not a very high priority.

I try to keep as informed as possible on this, especially now
with all of the new installations popping up. A couple more in Italy
this year. RAI seems to like the design, as does a private German
company. The new installation in Britain, not associated with the
Isle of Man installation, is solely for providing the measurements
and comparisons that everyone has been demanding, and this will be
under controlled conditions so as to erase any ambiguity. Given the
amount of controversy surrounding this, I would say that the demo

installation is long overdue. Better late than never.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

3668. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 01:24:19 UTC
From: tom <tsokol@adelphia.net>
Message-ID: <7FBX5.6417$tR2.166676@news1.news.adelphia.net>
Source record: 175217

To all who responded:

Thanks so much for all of the useful information!

It looks like I'm not the first ham to encounter this predicament!!

It seems that I have variety of options here....

I'll probably start off with the parallel coax idea (it's the leaset expensive and I have some short pieces of good coax lying around....) If that doesn't work I'll invest in a remote balun. Either way I am determined to get some wire in the air!

Tom

3669. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 01:28:33 UTC
From: n7ws@azstarnet.com
Message-ID: <3a2ee4ec.123038779@news.azstarnet.com>
Source record: 175218

On Wed, 06 Dec 2000 13:37:13 -0600, ignacy@num.ads.uga.edu wrote:

>>And just how much additional loss would there be in say 4-5 feet of coax?
>
>It would be an extra 150 pF to tune out. Perhaps not too important on
>160-40m. On higher bands, it is likely that a tuner won't match some
>bands.

Why do you consider the coax to be a capacitor? In this application, is not a capacitor; it is a transmission line.

It is as probable that the addition of the coax will actually improve the matching situation on some frequencies as it is that it will hurt.

In other words, the impedance seen at the input of a random-length, random-impedance transmission line feeding a random-length dipole, installed at random-height, operating on a random frequency is a crapshoot. Four feet of coax isn't going to make it any messier than it is already. And it certainly isn't going to introduce any easily measurable loss.

[snip]

N7WS

3670. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 16:18:45 UTC
From: rwclark@seanet.com
Message-ID: <3aabb6e1.3698492040@news.seanet.com>
Source record: 175122

On Thu, 07 Dec 2000 03:18:57 GMT, Pervert_Extraordinaire
<valued_customer1@att.com> wrote:

>Richard Clark wrote:
>
>> Hi OM,
>
>Who's OM?
>
You are (Old Man - not an aspersion!)
>> Code requires you to now connect your new ground to the service
>> ground.
>
>Even if the second rod is strictly for the antenna?
>
You are creating the opportunity for a ground loop which is often
evidenced by a persistent hum or buzz in your audio that you just
can't seem to get rid of. Other problems could follow like burnt out
ground traces in your equipment's circuit boards.
>Would a buried copper #10 wire be sufficient ?
>
Check your local code (often deferred to the code books you will find
in your local hardware store - but not always).
>Thanks in advance.

73's
Richard Clark, KB7QHC

3671. Re: Second Shield of Double-Shielded Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:12:36 UTC
From: 2w8ji@contesting.com
Message-ID: <3a2fc31f.28570306@news.akorn.net>
Source record: 175120

On Wed, 06 Dec 2000 13:26:21 -0500, Drew Northup
<dnorthup@ecs.syr.edu> wrote:

>One small term: Faraday Cage.
>Yes, according to theory, the current only flows on the surface of any conductor
>(& in practice too), but this is not what is at issue when you have braided
>shields on cables (or at least isn't quite that significant at anything other
>the microwave--10GHz--frequencies). What is at issue is the shielding
>principle--the Faraday cage. The outside (second) sheild acts as a small
>elongated Faraday Cage when tied to earth ground--preventing common mode pickup
>on the first (inside) shield. Therefore the two shields must be able to carry
>different currents at times (while there is no restriction that they never carry
>the same current). The physics bears this explanation out. This is why the
>proper connection of your coax at both ends really does matter. Do you think
>that Cecil's advice would make any sense if this weren't true?

In RF applications, the second shield does nothing at all to eliminate
common mode current, no matter what name you hang on it.

As Roy and others pointed out, the most it can do is add a little
extra shielding.

In applications where the shield is NOT several skin depths thick,
such as systems carrying very low frequency energy or responding to
very low frequency energy, the extra shield thickness can be helpful.

In broacast audio application, for example, an outer shield grounded
at only one end helps a lot but only if the INNER conductors have no
direct ground connections. If you gound the shield shield at both
ends, it conducts power line currents and induces them (becauyse it is
right against the other conductors) into the system.

>(As for rigs being dirty as far as RF goes, most of them are reasonable to bad.
>But, if you live next to a TV or cellphone installation--or near a lot of
>computers--the leakage of your rig will turn out to be quite minimal and
>insignificant when compared to common-mode pickup on improperly installed single
>or dual shield coax.)

That's right. If you install the coax wrong...no matter what
type....it will become a problem. Installion errors or flaws are the
single biggest problem, not the leakage through the shield in the
application being discussed.

73 Tom

3672. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:18:56 UTC
From: 2w8ji@contesting.com
Message-ID: <3a2fc570.29162766@news.akorn.net>
Source record: 175121

On Thu, 07 Dec 2000 00:58:10 GMT, Butch Magee <lynyrd@netdoor.com>
wrote:

>Yea,...been feeling for you for some time now and that Mosley. You will
>get the shaft if you can't settle out with them on a better aggrement than
>that which you have. Push for a "gimme my money and I'll giveya du
>antenna, no questions, no talk back, not one word against your FINE
>product after we sign this agreement:"
>
>gl, 73, Season's Greetings,
>
>Butch Magee KF5DE

Actually Butch, if I'm not mistaken, long long ago Mosley did offer
him his money back. At least that is what I recall him saying.

At that time, he preferred to bitch about the thing to the world
rather than take the refund. It takes two to start a pissing contest.

When only one person complains, and does so for a year or more, it
often means the problem isn't solely with the manufacturer. If Mosley
had a real problem, you'd be seeing hundreds of complaints....not just
one person.

73 Tom

3673. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:22:31 UTC
From: 2w8ji@contesting.com
Message-ID: <3a2fc69d.29464207@news.akorn.net>
Source record: 175123

On Wed, 6 Dec 2000 21:48:30 +0000, "M.J.Powell"
<mike@pickmere.demon.co.uk> wrote:

>I
>There are at least 8 installed as BC antennae in Europe. In Italy at San
>Remo one gives same coverage as old 1/4 wave with half the original Tx
>power. Another proposed for high power LW Tx in isle of Man. Another
>being built near Birmingham, UK for test purposes. Another in use in
>Egypt for at least five years without problems.
>
>Mike
>--
>M.J.Powell

Hi Mike,

That's not true.

The only CFA's out there that are "claimed" to be working are the few
owned by the people selling them, and none have FS readings anywhere
near that of a properly working vertical.

You've been reading too many of their sales picthes, and not enbough
of the reports.

At the NAB show, they admitted "10 dB down" wasn't too bad for a small
antenna like the CFA.

73 Tom

3674. Re: High School Project/Packet Radio

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:24:01 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A2FC7B0.28D3175C@ecs.syr.edu>
Source record: 175119

Greg wrote:

> Hello everyone...
>
> This'll be a tough one - get ready...
>
> I'm a high school geek from Michigan who knows absolutely nothing about
> am. radio, other than the fact that it exists (I went to Dayton
> Hamvention in 97 or 98, but that's irrelevant... :)). Our physics and
> engineering departments are pairing up to build 8 foot tall rockets and
> launch them in competitions (with FAA clearance). Part (most) of the
> competition involves designing a payload and doing something somewhat
> useful with it. I came across TINI (http://www.ibutton.com/TINI) chips
> and, later that week, amidst a linux (http://www.linux.org) kernel
> recompilation, I noticed Am. Radio support, which I had always
> completely disregarded. I thought about the possibility of combining
> the two and broadcasting temperature information (or barometric pressure
> or GPS data, etc...) live, while the rocket is in flight, to a computer
> on the ground and displaying it real-time.
>
> The one major limitation is the amount of size in the payload section of
> the rocket. I BELIEVE (I'd have to check to make sure) that the rocket
> is six inches in diameter the payload section is about a foot long. I
> did a little research (emphasis on little) and determined that in order
> to broadcast data, I would need a Terminal Node Connector (?), which
> appeared to be a rather bulky piece of equipment. The other issue is
> licensing. It's my understanding that not just any fool can pick up an
> am. radio and start talking. What kind of a license would I need to
> broadcast data? How much would the equipment cost? I understand that
> this is probably going to be a substantial investment of time and money,
> but if we could get it to work, it would be REALLY cool.
>
> A google search (http://www.google.com) yielded this page
> (http://www.arrl.org/news/stories/2000/10/10/1/?nc=1) which suggests
> that a Japanese packet radio group has had some success in implementing
> packet radio on TINI chips, so that issue may be solved.
>
> This may also be overcomplicating a simple task. If anyone knows of a
> better way to get that data to the ground, I'd be grateful for all
> suggestions (PPP via cell phone?).
>
> Thanks for taking the time to read this, any assistance is greatly
> appreciated.
>

> -Greg

Hi Greg,
First things first--yes you will need a liciense of technician level or higher. Now about data transmission--there are many ways to accomplish this, and what would seem most elementary to you as far as data transmission is concerned isn't really that simple in the RF world. What do I mean by this? Well first off, I assume that you are familiar with the ins and outs of TCP/IP. Now imagine being constrained to 1/4 Watt and 9600 baud (about 9600 bits-per-second--including error checking--on a good day). Can you make this leap? The fact of the matter is that you are going to have to pick up an entirely new point of view about data transmission, about how much bandwidth is reasonable bandwidth (28.8Kbits per second [telephone modem protocol] is still experimental & unreliable at best over RF--because of how it works), about how much draw (power-wise) is acceptable for an embedded payload--basically you have no idea how difficult this will be as it sounds in your post.
Go get the amatuer radio books from your local bookstore or RadioShack. Read them. Go out on the internet and learn more about packet radio. Look up information about power supplies (batteries in your case) and how much the computer you plan to use will draw. Also, this will NOT BE CHEAP!!! (Unless somebody will donate the equipment.) Decide if this is what you really want to try (or if you can settle for some out of the box solution--and deal with its restrictions--see www.cicuitcellar.com for more info on these). Then re-post (or e-mail me) and we can discuss the full ramifications of the project that you have proposed here.

--
Drew Northup, N1XIM

3675. Re: Loops - Pro & Con

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:48:07 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <r3QX5.69$x6.269073@news2.rdc2.tx.home.com>
Source record: 175124

I've had a 40 meter full wave square horizontal loop for many years now.
It's up about 25 ft. fed at the corner on the end of about 15 ft. of coax.
It seems to work well on 40, 20, 15 and 10 meters. But, I do need to run it
through a tuner.

Pete, KA0TZK

3676. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 17:53:28 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <9aQX5.97$d5.831399@news.ntplx.net>
Source record: 175125

Tom W8JI <2w8ji@contesting.com> wrote:

> At the NAB show, they admitted "10 dB down" wasn't too bad for a small
> antenna like the CFA.

I built a 40 m model of the EH CFA antenna that was featured by one of the presenters at the last NAB event. I installed it on the roof of ARRL HQ. I asked AA1DO to show up late for work and, at about 9:00 in summer, we compared the signal strengths between the antenna and the inverted vee installed about 20 feet higher, hung off of the tower. The invee was consistently 4 S units better than the CFA antenna.

What would be useful, I think, would be to install two of them at the same height at about 100 meters horizontal separation. One could then measure the path loss between the two antennas, and compare it to the predicted loss, either by the formula, loss=-27.55+20logD(meters)+20logF(MHz) or to the loss predicted by the near-field calculation in NEC for vertically polarized infintesimally small dipoles (lossless).

What was interesting about the EH antenna is that when the inductance was adjusted to resonance, the antenna did indeed exhibit a 50-j0 ohm feed point. Minor variations in inductance changed the impedance by adding inductive or capacitive reactance, but also by significantly lowering the R component, all as measured using our MFJ bridge.

73,
Ed Hare, W1RFI

3677. Re: Ham-II Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-07 18:24:50 UTC
From: "Kenneth D. Grimm" <grimm@NOSPAMlynchburg.net>
Message-ID: <9clv2tk7lk22f82nhi9gj2hps2ov2c0jsv@4ax.com>
Source record: 175126

On Thu, 7 Dec 2000 06:53:57 -0600, "Billy Young" <youngbil@lcc.net>
wrote:

>I'm looking for a schematic for a Ham-II rotor. If any one has a schematic
>please let me know
>
>"73's"
>
>Billy Young
>KD5CSD

You are welcome to download a copy of the manual from the BoatAnchor
Manual Archive.

Ken K4XL
Remove NOSPAM from address to reply by Email
Boatanchor Manual Archive - http://bama.sbc.edu

3678. 40 Meter Loop site???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 00:00:00 UTC
From: kf3dy@repeater.net
Message-ID: <3a30555c.88007142@news.epix.net>
Source record: 175128

I am looking for a webpage that describes the 40 meter loop. I am thinking about making one and getting it up this weekend, but would like to see a website that explains, show, and tells how to make one. THanks. Corey - kf3dy

3679. Re: SWL Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 00:00:00 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <aQZX5.122565$U46.4136988@news1.sttls1.wa.home.com>
Source record: 175129

Mike,

Had a R71a for many many years. Great receiver!

Heard good things about the carpet loop but never tried one. It is the first link, the others are decent links with varied information. Last link is pretty cool!

http://northshore.shore.net/~dmoisan/faqs/carpetloop.html

http://www.inforamp.net/~funk/page6.html

http://www.hard-core-dx.com/nordicdx/antenna/hidden/

Glenn

"Capt'n Mike" <mmurdock@fishinglife.com> wrote in message news:ZtVX5.103922$vc3.22202197@typhoon.tampabay.rr.com...
> I have a mint Icom R71A receiver set up in my small apartment and am
> currently using (embarrassed) a CB antenna outside the window. I used to
> have a very nice long wire antenna but don't have the space for it here
> (neighbors wouldn't be too happy).
>
> Can anyone suggest either a good compact antenna for .3 - 30 mhz SWL.
> Commercial or web site with plans would be fine... I need some ideas before
> I go into serious SWL withdrawal
>
> Mike
>
>
>

3680. RF Health Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 02:00:17 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <RgXX5.510$x6.889913@news2.rdc2.tx.home.com>
Source record: 175127

I would appreciate any info or useful links regarding the health hazards of RF. I'm particularly interested in how I might calculate the danger from an antenna radiating a specific wavelength, at a certain distance and power level.

Thanks, Pete KA�TZK

3681. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 12:31:02 UTC
From: fractenna@aol.com
Message-ID: <20001208073102.15155.00001302@ng-mj1.aol.com>
Source record: 175130

>I built one for 10M about 2 years ago. Compared it against a
>1/4 wave vertical, ground mounted, with 12 radials. The vertical
>on average was 10 - 20 dB better...The CFA was located about
>100 ft away, and there was no interaction between the antennas.
>
>Matching the CFA was tough, but I managed to get a reasonable match,
>VERY sharp however....I'm not sure that I ever got it working right...
>but I copied the dimensions exactly and am sure that I scaled it right.
>
>The fractal antenna, a 2E version at 35 ft was equal to and up to +3 dB
>better than
>the vertical, but when compared to a short 2E yagi with the same form
>factor,
>about equal to -3dB down. These were from many reports on 10M.
>The yagi and fractal were at the same height and separated by
>about 160 ft.
>73,
>Chuck...K1KW (I'll try any antenna...!! but show me one that works better
>than what I have up now)
>
>
>

Mr. O'Neal is caught in a lie.

Readers of this NG will recall as a matter of FACT that O'Neal stated that the fractal quad he built was superior. This -3dB to that Yagi of the same size would require a very small 2 element Yagi with 6 dB gain!

mR o'nEAL: If you have data that shows my measurements to be wrong, then publish them in a magazine or journal. You will not ever manage to undo this lie of yours.

Nathan Cohen, Ph.D.

>
>
>
>

3682. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 12:41:06 UTC
From: ham_guy@webtv.net
Message-ID: <18725-3A30D6E2-2@storefull-131.iap.bryant.webtv.net>
Source record: 175134

As a quality assurance rep, having worked for several companies, I would have to agree that Mosely personnel are definitely making some bad business decisions here. The primary one, of course, is they still have $5,000 of a customer's money and are not acting in good faith to make restitution.
Personally, I would refuse to represent any company that used this sort of tactic against its customers. I requested and received sales literature from Mosely and was considering the purchase of one of their antennae. I am not going to entertain that thought any further.
When one of our customers makes a complaint, we file an 8D report within our quality department that requires the problem be contained and that the issue must be resolved to the customer's satisfaction within 90 days. Any outstanding 8D's are presented before the managers of Quality, Manufacturing, Sales, and Shipping for review. The customer may at any time request a visit by me or my highest level manager if they are not satisfied with telephone conversations.
I make a lot of those trips and always act in good faith to please the customer, having confidence in the company that I represent. Briefly, I would refuse to work for Mosely and represent their products. Johnny

3683. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 12:51:23 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A30D94B.49E5@wt.net>
Source record: 175131

Bill Turner wrote:
>
> >Also using the longest stinger
> >possible will also help alot.
> ----------
>
> If you're in an experimental mode, consider adding a wire from the top of the
> stinger forward horizontally to another antenna mounted on the front bumper.
> This increases the length of the stinger considerably, although a good divorce
> lawyer should be consulted beforehand.
>
> And if you're REALLY into tinkering, ground the bottom end of the forward
> antenna and feed the whole thing as a big one-turn loop. Your car body provides
> the missing part of the loop.
>
> 73, Bill W7TI

I tried a long loading wire from the top of trunk mounted antenna to the hood/front bumper area one time, but found it worked very poor. My wire was way too close to the car metal. I would think you would want a tall front antenna to keep the wire up off the car a good ways to work. Also in a way I think it would be best to have an insulator high up on the front antenna to keep the high voltage part away from the metal. Mainly for the same reason. So the front antenna could be a "dummy stick" and just a support. I'm trying to decide how I want to mount a mobile in a truck I've been driving. It's no sweat right now, as no camper, but I want to put a camper top on it before too long. So that really ruins things as far as good antenna mounting. Or to me anyway. I'll probably still mount on the bed rail somewhere I guess. Either that or use a cab mount up on the door/window pillar. But, I'm not too keen on possible cab damage, so I'll probably go with the bed somewhere. On my car it's on the trunk behind the back window. Pretty easy. MK
--
http://web.wt.net/~nm5k

3684. Re: SWL Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:00:41 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A30DB79.2F96@wt.net>
Source record: 175132

Capt'n Mike wrote:
>
> I have a mint Icom R71A receiver set up in my small apartment and am
> currently using (embarrassed) a CB antenna outside the window. I used to
> have a very nice long wire antenna but don't have the space for it here
> (neighbors wouldn't be too happy).
>
> Can anyone suggest either a good compact antenna for .3 - 30 mhz SWL.
> Commercial or web site with plans would be fine... I need some ideas before
> I go into serious SWL withdrawal
>
> Mike

Actually, the cb antenna shouldn't be all that bad. Good for the higher bands I would think. If you only fed the center pin to the radio and left the shield floating it would even work low bands ok. Sure, you may not have the signal level as other antennas, but the S/N ratio should still be about the same unless you need a certain pattern. As far as rcvr's usually for me about any old wire will do, the longer the better. Run a magnet wire all along the ceilings around the house. That should work ok. Also a small tuner can help sometimes to get a better match on certain bands. Any old cheapy L / random wire tuner would do. Also you might look into some of the active antennas, although I've never use or needed these. Seems kinda like a waste of money to me for normal hf listening when a wire will usually do. MK
--
http://web.wt.net/~nm5k

3685. Re: RF Health Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:06:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A30DCBE.4BC5@wt.net>
Source record: 175133

Pete Holden wrote:
>
> I would appreciate any info or useful links regarding the health hazards of
> RF. I'm particularly interested in how I might calculate the danger from an
> antenna radiating a specific wavelength, at a certain distance and power
> level.
>
> Thanks, Pete KAï¿½TZK
For an online calculator
http://n5xu.ae.utexas.edu/rfsafety/
Also I think the ARRL web site has some info. MK

--
http://web.wt.net/~nm5k

3686. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:41:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A30E50F.5F0E79B0@IEEE.org>
Source record: 175136

Roy Lewallen wrote:
> I'm looking forward to seeing the published results of the tests, which
> will surely include a comparison between the tribander and a dipole.
> Won't it?

Assuming a supergain antenna cannot create energy, the only explanation for "2 to 3 S-units" (12dB-18dB) gain over a reference tribander is a narrowing of the beamwidth. Seems impossible for a two-element beam to narrow the beamwidth that much. Maybe that reference tribander has water in its traps? Your idea for a reference dipole at the same height is a good one.
--
http://www.mindspring.com/~w6rca

3687. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:42:13 UTC
From: "Adam T. Cately" <atcately@bright.net>
Message-ID: <3A30E535.92AFDF16@bright.net>
Source record: 175135

Thanks!

3688. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:44:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A30E5C6.A7BEBDE3@IEEE.org>
Source record: 175137

Mark Keith wrote:
> I want to put a camper top on it before too long. So that really ruins
> things as far as good antenna mounting.

I once had a molded plastic camper shell on my pickup. The antenna
hardly noticed it was there.
--
http://www.mindspring.com/~w6rca

3689. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 13:53:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A30E7F0.B1C09C11@IEEE.org>
Source record: 175138

G0DJA wrote:
> For a quarter wave divide the wavelength by 4 (E.g., a quarter wave on 80M
> is 80/4 = 20M)

That is a free space number. For metal antennas, that number must be reduced by a certain percentage because of the difference in the speed of light in free space VS metal. For a wire antenna, the reduction is about 5%.
--
http://www.mindspring.com/~w6rca

3690. Re: RF Health Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 14:33:02 UTC
From: w1rfi@aol.com
Message-ID: <20001208093302.11009.00000600@ng-cu1.aol.com>
Source record: 175139

>From: Bill Turner w7ti@jps.net

>Check the ARRL web page: www.arrl.org

The exact URL is:

3691. Re: RF Health Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 14:34:17 UTC
From: w1rfi@aol.com
Message-ID: <20001208093417.11009.00000601@ng-cu1.aol.com>
Source record: 175140

>From: Bill Turner w7ti@jps.net

>Check the ARRL web page: www.arrl.org

The exact URL is:

http://www.arrl.org/tis/info/rfexpose.html

It has links to the FCC, the University of Texas web-page calculator, and a number of good "professional" links.

73,
Ed Hare, W1RFI

3692. Re: SWL Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:04:47 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A30F88F.EAE060C@dvol.com>
Source record: 175141

GLC1173 wrote:

> Brian wrote:
> >Even a short outdoor wire will be better >than any indoor antenna.
>
> I didn't find it that way at all - at least if just for receiving. The
> Slinky endloading a
> 20'-25' length of wire in my room did just as well as a 70' longwire outdoors.

>
Not my experience over many years at all, been there, done it. Always got much better signal strengths and s/n ratios with outdoor antennas particularly on the low bands and particularly when I got 'em up at 50' and above. I'd suspect something was not right with the 70' wire.
>

> How strong is 18-gauge wire - much less 26-gauge?

>
Don't have the actual break strengths but plenty strong enough for reliable 30-40' runs into trees with ice. The big trick is to leave plenty of slack in the wire between "supports".
>

> The last straw for me with that 14-gauge longwire was when an average-size
> tree branch fell on it in a storm; I went to the Slinky after that.

>
You are not gonna hear JAs on 80 with an indoor slinky antenna like I can with outdoor sneak wires.
>
An average size tree branch will take out a $1,000 beam, too. All antennas installed under conditions which put them at those kinds of risks are considered expendable, gets knocked down,, ya put it back up, that's just ham radio SOP. I have a 475' of insulated stranded #14 soft copper house wire strung thru seven big trees at my brother's place, been clobbered by two hurricanes and it's still up. Yeah, some branch will eventually land on it and I'll have to fix it.

>
>

w3rv

3693. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:19:41 UTC
From: k6mhe@arrl.net
Message-ID: <3a30fb78.2637338@news.mcn.org>
Source record: 175147

On Thu, 7 Dec 2000 22:40:56 -0600, "WE0H" <mikereid1@qwest.net> wrote:

>I unfortunately bought one of those B&W 90' folded dipoles. Now after
>reading this thread amongst others, how long is too long to use parallel
>coax to the balun??? I have a 25' 1-1/2" plastic pipe buried in the ground
>from the house to the tree that is the center to whatever antenna. Could I
>run the 450 ladderline through this pipe??? Or is it OK to run the parallel
>coax through the pipe and have the balun out in the open air. How about this
>idea> If running 450 ladderline through the pipe is OK, then how about using
>it to feed a 135' inverted L with 55' of it vertical and the rest horizontal
>at 30-55'??? I have used the L fed with coax and a tuner on most of the HF
>bands with pretty good luck. Maybe the 450 line would be of less loss used
>this way? I do have over 3000' of insulated radials going to a few ground
>stakes next to the tree. All radials are 65' and 135' long. What do you all
>think??? Mike> WE0H.
>
>
Mike,

Sometime ago Tom made some measurements on buried ladder line... The
results weren't good.

Of your options I would choose the parallel run of coax.

Danny, K6MHE

3694. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:20:27 UTC
From: Bob Tomas <tomas@monsoon.colorado.edu>
Message-ID: <3A30FC3B.577DEC6E@monsoon.colorado.edu>
Source record: 175143

Tom W8JI wrote:

> On Tue, 05 Dec 2000 08:21:23 -0700, Bob Tomas
> <tomas@monsoon.colorado.edu> wrote:
>
> >I am thinking now that I may be able to construct an array that meets
> >
> >my needs as well as being simpler to construct and more versatile
> >
> >(i.e., multi-band, unlimited bandwidth) by erecting two small vertical
> >
> >elements (~10') and phasing them using the MFJ noise canceling unit.
> >
> >I would appreciate if you would comment on this idea.
> >
> >Thanks.
> >
> >Bob
>
> I'd never use resonant loops or verticals in a system like that (at
> least not without some resistor loading), because the system is much
> too bandwidth critical. Anything you can hear with resonant loops, you
> should be able to hear with non-resonant loops and a good amplifier at
> the loop.
>
> I have arrays of short (20 ft tall) phased verticals, that are loaded
> with a series resistance and inductance at each vertical. They cover
> the entire band with very high F/B ratio. As a general rule, they are
> my best receiving antennas. They use delay lines with crossfire
> phasing. 8 verticals covers every 45 degrees with a broadside-endfire
> directivity that is like pointing a flashlight at the DX. Far better
> than a single Beverage, or even smaller combinations of Beverages.
>
> The biggest problem in limited space is the coupling between the
> antennas and everything around them, like the transmitting antennas.
> Even with 300-350 feet of spacing my receive antennas are greatly
> affected by my transmitting antennas. With that in mind, you might
> have to detune your TX antenna while receiving.
>
> I use units similar to the MFJ units to combine my individual arrays
> into a giant receiving array. That way I can compensate for direction
> and angle of the signal and "focus" the system.
>
> 73 Tom

Hi Tom,

Thanks for the reply.

I am wondering how you load your 20' vertical antennas. Specifically, what
do you use to guide you in determining how much series resistance and
inductance to use?

Regards,

Bob

Bob Tomas
Program in Atmospheric and Ocean Sciences
Univ of CO
Campus Box 311
Boulder, CO 80309-0311
Duane Physics Building, D-341
voice (303) 492-2654
fax (303) 492-3524
tomas@monsoon.colorado.edu

3695. Antenna for Aviation Handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:22:24 UTC
From: "Paul R. Loring" <paul@loring.net>
Message-ID: <Q07Y5.255$7J4.205844@typhoon2.ba-dsg.net>
Source record: 175142

Hi,

I just purchased a handheld for a backup in the cockpit. When I use it at home to listen to transmissions, I only get the aircraft and not the ground based stations (Air Traffic Control). I would like to build an antenna for the roof to try and pick up ATC as well. I am no way as techincal as most of you on this board, but I am fairly handy, have a physics degree, and enjoy tinkering (and love climbing on the roof).

Can anyone help get me started to build something like this?

Thanks,

Paul Loring

3696. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:33:55 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A30FD52.68C6C07C@bellatlantic.net>
Source record: 175144

Sylvan Butler wrote:

> If you had been following along, you should have no trouble
> identifying the problem.

Now THAT's condescending!

3697. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:37:36 UTC
From: richardharrison@webtv.net
Message-ID: <1845-3A310040-22@storefull-111.iap.bryant.webtv.net>
Source record: 175146

Bill Turner wrote:
"Also using the longest stinger possible will help a lot."

Similar antennas on both ends of an ionospheric 75-mile path in southern Florida (good ground) were used at 3 MHz to get comparative data for several antenna types using the F2-layer.
These data were collected for the War Deparment`s "Electrical Communication Systems Engineering". A table gives signal level, noise, S/N, and power needeed for equal S/N. I`ll give only the relative received signal db:

Horizontal half-wave, end-fed, 7-ft-high=0db.
Horizontal half-wave, end-fed, 30-ft-high=+21db.
Horizontal half-wave, center-fed, 30-ft-high=+21db.
Sloping half-wave, 5 to 30-ft-high=+12db.
Sloping quarter-wave, 5 to 20-ft-high=+1db.
45-ft horizontal top, 35-ft downlead with 80-ft counterpoise at 5-ft elevation=-2db
15-ft tuned whip with crow foot counterpoise=-38db.

This 75-mile path requires high vertical angle radiation for the short skip. There was a footnote regarding the horizontal half-wave antennas at 30-ft elevation. These were measured using a 150-mile path. No explanation, but 30-ft elevation at 3 MHz won`t concentrate the signal at lower angles for DX.

My money would be on the half-wave at 30 feet. I`d avoid the 15-ft whip no matter how good my tuner or ground were, unless I had a mobile installation and could not use the half-wave horizontal. The sloping half-wave isn`t half bad, either. The surprising flat-top sorta stunk. A Signal Corps kit for the SCR-188-A radio was used as the flat-top. This radio operated at 1.5 to 12.5 MHz and tried to get either !/4-wave or 3/4-wave resonance in its inverted L-antenna with counterpoise.

The antenna elevations will scale for other frequencies but the ionospheric behavior is different.

Best regards, Richard Harrison, KB5WZI

3698. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:43:28 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Ak7Y5.1663$d62.113244@bgtnsc04-news.ops.worldnet.att.net>
Source record: 175145

<john@homebrew.free-online.co.uk> wrote in message
news:3a2e983d.4373702@news.free-online.net...
> Has anyone built a CFA "crossed field antenna"
> What is the typical radiation efficiency and bandwith for a small 160m
> operating antenna?
> Are they any better than other antennas?
> Do they really work?
>

The Cross Field Antenna (CFA) is an electrically small antenna and operates under the same laws of physics that all electrically small antennas do. All electrically small antennas "work" to some extent in that they radiate some portion of the energy delivered to their input terminals. The real question is what percentage of delivered power is actually radiated.

Additionally, the CFA and all other electrically small antennas can be impedance matched to 50 ohms at any single frequency. Usually, this impedance match is constrained to a very small bandwidth and is very sensitive to minor changes in the antenna structure and the surrounding environment.

The question of whether or not the installed broadcast CFA antennas "work as claimed" appears to be an open issue. To anyone who states that the CFA antenna works as claimed by the inventors, I ask the following question - Have you personally witnessed testing of these antennas and personally verified the level of power delivered to the antenna and personally verified the measured radiated field strength? I have spoken with one of the RF engineers that traveled to Egypt to verify the installed CFA performance. He indicated that his group was able to measure field strength but were never allowed to determine the power delivered to the antenna. I am certain that those on the other side of the evaluation would have a different story. Since I would prefer not to draw conclusions based on one individual's statements, I think its important for anyone stating that the antenna works as claimed to identify the basis upon which this statement is made.

There are also numerous issues surrounding measuring the CFA performance that need to be considered and identified when presenting measured data. For example, when the broadcast CFA is energized, are the original broadcast tower antennas still present? If so, the near-field energy created by the CFA will couple to the existing broadcast antennas and the "antenna" being measured is now an array consisting of the CFA and the original broadcast towers. This situation does not represent a true "CFA test".

Additionally, field strength measurements from the CFA must be presented as compared to a standard antenna with the same power delivered to its input terminals. I mention this because I have seen absolute measured field

strength data presented for the CFA with no relative comparison data. Field strength data presented with no comparison to a standard antenna is virtually meaningless because the measurements will vary as a function of ground parameters, terrain topology, multipath, and the presence reflecting objects near the CFA antenna.

Comparison data must be presented in evaluating the CFA antenna performance. Additionally, the antenna should be tested with no other reflecting resonant structures (like existing broadcast towers) nearby.

Just some thoughts ...

Steve VE9SRB

3699. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:55:51 UTC
From: n7ws@azstarnet.com
Message-ID: <3a30fb95.4719916@news.azstarnet.com>
Source record: 175148

On Thu, 7 Dec 2000 22:40:56 -0600, "WE0H" <mikereid1@qwest.net> wrote:

>I unfortunately bought one of those B&W 90' folded dipoles. Now after
>reading this thread amongst others, how long is too long to use parallel
>coax to the balun??? I have a 25' 1-1/2" plastic pipe buried in the ground
>from the house to the tree that is the center to whatever antenna. Could I
>run the 450 ladderline through this pipe???

Not a good idea.

>Or is it OK to run the parallel
>coax through the pipe and have the balun out in the open air.

Yes

> How about this
>idea> If running 450 ladderline through the pipe is OK, then how about using
>it to feed a 135' inverted L with 55' of it vertical and the rest horizontal
>at 30-55'??? I have used the L fed with coax and a tuner on most of the HF
>bands with pretty good luck. Maybe the 450 line would be of less loss used
>this way?

Why would you suffer all of the grief of using ladder line, especially when
feeding an unbalanced antenna, just to "save" some imaginary dB?

If the inverted L/tuner has worked well before and you want to improve it,
unless you want to work 160, I would recommend you ditch the horizontal part,
use low loss coax and be done with it. It sounds like your run is only a bit
over 25'. If you want the to go all out, pick up some surplus 1/2" Heliax at
the next hamfest.

A 55' vertical isn't the best for the higher h-f bands, especially if it's
coupled closely to the supporting tree, but with the lousy "peak" of the sunspot
cycle might as well write them off anyway and worry about 80 meters.

> I do have over 3000' of insulated radials going to a few ground
>stakes next to the tree. All radials are 65' and 135' long. What do you all
>think??? Mike> WE0H.

Sounds like a respectable ground plane.

Wes N7WS
>
>
>

3700. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 15:56:15 UTC
From: "Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A31049F.622F@rpi.edu>
Source record: 175149

Dave Holford wrote:
>
> S Reeves wrote:
>
> >
> > The question was about antennas.. and later clarified to point out
> > that it was for SLOW SCAN TELEVISION. Last time I checked, IN
> > AMERICA THAT IS, slow scan television was not used to control aircraft
> > in any manner. You make it sound as if I asked how to do open heart
> > surgery. Calm down a bit. The question was about ANTENNAS, Not
> > about building a control tower at JFK or LaGuardia..
> >
>
> I would be very interested to know when was the last time you checked,
> and who you checked with? In America (I presume you mean the U.S.A.)
> that is.
>
> Dave

Aside from it just being general knowledge, a cursory read-through of
the FARs and other aviation-related publications reinforces the notion
that SSTV has no current or planned role in the air traffic control
system in the USA.

Curt Breneman
KC2EBP

3701. homebrew antenna websites?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 16:10:49 UTC
From: Ken <klajr2@swbell.net>
Message-ID: <DL7Y5.1$Fc2.1045@nnrp1.sbc.net>
Source record: 175150

Could anyone please direct me to an antenna building site that would give me element dimensions for a beam?

Thanks,
Ken

3702. Re: Antenna for Aviation Handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 16:46:16 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o83r09.hko.ln@mail.specsol.com>
Source record: 175152

Paul R. Loring <paul@loring.net> wrote:
> Hi,

> I just purchased a handheld for a backup in the cockpit. When I use it at
> home to listen to transmissions, I only get the aircraft and not the ground
> based stations (Air Traffic Control). I would like to build an antenna for
> the roof to try and pick up ATC as well. I am no way as techincal as most
> of you on this board, but I am fairly handy, have a physics degree, and
> enjoy tinkering (and love climbing on the roof).

> Can anyone help get me started to build something like this?

> Thanks,

> Paul Loring

Try a simple verticle dipole first to see how much signal you get.

Take a length of PVC pipe (cheap) and tape coax to it. Connect about 21
inches of wire connected to the center sticking up. Connect about 21 inches
of wire pointing down to the shield. Since you are not going to transmit,
lengths are not critical. See if you can hear ATC.

You can make a more permenant ground plane later if the signal is good.

Get a copy of the ARRL Antenna Book and look in the section on verticle
antennas for ideas on how to build a sturdy version.

Jim Pennino

3703. Re: Modeling antenna wire in plastic tube

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 16:54:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <dInF+aB5IRM6EwiR@ifwtech.plus.net>
Source record: 175166

Cecil wrote:
>Roy Lewallen wrote:
>> I'm looking forward to seeing the published results of the tests, which
>> will surely include a comparison between the tribander and a dipole.
>> Won't it?
>
>Assuming a supergain antenna cannot create energy,

(seems a pretty safe assumption :-)

>the only explanation
>for "2 to 3 S-units" (12dB-18dB) gain over a reference tribander is a
>narrowing of the beamwidth. Seems impossible for a two-element beam to
>narrow the beamwidth that much. Maybe that reference tribander has water
>in its traps? Your idea for a reference dipole at the same height is
>a good one.

It's generally better to use a reference antenna with a similar pattern
to the one under test, so that any problems with the test range apply
about equally to each. Unfortunately a dipole is about the worst
possible reference antenna for *practical* tests because it has no
discrimination against stray reflections.

From that point of view, they're getting it right by using a reference
tribander rather than a reference dipole.

However, that doesn't eliminate the possibility that the reference
tribander itself isn't working properly. To do that, it would seem
better to check against two different tribanders (same size, different
make, different trap design). If they are both ones that have already
been measured in the K7LXC program, that also offers some possibility of
cross-checking.

Yet another sensible precaution would be to duplicate all the
measurements with the antennas swapped between the two towers.

Yes, it's a lot of hard work to get antenna gain measurements right.
That's why modeling is generally more accurate.

NEC-based modeling has been highly successful for a huge range of
different types of antenna - literally from dipoles to dishes and
beyond. Of course NEC has limitations, but the large user community have
pretty well identified those problems. At this stage of its development,
NEC doesn't have to prove itself against every challenger who comes
along.

If someone says that "NEC doesn't work for my antenna," I firmly believe
it's *their* responsibility to prove why not.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3704. Re: homebrew antenna websites?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 16:57:24 UTC
From: nospam@spam.com
Message-ID: <3a3212ef.15830951@news.vnet.net>
Source record: 175151

On Fri, 8 Dec 2000 10:10:49 -0600, "Ken" <klajr2@swbell.net> wrote:

>Could anyone please direct me to an antenna building site that would give me
>element dimensions for a beam?
>
>Thanks,
>Ken

Ken,

It is impossible to build your own beam antenna. Being told such a
thing is possible is like taking a kid "Snipe" hunting. I don't know
why hams continue to spread this homebrew antenna myth but they do.
Antennas should always be purchased from companies like KMA Antennas.

But if you insist on taking part in this ancient ham radio farce, try
looking at these web sites.......
http://www.marktwain.net/~aschmitz/antennas/calcantenna.html

http://www.poynting.co.za/techinfo/tutorial/tutyagi.htm

http://ac6v.com/antprojects.html

Good luck & 73
KMA Antennas

KMA Antennas
VHF - UHF - HF log periodics
http://www.kmaantennas.com

help support qsl.net with a donation
https://proxy.qsl.net/donation

3705. Re: homebrew antenna websites?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 17:24:07 UTC
From: tom_bruhns@agilent.com
Message-ID: <90r5fe$q6i$1@nnrp1.deja.com>
Source record: 175153

This site has links to a bunch of antenna stuff (as well as to a bunch
of other ham related stuff): http://www.dxzone.com/

In article <DL7Y5.1$Fc2.1045@nnrp1.sbc.net>,
"Ken" <klajr2@swbell.net> wrote:
> Could anyone please direct me to an antenna building site that would
give me
> element dimensions for a beam?

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3706. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 17:58:45 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A312154.F684FD99@ipeg.com>
Source record: 175154

"M.J.Powell" wrote:

> In article <3a2fc69d.29464207@news.akorn.net>, Tom W8JI
> <2w8ji@contesting.com> writes
> >On Wed, 6 Dec 2000 21:48:30 +0000, "M.J.Powell"
> ><mike@pickmere.demon.co.uk> wrote:
> >
> >>I
> >>There are at least 8 installed as BC antennae in Europe. In Italy at San
> >>Remo one gives same coverage as old 1/4 wave with half the original Tx
> >>power. Another proposed for high power LW Tx in isle of Man. Another
> >>being built near Birmingham, UK for test purposes. Another in use in
> >>Egypt for at least five years without problems.
> >>
> >>Mike
> >>--
> >>M.J.Powell
> >
> >Hi Mike,
> >
> >That's not true.
> >
> >The only CFA's out there that are "claimed" to be working are the few
> >owned by the people selling them, and none have FS readings anywhere
> >near that of a properly working vertical.
>
> Have you got the figures, please?
> >
> >You've been reading too many of their sales picthes, and not enbough
> >of the reports.
> >
> >At the NAB show, they admitted "10 dB down" wasn't too bad for a small
> >antenna like the CFA.
>
> The Italian Service at San Remo removed one of their two 3 kW TES after
> the CFA was installed and provided the same service. Fringe listeners
> would have complained if it was much worse. The Egyptian ant is still up
> and working, isn't it? Are they going to re-install their original ant?
>
> Vy 73
>
> Mike
> --
> M.J.Powell

Good morning all,

It might be instructive to look at where these antennas are sited. Tanta, Egypt, is about equidistant between Cairo and Alexandria, the two major population centers, at a distance of some 50-60 miles. Flat delta terrain. San Remo, Italy, is a coastal location backed up against a major escarpment (very much like Monaco) with France at the top of the mountain. They broadcast in Italian. The Isle of Man is small, 277 square miles, or so with a major mountain in the center.

None of these sites require much in the way of antennas to be effective, especially San Remo. I suspect that the reason these antennas work (more or less) has more to do with what they are expected to cover, rather than any intrinsic technical merit on the part of the antenna.

Marty
N7MX

3707. Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 18:43:00 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a312ec2.0@oracle.zianet.com>
Source record: 175155

I have acquired a second Hy-Gain Hy-Tower which I intend to phase with the one I have up now. I am very interested in hearing from others who have successfully phased two of these fine old antennas.

In the ARRL's "Vertical Antenna Classics" on page 72, there is a very interesting article by Peter Anderson, KZ3K on "Phasing Verticals with Continuous Phase Control." I am especially interested in hearing from anyone who has implemented this "steerable" phasing system.

Any tips or suggestions will be most welcome! Please reply via email.

Happy Holidays... Ed, W5EJ

Ed Juge
Ruidoso, NM
Phone: 505-430-7209
Email: ed@juge.org
==========

3708. Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 18:53:25 UTC
From: Randy Mclean <rmclean@no_address.com>
Message-ID: <328E43C84DBDC892.9329C23FFB05EF93.8CA4612CAA8C1B2D@lp.airnews.net>
Source record: 175156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

Hello,
Next summer I am planing on setting up a Satellite station. I intend
to use the m2 2MCP22(2m 22 element cross polarized yagi) and
436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
azimuth/elevation rotator. My question is, how well would this setup
work for EME, if at all? I've been told that you need array of many
antennas to work EME, is this true?? Thanks.

If you wish to reply via email please use my email address on Qrz.com as
I do not use my true email address on Usenet for Spam reasons.

--
73 de k5drm
Randy Mclean

3709. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 19:20:16 UTC
From: Disposable Hero <NoFixxxer@XHotmail.com>
Message-ID: <QvaY5.60810$i%4.1603197@news20.bellglobal.com>
Source record: 175157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

Sounds like trying to hit a Freight Train with a Bee Bee Gun.

"Randy Mclean" <rmclean@no_address.com> wrote in message
news:328E43C84DBDC892.9329C23FFB05EF93.8CA4612CAA8C1B2D@lp.airnews.net...
> Hello,
> Next summer I am planing on setting up a Satellite station. I intend
> to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
> azimuth/elevation rotator. My question is, how well would this setup
> work for EME, if at all? I've been told that you need array of many
> antennas to work EME, is this true?? Thanks.
>
>
> If you wish to reply via email please use my email address on Qrz.com as
> I do not use my true email address on Usenet for Spam reasons.
>
> --
> 73 de k5drm
> Randy Mclean
>
>
>

3710. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 19:26:19 UTC
From: ann7how@aol.com
Message-ID: <20001208142619.02588.00003133@ng-cc1.aol.com>
Source record: 175158

I have no views to express about the effectiveness of the CFA, but reports that I have seen are that the intention of the Isle of Man builders is to cover the whole of UK and the east coast of Europe. 73, Hal, W9UYA

3711. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 19:36:25 UTC
From: Ron Murdock <rdmw6kj@succeed.net>
Message-ID: <t32e1ud7cv1uf9@corp.supernews.com>
Source record: 175159

Greetings from Yuba City,
I bought this antenna because it would fit on my lot, be suspended from the center by a support on my tower, and give me a replacement for my 160 meter antenna. It does not work on 160 except as a dummy load, a fact B&W doesn't like to admit--I have talked to them directly. They say it works on 160 if mounted in free space 80 above ground level. I doubt it but maybe you can do that and let me know. The antenna starts to lose its low swr profile at about 3.7 MHz and below that it rises rapidly to the point that only a really good antenna tuner will let you pretend it is working at all. On 40m and higher, it is a good antenna.
My situation is that my tower is behind my garage, and the antenna is at 40 feet (the maximum recommended in B&W's literature.) One side of the antenna therefore runs across the roof of the garage at about 25 feet average while the other just slopes down across the backyard. I am able to work to the east on 80 m with good results, but the antenna tuner in the IC-746 is engaged at frequencies below 3.7 MHz.
A load resistor and matching transformer (two separate elements) allow this antenna to radiate on the higher frequencies. I made one contact on 160 after first installing the antenna, and have had nothing since. If it were not for its utility on the higher bands, I would have gotten rid of it long ago.
A friend about two miles from me has an identical antenna mounted at 40 feet height across a clear backyard without obstructions. Using my MFJ 259b, his antenna and mine exhibit almost identical properties over the range of frequencies I mention here. So would most examples of this antenna, I suspect.
To give a short answer to your question, if you don't need 160, this is an acceptable antenna.
73, Ron, W6KJ
Bill Hiscox K7WRH <hiscox@proaxis.com> wrote in message news:90h59lomv1@hpcvnews.cv.hp.com...
> Does anyone have experience to share with the B&W braodband folded dipole?
> Positive or negative? I am considering one for use primarily on 160/80m
> (but would use it on other bands as well.) I run only 100W with a IC737
> (internal tuner).
>
> Comments?
>
> de K7WRH/AE
>
>

3712. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 19:58:27 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <90regv$23d$1@nnrp1.deja.com>
Source record: 175160
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

In article
<328E43C84DBDC892.9329C23FFB05EF93.8CA4612CAA8C1B2D@lp.airnews.net>,
rmclean@no_address.com wrote:
> Hello,
> Next summer I am planing on setting up a Satellite station. I
intend
> to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-
5500
> azimuth/elevation rotator. My question is, how well would this setup
> work for EME, if at all? I've been told that you need array of many
> antennas to work EME, is this true?? Thanks.
>
> If you wish to reply via email please use my email address on Qrz.com
as
> I do not use my true email address on Usenet for Spam reasons.
>
> --
> 73 de k5drm
> Randy Mclean
>
>
Depending on the frequency range in question a antenna gain in the
order of 20 db is considered normal for EME.

Dan/W4NTI

--
"Just tellin the truth, and they cain't stand it."

Sent via Deja.com http://www.deja.com/
Before you buy.

3713. Re: HP803A VHF Impedance Bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:08:12 UTC
From: tom_bruhns@agilent.com
Message-ID: <90rf37$2jn$1@nnrp1.deja.com>
Source record: 175164

Hi Kevin...and lurkers.

I looked up the manual, and the "Principles of Operation" section is just a single page. Paraphrasing and condensing: The generator input feeds a short loop of coax to the "unknown" port. As close as possible to the "unknown" port is a pair of probes, one magnetically coupled and one electrically coupled to the through line. Those two probes feed the two ends of a loop of slotted line. Each probe appears to be terminated, presumably to prevent reflections on the slotted line loop of the signal from the probe at the opposite end. There are two front-panel adjustments which the operator makes to get a null on the receiver port, those being magnitude and phase. The phase adjustment (really a time-difference adjustment, but calibrated to read phase directly at 100MHz) is just the slotted line pickoff position (which feeds the detector port). The magnitude adjustment changes the spacing of the probes from the line, presumably increasing one while decreasing the other, though they never 'zactly say that. At any rate, the ratio between the couplings is variable.

Without thinking too carefully about it, I suspect the only two resistors--the ones that terminate the probes--are OK if you got a constant error, independent of frequency. If one of those was bad, you'd have reflections on the slotted line that would cause frequency-dependent effects, no? And in fact, there may be a mechanical adjustment to set the coupling ratio correctly, and that may be all you need to do. Comments (especially ones to make my thinking on this clearer) are most welcome.

Cheers,
Tom

In article <90ek9d$9io$1@news.asu.edu>,
w9cf@ptolemy.la.asu.edu wrote:
> This weekend I bought an HP-803A VHF impedance bridge at a local
hamfest.
> It did not come with a manual, but looking inside, there doesn't seem
to
> be much to it. The generator input is connected to what appears to be
> a dual differential adjustable waveguide attenuator each end of which
> then couples to one of the two ends of a transmission line loop with
> an adjustable tap which goes to the detector. I surmise that the way
it
> works is that the generator drives a 50 ohm standard hidden inside the
> waveguide attenuator as well as the unknown. Each signal is separately
> attenuated and fed to one end of the transmission line. The

differential
> attenuator adjustment is calibrated to give the impedance magnitude
and
> the transmission line adjustment gives the phase.
>
> My problem is that a good 50 ohm load connected to the unknown
connector
> balances with a reading of 38 Ohms. Hooking various lengths of 50 ohm
> air line to the unknown connector, the bridge balances within a degree
> or 2 of a phase of plus or minus 90 degrees and if I remove and add
> a shorting cap across the airline the product of the open and shorted
> impedances are 38 plus minus 1 or 2 ohms squared. I have tested this
> from 60 to 500 MHz and the results are the same throughout that
> range. From the above results I can determine the effective length of
> the front panel transmission line, and the results are consistent with
> the bridge giving the true impedance multiplied by 38/50. From this I
> am assuming that the internal 50 ohm standard has changed value to 38
> ohms presumably because someone damaged it by feeding it too much
power.
>
> My questions:
> 1. Am I correct in my guess as to how the HP803A works?
> 2. Am I likely correct in my guess as to what is wrong?
> 3. Does anyone know if this is repairable with available parts? That
> is, will something like a 50 ohm chip resistor fit in there. The coax
> from the generator cable has a solid outer conductor, and getting at
> the resistor which I assume is inside the wave guide attenuator would
> require undoing a fair amount of plumbing, so I would prefer not to
take
> it apart until I know whether or not it can be fixed.
>
> I can of course just multiply the impedance measurements by 50/38
> and forget about it, but it would be nice to have it working as it
> was intended.
>
> Thanks and 73, Kevin w9cf@ptolemy.la.asu.edu
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3714. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:11:01 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A314053.886B570B@earthlink.net>
Source record: 175161
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

i would suggest stacking atleast 2 of each to improve gain and actually 4
would be ever better and you will need atleast 160 watts
there is a lot of signal loss between the earth and the moon and back and
you will also need a good preamp
good luck

Randy Mclean wrote:

> Hello,
> Next summer I am planing on setting up a Satellite station. I intend
> to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
> azimuth/elevation rotator. My question is, how well would this setup
> work for EME, if at all? I've been told that you need array of many
> antennas to work EME, is this true?? Thanks.
>
> If you wish to reply via email please use my email address on Qrz.com as
> I do not use my true email address on Usenet for Spam reasons.
>
> --
> 73 de k5drm
> Randy Mclean

3715. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:12:36 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <FibY5.110$d5.903776@news.ntplx.net>
Source record: 175162

Martin Hibbs <mhibbs@ipeg.com> wrote:

> None of these sites require much in the way of antennas to be effective,
> especially San Remo. I suspect that the reason these antennas work (more
or
> less) has more to do with what they are expected to cover, rather than any
> intrinsic technical merit on the part of the antenna.

The CFA controversy sure is interesting. On one hand, for whatever reason, there is a real dirth of quantatative data. OTOH, if that 50 kW Egyptian station's antenna were badly inefficient, I think it would be pretty evident in the 49 kW of heat that would be radiated by the structure. Even if the antenna were as good as 10% efficient, better than some of the comparisons I have seen posted here, 45 kW would be lost as heat, and I think that 45 kW of heat would be pretty hard to miss.

All that I know is that I have duplicated two QST article submissions. In one case, I was unable to reproduce the matching arrangment, but did some expermintation that seemed to come pretty close. This one used a tapped autotransformer to obtain the impedance transformation, along with some Ls and Cs. I could find a number of combinations that would result in a 50-ohm match, but in no case did that CFA hear better than a piece of coax laying on the ground. The other one seemed a lot easier to tune, but was consistently a few S units below the reference horizontally polarized dipole, albeit over a short path.

I had seen one other study that, if memory serves, had been done by the British Army. In that study, at a point about a mile away, presumably by ground wave, the CFA was at approximately the same level as a relatively low horizontal dipole. Unfortunately for the CFA, the signal should have been a lot stronger from a short vertically polarized antenna than from a dipole, which radiates relatively little energy toward the horizon. I stretched NEC's near field calculation probably past its limit and it predicted that the field from an very small vertical should have been about 20-40 dB stronger than the field from a low horizontal dipole, at a point 6 feet above average ground, 1 mile away. (I am working from memory on this, but the gist of it is correct).

73,
Ed Hare, W1RFI

3716. Re: homebrew antenna websites?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:16:39 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <tmbY5.111$d5.904031@news.ntplx.net>
Source record: 175163

Ken <klajr2@swbell.net> wrote in message
news:DL7Y5.1$Fc2.1045@nnrp1.sbc.net...

> Could anyone please direct me to an antenna building site that would give
me
> element dimensions for a beam?

Among the several projects found at:

http://www.arrl.org/tis/info/antproj.html

are pdf's of several QST HF and VHF beam antennas.

73,
Ed Hare, W1RFI

3717. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:20:29 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a313be4.21186008@news.azstarnet.com>
Source record: 175165
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

On Fri, 08 Dec 2000 12:53:25 -0600, Randy Mclean <rmclean@no_address.com> wrote:

>Hello,
> Next summer I am planing on setting up a Satellite station. I intend
>to use the m2 2MCP22(2m 22 element cross polarized yagi) and
>436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
>azimuth/elevation rotator. My question is, how well would this setup
>work for EME, if at all? I've been told that you need array of many
>antennas to work EME, is this true?? Thanks.

Randy,

For 2m EME I would suggest a minimum antenna gain of 20 dBi, at least 1KW to the antenna and a noise figure of about 1 dB.

You can work some of the "big guns" (W5UN, KB8RQ, SM5FRH, F3VS, et.al) with less but that's about it. I have worked all of these guys using 1KW out, a HB 17 el, 3.2 wavelength Yagi, 180' of 1/2" Heliax and a 0.8 dB NF preamp (in the shack).

Before changing QTH, I had four of these Yagis and a short run of RG-17 and could hear my echoes about half of the time. I don't believe you are really EME capable until you can hear your own echoes.

Wes N7WS

>
>
>If you wish to reply via email please use my email address on Qrz.com as
>I do not use my true email address on Usenet for Spam reasons.
>
>--
>73 de k5drm
>Randy Mclean
>
>
>

3718. Re: homebrew antenna websites?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:45:13 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A314859.80F1B23B@dvol.com>
Source record: 175167

Ken wrote:

> Could anyone please direct me to an antenna building site that would give me
> element dimensions for a beam?

>
http://www.cebik.com is one good one.
>
look for the antenna projects in http://www.ac6v.com/
>
The ARRL site per Ed Hare's recommendation really gets down the nuts & bolts.
>
>Thanks,

> Ken

>
w3rv

3719. Re: HP803A VHF Impedance Bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 20:48:35 UTC
From: rwclark@seanet.com
Message-ID: <3ab1436f.3800010305@news.seanet.com>
Source record: 175019

On Fri, 08 Dec 2000 20:08:12 GMT, tom_bruhns@agilent.com wrote:

>Comments (especially ones to make my thinking on this
>clearer) are most welcome.
>
>Cheers,
>Tom
>
>

Hi Tom,

I'm not sure I can add anything except reassurance of your descriptions. That is, because anytime I had to service/cal any of these instruments (speaking generally) the circuitry was just as simple as you describe. Also, your description of the theory of operation is right on as far as I can see.

HP always designed with first principles in mind and no bluffing. The simplicity of their designs were always a testament to the continued bullet-proof operation and rock-steady results.

As to w9cf's speculation about past abuse, I can agree that was a probability. I too bought my GR-1606 at a show and when I asked how well it worked the fellow sort of mumbled "fine" and looked away. It didn't matter to me later when I confirmed that the reference resistor for the bridge wasn't even in the circuit! Undoubtedly someone keyed down into the bridge and fried it. Simple resolution - much the same as w9cf speculates - replace the resistor. However, both w9cf and my seller appeared to be intimidated by "precision" when, as I said, the solution was simple when you consider first principles.

I have had to service/cal equipment where circuit components and layout mattered immensely (at least when you are measuring out to the third place or beyond), but standing back and considering the situation always lead to a robust and simple solution. Proving that the solution is effective can be a challenge, but even here, common sense prevails and provides equally suitable, simple tests.

Both your comments and those of w9cf give me every confidence that this bridge will be back in operation.

73's
Richard Clark, KB7QHC

3720. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 21:29:17 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3152AD.C0590FFF@oio.net>
Source record: 175168

Ed,
You might talk to KB5PX, who makes phasing networks
for vertical antennas.
'Doc

3721. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 22:09:39 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <3a315afc$0$18135$7f31c96c@news01.syd.optusnet.com.au>
Source record: 175020

All is revealed,
Tom the philips headed screw closest to the TUNE knob on my MFJ 259 was slightly loose,and with downward pressure was showing very strange readings, nipped it up and all ok,
i must say in regards the R 8 .i have assembled quite a few commerial and home brew antennas, but for ease the R 8 is the leader,
as per the C/CRAFT manual.NEVER touched the antenna in regards tuning.
perfect out of the box. only 2 full S POINTS down on 10mtrs against a full size trapless tribander HB35C at 55ft.this antenna is mounted on top of a 15ft shed roof,and then again another 7ft to the tilt frame.
many thanks to all that replied
Kind Regards Dennis VK4SX.
tom <tsokol@adelphia.net> wrote in message news:UueX5.6049$tR2.157902@news1.news.adelphia.net...
> Dennis,
>
> The MFJ should work fine with the R8. It doesn't care what kind of antenna
> you have, and works the same way as your rig's meter, just with lower power.
>
> I'd open up the black box and check all the solder connections. Also I'd try
> a different piece of coax. (I have had brand new coax with shorted
> connectors.)
>
> Tom
> N2LDE
>
> "Dennis Edey" <vk4sx@dingoblue.net.au> wrote in message
> news:3a2c47ed$0$18135$7f31c96c@news01.syd.optusnet.com.au...
> > Hello fellas,just finished assembling a new R 8. stood it up,and put the
> MFJ
> > 259 on to have a look,got no reaction,like a short,
> > something to do with the matching box maybe ??
> > any ideas,will revisit the antenna tomorrow,just looking for any tips and
> > tricks,
> > Kind Regards Dennis Vk4sx.
> >
> >
> >
>
>

3722. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 22:11:02 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <3tm23tcbsg2n2tol6jqp3pcvo4c4859nd6@4ax.com>
Source record: 175021

I sent you a note by private e-mail. I have the Hy-Gain engineering
report that describes how to put two (or even three) Hy-Towers in
phase in various configurations.

Dick Hughes - W6CCD

On Fri, 8 Dec 2000 11:43:00 -0700, "Ed Juge/NM" <ed_juge@zianet.com>
wrote:

>I have acquired a second Hy-Gain Hy-Tower which I intend to phase with the
>one I have up now. I am very interested in hearing from others who have
>successfully phased two of these fine old antennas.
>
>In the ARRL's "Vertical Antenna Classics" on page 72, there is a very
>interesting article by Peter Anderson, KZ3K on "Phasing Verticals with
>Continuous Phase Control." I am especially interested in hearing from
>anyone who has implemented this "steerable" phasing system.
>
>Any tips or suggestions will be most welcome! Please reply via email.
>
>Happy Holidays... Ed, W5EJ
>
>--
>Ed Juge
>Ruidoso, NM
>Phone: 505-430-7209
>Email: ed@juge.org
>==============================
>
>

3723. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 22:32:49 UTC
From: Randy Mclean <rmclean@no_address.com>
Message-ID: <717693862E59B8B9.908F47237147A965.64216E0B98F21070@lp.airnews.net>
Source record: 175022
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

First, I want to thank all the people for the replies. I do have a few more questions. You suggest "Stacking 2 of each". Do you mean stacking them in series or parallel to each other. Others replied that I need min of 20db gain, would "stacking" two add the gain of two antennas? Also to connect the two antenna to the same coax would i use a Y-connector??

Let me see if I understand if I "stack" 2 2MCP22 antennas each having 16db gain would that give me 32db gain??

Thanks Again?

Dennis Kaylor wrote:

> i would suggest stacking atleast 2 of each to improve gain and actually 4
> would be ever better and you will need atleast 160 watts
> there is a lot of signal loss between the earth and the moon and back and
> you will also need a good preamp
> good luck
>
> Randy Mclean wrote:
>
> > Hello,
> > Next summer I am planing on setting up a Satellite station. I intend
> > to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> > 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
> > azimuth/elevation rotator. My question is, how well would this setup
> > work for EME, if at all? I've been told that you need array of many
> > antennas to work EME, is this true?? Thanks.
> >
> > If you wish to reply via email please use my email address on Qrz.com as
> > I do not use my true email address on Usenet for Spam reasons.
> >
> > --
> > 73 de k5drm
> > Randy Mclean

--
Randy Mclean
Administrator of Novell, UNIX, NT, Network Security, and/or any thing else that users break around here(WHY IS THAT???)!

3724. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 22:43:21 UTC
From: 2w8ji@contesting.com
Message-ID: <3c12956b.7911926@news.akorn.net>
Source record: 175023

On Thu, 7 Dec 2000 21:06:48 +0000, "M.J.Powell"
<mike@pickmere.demon.co.uk> wrote:

I said:

>>The only CFA's out there that are "claimed" to be working are the few
>>owned by the people selling them, and none have FS readings anywhere
>>near that of a properly working vertical.

Mike said:
>Have you got the figures, please?

Ummm, that's the problem. I can't supply them for an imiginary
antenna that doesn't exist.

>>You've been reading too many of their sales picthes, and not enbough
>>of the reports.
>>
>>At the NAB show, they admitted "10 dB down" wasn't too bad for a small
>>antenna like the CFA.
>
>The Italian Service at San Remo removed one of their two 3 kW TES after
>the CFA was installed and provided the same service. Fringe listeners
>would have complained if it was much worse. The Egyptian ant is still up
>and working, isn't it? Are they going to re-install their original ant?

Sure, and pigs can fly. Look at where the data comes from. The
supporting data all comes from...suprise!...the people trying to
hoodwink people into believing in something that they are
selling....that they can't or won't supply data for.

Ask yourself this....

Since that antenna has been around and available for nearly a decade,
whuy can't the owners or sellers point out an independent measurement
backing up their claims?

If it works like they say (which it can't since the theory itself is
nonsense) why are they selling copies of plans to hams on Antennex
instead of selling hunderds of them commercially?

Why is Antennex complaining about a lack of supporting results, when
they are making money off the thing??

Frankly, I'm amazed after about ten years of non-results they can
still find suckers who fall for their bolognia....but then I guess
people still buy magnetic pillows to releive headaches.

73 Tom

3725. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 22:46:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3164A9.294863FD@dvol.com>
Source record: 175024

"Curt M. Breneman" wrote:

> that SSTV has no current or planned role in the air traffic control
> system in the USA.
>
> Curt Breneman
> KC2EBP

>
Yeah, Center needs more 1933 "flying spots" sorts of technology to deal with
like it needs chicken pox or another strike.
>
w3rv

3726. Re: Feeding Dipole with Ladderline & Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:00:13 UTC
From: WE0H <mikereid1@qwest.net>
Message-ID: <FJdY5.1265$kf3.262440@news.uswest.net>
Source record: 175025

Thanks Guys,
The 135' L worked good when I had it up last year. I think that I will put the B&W in the garage and put up the L again. I do operate 160, so will run the full 1/4 wave wire for that band. Now I know that I can use a balanced line if I put up another dipole in the future. Gona use the parallel coax runs in the ground. Thanks again es 73's, Mike> WE0H.

3727. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:09:45 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A316825.24A5C90F@bellatlantic.net>
Source record: 175026

The National Electrical Code
REQUIRES
that the electrode you made be bonded to the house
grounding electrode system, per article 250-50.
The size of the bonding jumper wire is given in
table 250-66 - the smallest is #8, and the actual size you
need will depend upon the size of the service entrance
conductors. Your #10 wire is too small. You must also
connect the jumper as per 250-70.

You don't have options in this area, other than those
contained in the code, if you want to be legal and safe.

Pervert_Extraordinaire wrote:

> Mark Keith wrote:
>
> > You could run a connecting wire between the two, and bury it just under
> > the dirt. Actually, you could probably get away with the seperate
> > grounds being as they are so far apart but I think it's better to bond
> > them together. it will add to the grounding.
>
> I'm leaning toward connecting the two.
>
> > If you use one of those, get a good one. "Gas tube" type. Polyphaser
> > etc. There is lots of other lightning info if you do a search under deja
> > news. There's been tons posted here in the past, and is recorded under
> > dejanews. MK
>
> 10-4.
>
> Thanks again!

3728. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:28:40 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <90rqr2cig1@nnrp1.deja.com>
Source record: 175028
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

In article
<717693862E59B8B9.908F47237147A965.64216E0B98F21070@lp.airnews.net>,
rmclean@no_address.com wrote:
> First, I want to thank all the people for the replies. I do have a
few more
> questions. You suggest "Stacking 2 of each". Do you mean stacking
them in
> series or parallel to each other. Others replied that I need min of
20db gain,
> would "stacking" two add the gain of two antennas? Also to connect
the two
> antenna to the same coax would i use a Y-connector??
>
> Let me see if I understand if I "stack" 2 2MCP22 antennas each having
16db gain
> would that give me 32db gain??
>
> Thanks Again?
>
> Dennis Kaylor wrote:
>
> > i would suggest stacking atleast 2 of each to improve gain and
actually 4
> > would be ever better and you will need atleast 160 watts
> > there is a lot of signal loss between the earth and the moon and
back and
> > you will also need a good preamp
> > good luck
> >
> > Randy Mclean wrote:
> >
> > > Hello,
> > > Next summer I am planing on setting up a Satellite station. I
intend
> > > to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> > > 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu
G-5500
> > > azimuth/elevation rotator. My question is, how well would this
setup
> > > work for EME, if at all? I've been told that you need array of
many
> > > antennas to work EME, is this true?? Thanks.
> > >

> > > If you wish to reply via email please use my email address on
Qrz.com as
> > > I do not use my true email address on Usenet for Spam reasons.
> > >
> > > --
> > > 73 de k5drm
> > > Randy Mclean
>
> --
> Randy Mclean
> Administrator of Novell, UNIX, NT, Network Security, and/or any thing
else that
> users break around here(WHY IS THAT???)!
>
>
When you stack another equivilant antenna you will get about 3db of
gain, better fb/fs and sharper pattern.

Stacking means one on top of the other. Then if you add two more you
put them beside the other two. Parallel feed.

Dan/W4NTI

p/s See a good VHF antenna book for more info.

--

Sent via Deja.com http://www.deja.com/
Before you buy.

3729. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:29:59 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A316CE3.A37C1B63@bellatlantic.net>
Source record: 175027

I made an error in my earlier post. The smallest conductor
you can use to bond the electrode you made for your radio antenna
is #6 copper or equivalent, not #8. Also, I neglected to mention
that the references I gave applied to the 1999 NEC.

I'll add this: if you can ground your antenna to the existing house
ground instead of adding a "made electrode" (the ground rod you drove),
you avoid the conductor size problem. For example, you can use #8
aluminum or #10 copper and connect to the interior grounded metal
water piping, if available. See NEC article 810-21 Note that all
of this discussion is directed at grounding the antenna MAST and/or
metallic support structure and/or the antenna discharge unit, not the
antenna itself.

Pervert_Extraordinaire wrote:

> Mark Keith wrote:
>
> > You could run a connecting wire between the two, and bury it just under
> > the dirt. Actually, you could probably get away with the seperate
> > grounds being as they are so far apart but I think it's better to bond
> > them together. it will add to the grounding.
>
> I'm leaning toward connecting the two.
>
> > If you use one of those, get a good one. "Gas tube" type. Polyphaser
> > etc. There is lots of other lightning info if you do a search under deja
> > news. There's been tons posted here in the past, and is recorded under
> > dejanews. MK
>
> 10-4.
>
> Thanks again!

3730. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:34:57 UTC
From: KC8JBO <kc8jbo@my-deja.com>
Message-ID: <90rr70cuj1@nnrp1.deja.com>
Source record: 175029
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

In article <90rqr2cig1@nnrp1.deja.com>,
Dan/W4NTI <w4nti@my-deja.com> wrote:
> In article
> <717693862E59B8B9.908F47237147A965.64216E0B98F21070@lp.airnews.net>,
> rmclean@no_address.com wrote:
> > First, I want to thank all the people for the replies. I do have a
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> > series or parallel to each other. Others replied that I need min of
> 20db gain,
> > would "stacking" two add the gain of two antennas? Also to connect
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> > > you will also need a good preamp
> > > good luck
> > >
> > > Randy Mclean wrote:
> > >
> > > > Hello,
> > > > Next summer I am planing on setting up a Satellite station.
I
> intend
> > > > to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> > > > 436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu
> G-5500
> > > > azimuth/elevation rotator. My question is, how well would this
> setup

> > > > work for EME, if at all? I've been told that you need array of
> many
> > > > antennas to work EME, is this true?? Thanks.
> > > >
> > > > If you wish to reply via email please use my email address on
> Qrz.com as
> > > > I do not use my true email address on Usenet for Spam reasons.
> > > >
> > > > --
> > > > 73 de k5drm
> > > > Randy Mclean
> >
> > --
> > Randy Mclean
> > Administrator of Novell, UNIX, NT, Network Security, and/or any
thing
> else that
> > users break around here(WHY IS THAT???)!
> >
> >
> When you stack another equivilant antenna you will get about 3db of
> gain, better fb/fs and sharper pattern.
>
> Stacking means one on top of the other. Then if you add two more you
> put them beside the other two. Parallel feed.

Yeah, and if you really want to see a "stack" (of SHIT) you'll check
out Jeswald's horrible picture.

> Dan/W4NTI
>
> p/s See a good VHF antenna book for more info.

Translation : "I'm copping out, because I don't know the answer."
--
73 de Roger, KC8JBO
EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
Yaesu FT-920 |Inverted Vee @ 40 ft.
Yaesu FT-90R

Sent via Deja.com http://www.deja.com/
Before you buy.

3731. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:41:22 UTC
From: k1bqt@aol.com
Message-ID: <20001208184122.10987.00000190@ng-fm1.aol.com>
Source record: 175030

> I guess people still buy magnetic pillows to releive headaches.<

Now wait a damn minute, Tom! My magnetic pillow cured my headache when I slept on it, cured my friend's prostate cancer when he sat on it, saved the life of my uncle Ted's horse when it had colic, and increased my gas milage by 25% when I threw it in the trunk of my car to bring it home. It's looking a little rough these days, but are sure you don't want me to ship it down? Happy to share!

73

Rick K!BQT

3732. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-08 23:44:25 UTC
From: mailfrmpa@aol.com
Message-ID: <20001208184425.25915.00001118@ng-mf1.aol.com>
Source record: 175031

With 5 years experience as the manager for client relations, I, too, have been amazed by the reported conduct of Mosley Antennas. In a hobby like ours, where contact with other practicioners of the same hobby is the primary goal OF the hobby, and where nearly every such contact includes a description of the equipment in use, I am flabergasted!

There is a basic principal used in every dispute resolution: Save the money, or save the customer. It is virtually impossible to do both. Mosley, it appears, has invented a third: Steal the money! I cannot believe that you are without product or refund at this stage.

I appreciate your keeping us apprised of future events,

Kï¿½MB

3733. Wonderbar Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 00:03:12 UTC
From: jgboyles@aol.com
Message-ID: <20001208190312.04376.00000968@ng-fp1.aol.com>
Source record: 175032

Hi All,
Did a search on this particular antenna and did not come up with much. The 10 meter contest is upon us, and considered playing around with it. The orginal design was in QST circa 1957 or so. In short it is a bow tie dipole with a loading coil and link coupling to the feed. Anybody done this before with any results? One thing I find troublesome in the orginal design, the loading coil is 12 turns 1 inch dia. 3 inch long, but they short out the last 1.5 to 2 turns. Why? Apparently this was a very popular antenna in the 50's when we had ionspheric conditions that were once in a lifetime. Need answers fast cause the contest is about to start:-).
73 Gary N4AST

3734. Re: SWL Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 00:32:21 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <DnwxOh1z7rkVVdMmVa2d6L1Ln8M9@4ax.com>
Source record: 175033

"Capt'n Mike" <mmurdock@fishinglife.com> wrote:

>I have a mint Icom R71A receiver set up in my small apartment and am
>currently using (embarrassed) a CB antenna outside the window. I used to
>have a very nice long wire antenna but don't have the space for it here
>(neighbors wouldn't be too happy).
>
>Can anyone suggest either a good compact antenna for .3 - 30 mhz SWL.
>Commercial or web site with plans would be fine... I need some ideas before
>I go into serious SWL withdrawal
>
>Mike
>
>

I've had good luck with an amplified active antenna, a Stoner Dymek
DA100D, with the 5 foot whip indoors, attached to a jrc nrd525
receiver. However, an outdoor wire antenna did substantially better.

I'd just putter around and see what you can get indoors by stringing
wire every whichway -- partly it depends on whether you are on the
ground floor or a 2nd or 3rd story.

Experiment, and see what sounds best. You really can't know until you
try a number of alternatives, and, after all, isn't that one reason
you mess around with radios, in the first place? 'T'is, for me :-)

Bob
k5qwg

3735. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 00:56:09 UTC
From: 2w8ji@contesting.com
Message-ID: <3c12b5f9.16247696@news.akorn.net>
Source record: 175034

On Fri, 8 Dec 2000 06:41:06 -0600 (CST), ham_guy@webtv.net (JJ OKK)
wrote:

>I make a lot of those trips and always act in good faith to please the
>customer, having confidence in the company that I represent. Briefly, I
>would refuse to work for Mosely and represent their products. Johnny

Hi Johhny,

...and please tell me, how do you know the story we are told is true?

Having been on the other end, I can tell you not every Ham is honest
and fair. The latest trend is to use the Internet as a threat, to get
something for nothing.

Now it's only one in thousands and thousands that do that, but it is
being done.

So how do we sort out the "blackmailers" from the legit people?

73 Tom

3736. Re: RX noise cancelling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 01:08:20 UTC
From: 2w8ji@contesting.com
Message-ID: <3c12b6e6.16484937@news.akorn.net>
Source record: 175035

On Fri, 08 Dec 2000 08:20:27 -0700, Bob Tomas
<tomas@monsoon.colorado.edu> wrote:

>I am wondering how you load your 20' vertical antennas. Specifically,
>what
>do you use to guide you in determining how much series resistance and
>inductance to use?
>
>Regards,
>
>Bob

I used a regular antenna analyzer to determine the resistance and reactance needed, but after the process was over I found that Eznec gave an excellent result on everything but the ground loss resistance present at the antenna terminals.

When the "gain" (signal level) was compared to my full size vertical, Eznec was very close.

I used enough inductive reactance to compensate the capacitive reactance of the verticals, and then added enough series resistance to get the feedpoint to 75 ohms, to match the feedlines.

The resistance "swamps out" the mutual coupling effects, giving me a wide VSWR bandwidth. Even with the swamping the sensitivity is much higher than my Beverages.

I use three top wires as a combination guy-line and loading hat. The 20 foot structure is self-resonant on 3.5 MHz, meaning a simple electronic switching system can make the array work on both 160 and 80 (by electrically adding or removing the loading reactance at the base).

For one Europe antenna, I have four 800 foot Beverages spaced broadside 350 feet apart. That array occupies a 1200x800 foot area. Quite often my four verticals spaced 330 feet broadside and 70 feet endfire beats the much much larger Beverage array.

The four vertical array always beats a single Beverage, every time.

73 Tom

3737. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 01:13:03 UTC
From: 2w8ji@contesting.com
Message-ID: <3c12b98d.17163381@news.akorn.net>
Source record: 175036

On Fri, 8 Dec 2000 11:36:25 -0800, "Ron Murdock" <rdmw6kj@succeed.net>
wrote:

>meter antenna. It does not work on 160 except as a dummy load, a fact B&W
>doesn't like to admit--I have talked to them directly. They say it works on
>160 if mounted in free space 80 above ground level. I doubt it but maybe
>you can do that and let me know.

My portable phone has a range of a thousand miles, in freespace.

73 Tom

3738. Re: Wonderbar Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:04:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A319345.23EF6A63@oio.net>
Source record: 175037

JGBOYLES wrote:
>
> Hi All,
> Did a search on this particular antenna and did not come up with much. The 10
> meter contest is upon us, and considered playing around with it. The orginal
> design was in QST circa 1957 or so. In short it is a bow tie dipole with a
> loading coil and link coupling to the feed. Anybody done this before with any
> results? One thing I find troublesome in the orginal design, the loading coil
> is 12 turns 1 inch dia. 3 inch long, but they short out the last 1.5 to 2
> turns. Why? Apparently this was a very popular antenna in the 50's when we
> had ionspheric conditions that were once in a lifetime. Need answers fast
> cause the contest is about to start:-).
> 73 Gary N4AST

Gary,
Sounds like the coil was used for matching. A tap 1.5 to
2 turns would appear to be where you get the best match.
'Doc

3739. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:06:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3193BB.2780C591@oio.net>
Source record: 175038

Dick,
Could I get you to send a copy of that report
to me too? Don't have a 'Hy-Tower, but just in
case I should ever find a couple of them...
'Doc

3740. Re: Antenna for Aviation Handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:25:57 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <90s59b$6sm$1@iac5.navix.net>
Source record: 175039

You might want to check with the local FAA facility and see where the transmitters are located. Most of the ATC facilities are co-located at a site that may be out of range regardless of what antenna you put up. If you can give me your location I can look in the FAA data base and tell you if any of the facilities are close to your location.

"Paul R. Loring" <paul@loring.net> wrote in message news:Q07Y5.255$7J4.205844@typhoon2.ba-dsg.net...
> Hi,
>
> I just purchased a handheld for a backup in the cockpit. When I use it at
> home to listen to transmissions, I only get the aircraft and not the ground
> based stations (Air Traffic Control). I would like to build an antenna for
> the roof to try and pick up ATC as well. I am no way as techincal as most
> of you on this board, but I am fairly handy, have a physics degree, and
> enjoy tinkering (and love climbing on the roof).
>
> Can anyone help get me started to build something like this?
>
> Thanks,
>
> Paul Loring
>
>

3741. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:51:26 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a31a1af.0@oracle.zianet.com>
Source record: 175042

Thanks, Doc, I didn't realize that.

Ed

"'Doc" <w5lz@oio.net> wrote in message news:3A3152AD.C0590FFF@oio.net...
> Ed,
> You might talk to KB5PX, who makes phasing networks
> for vertical antennas.
> 'Doc

3742. "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:53:20 UTC
From: kg9qm@nomail.net
Message-ID: <A8hY5.119$qk3.89987@news1.iquest.net>
Source record: 175040

This is going to sound pretty wierd, but I'm quite serious...

My annual pilgrimage to San Francisco comes up the week of Jan 14th. While standing on the Golden Gate last year, I saw the bridge differently - as an array of "potential" vertical antennas, just waiting for a transmitter to come along.

Well, this year I have a 706MKIIG and am contemplating taking it along. Assuming I don't get locked up on some sort of vandalizm charge, what might all of you think about the chances of this working?

Figuring out what would be good connection points for ground and the "driven element" will require some careful surveying on-site. I assume no one has actually tried this, but I'd like to hear if it has. I noticed several unpainted galvanized bolts where repairs had been done, which I hope are still there.

Thoughts and suggestions are welcome. (Especially if you know where the "blind spots" are - regarding the cameras that watch for "jumpers").

One idea was to drop a vertical downward and essentially create a vertical dipole, but that seems a bit tricky (harder to conceal) and potentially a problem as to the regs on "tossing" anything off the bridge.

don

3743. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:53:39 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a31a1b0.0@oracle.zianet.com>
Source record: 175041

I just heard, Doc, that MFJ is re-introducing them in their latest catalot (included with the Dec. Amateur Radio Trader). Apparently, the price will be $750.

Ed, W5EJ

"'Doc" <w5lz@oio.net> wrote in message news:3A3193BB.2780C591@oio.net...
>
>
> Dick,
> Could I get you to send a copy of that report
> to me too? Don't have a 'Hy-Tower, but just in
> case I should ever find a couple of them...
> 'Doc

3744. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 02:58:44 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <90s7g5$3f2$1@slb0.atl.mindspring.net>
Source record: 175043

"don" <kg9qm@nomail.net> wrote in message
news:A8hY5.119$qk3.89987@news1.iquest.net...
> This is going to sound pretty wierd, but I'm quite serious...
>
> My annual pilgrimage to San Francisco comes up the week of Jan 14th.
While
> standing on the Golden Gate last year, I saw the bridge differently - as
an
> array of "potential" vertical antennas, just waiting for a transmitter to
come
> along.
>
snip

LOL!
What a trip. I can hear you now trying to convince someone that you are currently using the Golden Gate bridge as your antenna. Good luck and let us know how it turns out. hehehe

3745. Re: TA-33 MOSLEY BEAM --40--20--15--10 METERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 03:14:36 UTC
From: Matt <ke5ol@flash.net>
Message-ID: <wshY5.3361$bw.278463@news.flash.net>
Source record: 175044

Matt wrote in message ...
>FS TA-33 MOSLEY THREE ELEMENT BEAM WITH 40 METER ADD ON..40-20-15-10
>METERS ALL TRAPS GOOD, WITH MANULS, PICK UP ONLY. NO SHIPING $125.OO OR
>TRADE FOR LATE MODLE KENWOOD 2 METER RIG IN GUD WORKING CONDITION. QTH FT
WORTH, TEXAS
>
>

3746. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 03:35:11 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A31D2A0.D7D25BAD@att.com>
Source record: 175045

ehsjr@bellatlantic.net wrote:

> I'll add this: if you can ground your antenna to the existing house
> ground instead of adding a "made electrode" (the ground rod you drove),
> you avoid the conductor size problem.

I 'do' have a water faucet located nearby. I think I'll lift the
vinyl siding and connect the RG-6 male/male grounding block to the
copper water pipe with my #10 copper wire. This seems to avoid the
pitfalls generated by my 'additional' grounding rod.

> For example, you can use #8
> aluminum or #10 copper and connect to the interior grounded metal
> water piping, if available. See NEC article 810-21 Note that all
> of this discussion is directed at grounding the antenna MAST and/or
> metallic support structure and/or the antenna discharge unit, not the
> antenna itself.

I've yet to actually see an antenna discharge unit. I assumed it was
an inline device which was located at the input port of the scanner.
(indoors, at the end of the RG-6, at the point of connection to my scanner)

Now I think it's an inline RG-6 device which is 'best' located at the
antenna, and probobly as close to the male/male grounding block as
possible to enable -easy connection to ground-. Any comments?

Thanks for taking the time to repsond to my query.

3747. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 03:58:57 UTC
From: Thomas Beltran <tbeltran@earthlink.net>
Message-ID: <56iY5.4020$U4.369797@newsread1.prod.itd.earthlink.net>
Source record: 175046

I have a hard time figuring out why these companies do the things they do. I bought an Cushcraft R7000 + vertical and the 80 meter kit. Some of the parts were wrong, according to the directions. I contacted Cushcraft on my letterhead (attorney) and got a response. They promised to send the new parts. In spite of several follow-up letters, they never did. They even admitted that the kit had been updated, and mine was an old kit.

I could take more agressive action, but decided not to. Of course now I'm getting ready to install a tower and beam. It is doubtful that I would 1) buy another Cushcraft product, and 2) recommend the company to anyone else.

One person on this thread had it right, it a hobby where communication with other hobbyists is the essence of the hobby. Of course there are those who use the web to try and extort companies, but I cannot believe that my experience is unique. Once the company realized that the 80 meter kit was old, it should have been a done deal. Tom W6EIJ

3748. Re: Phasing Hy-Towers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 04:01:39 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <jjb33t4tb916j8jnbugmoticnsvli86aap@4ax.com>
Source record: 175047

Is your address OK in the QRZ database?

Dick

On Fri, 08 Dec 2000 20:06:51 -0600, 'Doc <w5lz@oio.net> wrote:

>
>
>Dick,
> Could I get you to send a copy of that report
>to me too? Don't have a 'Hy-Tower, but just in
>case I should ever find a couple of them...
> 'Doc

3749. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:11:00 UTC
From: Barry Ornitz <ornitz@dpnet.net>
Message-ID: <C6jY5.476$FM2.51918@news-east.usenetserver.com>
Source record: 175048

Those of us old enough to remember the classic "Jeeves" cartoons by Gil in QST may recall the one where the auto is parked on the bridge and Jeeves is up tangled in the bridge cables with a roll of coax. The caption coming from the car says: "OK Jeeves, now let's try shunt feed, off center."

Many of those cartoons would not make sense to today's hams, but they were great!

73, Barry WA4VZQ ornitz@usa.net

3750. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:15:23 UTC
From: dinod@deltanet.com
Message-ID: <LdjY5.2723$x6.3055338@news2.rdc2.tx.home.com>
Source record: 175049

Dave, your an ass. Do you fly? If so, then you should know that
you can communicate from the ground. If you have nothing to add
to the LEGITIMATE question, then say nothing. Had you done so in
this case, you would have saved yourself from being called an ASS.

Dino

>Let's see if I understand this correctly, you are installing, presumably
>professionally, a system that may be used to communicate with aircraft?
>However, you don't seem to have been fully trained in their operational
>characteristics. So, you post to an Amateur Radio newsgroup on Usenet to
>try and find the answer.
>
>May I ask where are you installing this set up, please?
>
>I only ask so I can make a mental note not to fly there!
>
>Dave (G0DJA)

3751. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:20:11 UTC
From: dinod@deltanet.com
Message-ID: <fijY5.2766$x6.3068713@news2.rdc2.tx.home.com>
Source record: 175050

There you go Dave! See...your an ASS! Well said Mr. Reeves!

Dino

Dave (the ignorant ass) said...
>>Let's see if I understand this correctly, you are installing, presumably
>>professionally, a system that may be used to communicate with aircraft?
>>However, you don't seem to have been fully trained in their operational
>>characteristics. So, you post to an Amateur Radio newsgroup on Usenet to
>>try and find the answer.

So now Mr. Reeves says...
> Now let's see if I understand you correctly... you've got nothing
>better to do then jump to conclusion and run your mouth without any
>fact behind it whatsoever... However you don't seem to be fully
>trained in courtesy, willingness to help, or common sense. So you
>post to an Amateur Radio newsgroup and show the world what an ignorant
>egotistical know-it-all you really are and in turn, single handedly,
>give Amateur Radio a black eye.

Dave further points out his ignorance by spewing...
>>May I ask where are you installing this set up, please?

And Mr. Reeves SLAMS a home run...
>Sure, and had you in the first place I would have told you. The
>setup is being installed to receive slow scan TV pictures from a Civil
>Air Patrol aircraft of accident sites and disaster areas. Each of the
>people involved is a duely licensed US Amateur Radio Operator. THANK
>YOU.

I'll save Dave a bit of face and snip the rest. What a FOOL!

Dino

3752. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:22:26 UTC
From: dinod@deltanet.com
Message-ID: <mkjY5.2787$x6.3074228@news2.rdc2.tx.home.com>
Source record: 175051

Just when you thought Dave couldn't make himself out to be more of an ass,
he says....

>Oh dear, I seem to have upset you.
>
>BTW, just how were you intending to tell whether anyone replying actually
>knew what they were talking about?
>
>Wouldn't it have been better to either,
>
>a) ask the manufacturer or a professional installer of the equipment or,
>
>b) ask the aviation authority for the country in which you either obtained,
>or intended to install, this equipment?
>
>And you call me clueless. I think the term is "BWAA HA HA HA"
>
>Cheers de Dave (G0DJA)
>
>

3753. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:26:26 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <6ojY5.60$LR2.5827@monger.newsread.com>
Source record: 175052

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"S Reeves" <kleptein@hotmail.com> wrote in message
news:5t8q2tkb2l8b9mr2s5ret4blq5922t6f30@4ax.com...
> I am in the process of installing a transmitter which is designed to
> communicate primarily with aircraft. In a case like this does it make
> more sense to use a 0dB omni antenna as opposed to a gain antenna in
> order to better cover the air?

First, I assume that you have the paperwork in order and license in hand?
Those in the airplanes (US registry and flying in the US) no longer require
a license, but those on the ground do.

Better cover?
Aviation radios are normally low power AM...5 to 12 watts. I think most are
in the 5 watt range

As many airports share the same unicom frequencies the idea is to have a
relatively short range. On a clear week end it's like one very busy party
line and with lots of squealing.

Towered airports do run a bit more power, but it's still relatively low and
they have their own frequencies and crews, or contractors take care of those
installations.
>
> I don't know a whole lot about coverage patterns and plots, but by
> looking at them it seems to me that most commercial UHF antennas don't
> radiate up from the horizon very well.

Most airplanes are either close to the horizon, or close to the station.

Ahhh...you don't find UHF at the small airports using unicom, or at least
I've never seen one. All the Unicoms I've seen..er... heard, were VHF.
I have the current AIM and FARs right behind me, but being lazy, I'm not
going to bother digging it out as I would on the aviation groups.

What did you say the reasoning behind setting up a transmitter was?

>
> Can anyone shed some light on this for me please?

I think this question will probably find lots of shedding <:-))

Roger (K8RI)

3754. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:28:25 UTC
From: dinod@deltanet.com
Message-ID: <ZpjY5.2850$x6.3087074@news2.rdc2.tx.home.com>
Source record: 175053

Then shut up and say nothing at all.

Dino

>So it would seem, in America that is......
>
>I still don't think that, had I had the same sort of request, that this
>would be my 1st choice of a place to ask!
>
>As I say, how will the guy who asked know who is giving the right answer?
>Some of the answers might just be completely wrong, but look plausible.
>
>I do hope that peoples safety is not involved in any way, given the way that
>it appears that people seem to be more willing to sue if things go wrong
>these days. If an accident did happen, I wonder what would the attitude be
>to the defence "Well, the people in rec.radio.amateur.antenna said it would
>be OK"?
>
>Let's face it, if I put up an antenna at home that doesn't do quite what
>it's supposed to do, what happens? I take it down and no harm is done,
>except maybe to my wallet and my ego. I could even put the experience down
>to my self training. I certainly wouldn't like to give advice on aviation
>communications without some form of indemnity insurance, and the relevant
>professional training, and I'd hope that even a private airfield wouldn't
>expect that equipment installation was being carried out by unqualified
>people. Especially ones that appear to be reliant on advice given in a
>Usenet NG!
>
>What happens if it's something for peoples safety whilst flying and it's not
>right? At best someone is inconvenienced, at worst..... Well, like my 11kV
>switchgear point, let's not even think about it.
>
>de Dave (G0DJA)
>
>

3755. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:32:50 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <6ujY5.62$LR2.6272@monger.newsread.com>
Source record: 175055

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Prof. Curt M. Breneman" <brenec@rpi.edu> wrote in message
news:3A2EF603.5038@rpi.edu...
> Rick Littlefield wrote:
> >
> Ir seems as if people are missing the point here -- the guy said that he
> was doing this on an authorized CAP or ham band

Quote from original post:
"I am in the process of installing a transmitter which is designed to
communicate primarily with aircraft. In a case like this does it make
more sense to use a 0dB omni antenna as opposed to a gain antenna in
order to better cover the air?"
End quote

No he didn't. He only asked about the antenna and talking to aircraft.
No mention is made in the original post about using CAP, or ham bands.
Actually no mention was made of using aviation frequencies either.

(that's why it made
> sense that he was UHF instead of VHF, like civilian air band). I'm not
> even sure that it would be illegal for an airport FBO operator to set up
> a Unicom rig on their authorized frequency by themselves either...
>
If the FBO is the Unicom operator and they have the paperwork taken care of
then yes, they may have unicom. But the airport may have only one unicom.
That it is used in the terminal building, in a car, or at the FBOs doesn't
matter as far as I've been able to find out.

Roger (K8RI)

> Curt Breneman
> RPI Chemistry
> KC2EBP

3756. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:42:55 UTC
From: dinod@deltanet.com
Message-ID: <zDjY5.2994$x6.3123794@news2.rdc2.tx.home.com>
Source record: 175057

It would be my GUESS that a simple 1/4 wave ground plane antenna
would give you a nice round pattern and work VERY well in all
directions.

I read this with interest an am disappointed with the answers and
replies. I was hoping to learn something.

One antenna NOT mentioned is an Eggbeater ot Texas Potatoe Masher.
Now I know these antennas have a horizontal pattern at the
horizon...but a circular patter overhead (30+ degrees?). Would
this be an option?

I'm still hoping I will learn something!

I respect Jim's knowlege...I don't care too much for his presentation.

Dino

>I am in the process of installing a transmitter which is designed to
>communicate primarily with aircraft. In a case like this does it make
>more sense to use a 0dB omni antenna as opposed to a gain antenna in
>order to better cover the air?
>
>I don't know a whole lot about coverage patterns and plots, but by
>looking at them it seems to me that most commercial UHF antennas don't
>radiate up from the horizon very well.
>
>Can anyone shed some light on this for me please?

3757. Re: Wonderbar Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 05:43:05 UTC
From: Frank Donovan <donovanf@erols.com>
Message-ID: <90sgpu$g4k$1@bob.news.rcn.net>
Source record: 175058

The 2 Element 10 Meter Wonderbar Yagi, February 1957 QST, page 43
73!
Frank
W3LPL
donovanf@erols.com

'Doc <w5lz@oio.net> wrote in message news:3A319345.23EF6A63@oio.net...
>
>
> JGBOYLES wrote:
> >
> > Hi All,
> > Did a search on this particular antenna and did not come up with much.
The 10
> > meter contest is upon us, and considered playing around with it. The
orginal
> > design was in QST circa 1957 or so. In short it is a bow tie dipole with
a
> > loading coil and link coupling to the feed. Anybody done this before
with any
> > results? One thing I find troublesome in the orginal design, the
loading coil
> > is 12 turns 1 inch dia. 3 inch long, but they short out the last 1.5 to
2
> > turns. Why? Apparently this was a very popular antenna in the 50's
when we
> > had ionspheric conditions that were once in a lifetime. Need answers
fast
> > cause the contest is about to start:-).
> > 73 Gary N4AST
>
> Gary,
> Sounds like the coil was used for matching. A tap 1.5 to
> 2 turns would appear to be where you get the best match.
> 'Doc

3758. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 06:05:27 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <HYjY5.74$LR2.6705@monger.newsread.com>
Source record: 175059

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001205183552.22244.00003437@ng-da1.aol.com...
> If your frequency span needs to be abnormally wide for full airband
agility
> (rather than narrow to cover a single unicom or assigned channel), a
discone
> might be good.

Good old radioshack special: bout $50, easy to assemble, easy to install,
and works well over a very wide range...VHF and UHF.

Roger (K8RI)

> If your frequency span is narrow (one or two channels close in
> frequency), why not use a simple groundplane? In order for an aircraft to
get
> "above the pattern", they'd have to so close to the transmitter site that
it
> wouldn't matter! We're talking DC-3s, not the space shuttle!
>
> Rick K1BQT

3759. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 06:09:28 UTC
From: dinod@deltanet.com
Message-ID: <s0kY5.3184$x6.3184915@news2.rdc2.tx.home.com>
Source record: 175060

I'll tell you this...if the letter posted on the web page is correct,
I will NEVER own a Mosley product! You just don't treat customers like
that!

Force 12....HERE I COME! Now here is a company that treats people
well! They also have the best multi-monoband antennas designs (IMHO).

Dino...K6RIX

3760. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 06:12:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Q2kY5.76$LR2.6793@monger.newsread.com>
Source record: 175061

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Curt M. Breneman" <brenec@rpi.edu> wrote in message
news:3A301612.2D49@rpi.edu...
> Jim Weir wrote:
> >
> > "Prof. Curt M. Breneman" <brenec@rpi.edu>
> > shared these priceless pearls of wisdom:
> >
<snip>
> Sigh... Another assumption. I have an air-band license (Limited Class -
> it's in the plane so I can't provide the specifics here). It used to be
> required for using aircraft radios, but is no longer necessary except
> for international flights. No violations...
>
You are legal in the airplane, but not out of the airplane.

Yes, it's done quite often, but it's still not legal, unless your airband
license covers the use on the ground, out of the airplane.

Roger (K8RI)

> Curt Breneman
> KC2EBP

3761. Re: Maxwell Help Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 06:30:28 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A31D183.CAB1ED31@ecs.syr.edu>
Source record: 175054

Bill Turner wrote:

> Original message:
>
> >I have been trying to design an ELF antenna to radiate sufficient
> >power density for an application I am working with. Currently I am
> >struggling with two issues. Maxwell's equation for antenna element
> >wave propagation not in free space (i.e. conductivity > 0 and
> >relativity permeability > 1) gives an imaginary value (square root of
> >-1) for a surrounding medium of diamagnetic Bismuth with permeability
> >of ~-2. How is this interpreted? In addition, an uninsulated copper
> >element surrounded by high conductivity mu metel (78% Ni and remainder
> >mostly Fe) says displacement current is negligible. With no
> >displacement current can the element still radiate assuming signal
> >attenuation due to conduction is excessive? Does the antenna need to
> >be match? If so then at one milliHz (yes, 0.001HZ) a gyrator circuit
> >can emulate a billion Farad capacitor to cancel reactance.
> >
> >Best Regards-
> >Steve Burns
> ----------
>
> Check with Fractenna. It's right up his alley.
>
> 73, Bill W7TI

Oh please!!! Leave him out of this one!!!! As for the original
question..... post what you calculated if you want a real response!!!!
(I seem to recal the there are only 4 really useful equations that Maxwell
"packaged-up" for the rest of the world..... start with them .....)

--
Drew Northup, N1XIM

3762. Re: High School Project/Packet Radio

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 06:34:18 UTC
From: Drew Northup <dnorthup@ecs.syr.edu>
Message-ID: <3A31D269.F1956557@ecs.syr.edu>
Source record: 175056

WE0H wrote:

> That hyperlink should have been http://www.circuitcellar.com/
> Mike> WE0H.

1) I don't send html mail, so there was no hyperlink
2) If there were, it was spelled right the first time I drafted
the message........ then my mail client went out to lunch!!!!
(Netscape on LINUX......)

--
Drew Northup, N1XIM

3763. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 07:00:15 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <3MkY5.82$LR2.7232@monger.newsread.com>
Source record: 175062

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Weir" <jim@rst-engr.com> wrote in message
news:07qs2tkin5oer3l9gva8t6eppvaotq6no6@4ax.com...
> Brian Kelly <kelly@dvol.com>
> shared these priceless pearls of wisdom:
>
> ->It's perfectly legal for an unlicensed individual to install a
type-accepted
> and
> ->licensed aviation base station at an uncontrolled airport, grass strip
or
> ->whatever for use on the Unicom freqs.
>
>
> That does not happen to be true.
>
Which brings the question Jim, Does the installer have to be FCC, or FAA
licensed?
I don't know if the FCC license is available any more, but the installer has
to work for a FAA licensed facility and I think, like the mechanic, must be
licensed as well.

Roger (K8RI)
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

3764. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 07:47:03 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A31E377.CD58FB87@dvol.com>
Source record: 175063

Roger Halstead wrote:

> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Jim Weir" <jim@rst-engr.com> wrote in message
> news:07qs2tkin5oer3l9gva8t6eppvaotq6no6@4ax.com...
> > Brian Kelly <kelly@dvol.com>
> > shared these priceless pearls of wisdom:
> >
> > ->It's perfectly legal for an unlicensed individual to install a
> type-accepted
> > and
> > ->licensed aviation base station at an uncontrolled airport, grass strip
> or
> > ->whatever for use on the Unicom freqs.
> >
> >
> > That does not happen to be true.
> >
> Which brings the question Jim, Does the installer have to be FCC, or FAA
> licensed?
> I don't know if the FCC license is available any more, but the installer has
> to work for a FAA licensed facility and I think, like the mechanic, must be
> licensed as well.

>
NO all the way around.
>

> Roger (K8RI)
> > Jim
> > Jim Weir, VP Eng. RST Eng. WX6RST
> > A&P, CFI, and other good alphabet soup

>
w3rv

3765. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 08:22:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A31EBA8.2C60@wt.net>
Source record: 175067

Cecil wrote:
>
> Mark Keith wrote:
> > I want to put a camper top on it before too long. So that really ruins
> > things as far as good antenna mounting.
>
> I once had a molded plastic camper shell on my pickup. The antenna
> hardly noticed it was there.
> --
> http://www.mindspring.com/~w6rca

That is an idea. My main gripe with the camper "if metal" is the max current portion of the antenna right next to the metal. Yuk...Real antenna killer...I was gonna consider a cheap aluminum model, but maybe I oughta go plastic. MK
--
http://web.wt.net/~nm5k

3766. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 08:43:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A31F0AC.5446@wt.net>
Source record: 175066

ehsjr@bellatlantic.net wrote:
>
> The National Electrical Code
> REQUIRES
> that the electrode you made be bonded to the house
> grounding electrode system, per article 250-50.
> The size of the bonding jumper wire is given in
> table 250-66 - the smallest is #8, and the actual size you
> need will depend upon the size of the service entrance
> conductors. Your #10 wire is too small. You must also
> connect the jumper as per 250-70.
>
> You don't have options in this area, other than those
> contained in the code, if you want to be legal and safe.

Yep, I agree if thats code. The only reason I stated that bonding might not be needed if far apart is I know from experience that this won't kill you if you take a hit. Myself, I don't have any connection to the electrical ground. Why? No readily available place to connect. We have no power ground rods etc. So I skipped that part. But I do tie into the water pipes and to the ground wires that run the perimeter of my yard. I took a direct strike on the mast and had no problems whatsoever. I think it's more important to have a really good ground at the base of the mast. This is whats really gonna do the dirty work of connecting the strike with the ground. In my case, I'm totally disconnected from ground, antenna lead-in, everything, when bad weather is around. So doesn't really matter how I connect the grounds outside. The one that really counts is at the base of the mast. But I would connect them all if you want to be in compliance with the NEC. In my case, the power line ground is the only one I'm not connected to.It's still at ground potential though. So far it hasn't hurt me. The proof was in the "{click-blamm!" lightning strike...g Many things were on in the house when it hit, including this puter. Nothing flinched at all. Actually, it was kinda interesting being 15 ft away from a lightning strike. But , I'm not keen on a replay..:/ But anyway, I agree, it may be better advice to ground all together. I do when I can. MK
--
http://web.wt.net/~nm5k

3767. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 08:50:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A31F25C.3E2@wt.net>
Source record: 175065

Pervert_Extraordinaire wrote:
>
> ehsjr@bellatlantic.net wrote:
>
> > I'll add this: if you can ground your antenna to the existing house
> > ground instead of adding a "made electrode" (the ground rod you drove),
> > you avoid the conductor size problem.
>
> I 'do' have a water faucet located nearby. I think I'll lift the
> vinyl siding and connect the RG-6 male/male grounding block to the
> copper water pipe with my #10 copper wire. This seems to avoid the
> pitfalls generated by my 'additional' grounding rod.

No, you don't want to do that. You want to stay with your outside ground rod. You never want to invite lightning inside the house. Also the water pipes may not be low resistance. Plastic parts, pipe dope etc, could eat your lunch. I would rather rely on a big fat ground wire that I can see. BTW, I see different gauges mentioned as far as NEC. Myself, I would use the thickest possible. At least #6. But saying that, if the ground and connection are low resistance, a #10 can do the job. I'd rather be thicker though to be on the safe side.
>
> > For example, you can use #8
> > aluminum or #10 copper and connect to the interior grounded metal
> > water piping, if available. See NEC article 810-21 Note that all
> > of this discussion is directed at grounding the antenna MAST and/or
> > metallic support structure and/or the antenna discharge unit, not the
> > antenna itself.
>
> I've yet to actually see an antenna discharge unit. I assumed it was
> an inline device which was located at the input port of the scanner.
> (indoors, at the end of the RG-6, at the point of connection to my scanner)
>
> Now I think it's an inline RG-6 device which is 'best' located at the
> antenna, and probobly as close to the male/male grounding block as
> possible to enable -easy connection to ground-. Any comments?
>
> Thanks for taking the time to repsond to my query.

You want the suppressor grounded to the ground block/bulkhead which leads into the shack. "outside". I have a bulkhead outside my window. I don't use suppressors, but if I did, thats where they would be. MK

--
http://web.wt.net/~nm5k

3768. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 09:37:27 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A31FD57.35F967A5@haertig.com>
Source record: 175070

At MW frequencies the initial measurements of CFA don't necessarily need to be done in reference to a "standard" antenna. To a first order approximation, the ground parameters can be inferred from the the shape and slope of the measured field strength data. This is especially true if the test site has reasonably uniform ground parameters out to 10 km or so. Abrupt ground parameter changes will likely be obvious from the data if not from casual observation of the surroundings.

If it is important to determine the efficiency (using the rather idiosyncratic definition of efficiency used by the FCC) down to the last dB, then there might be reason to do comparison measurements. However, measurements without a comparison antenna should be more than adequate to differentiate between the inventor's claim of efficiencies equivalent to a 1/4 lambda vertical monopole over a good radial ground system and the claims of the CFA naysayers who think reality is at least 10 dB shy of the claims.

Matters of terrain effects and reradiation are easily handled at MW frequencies by proper selection of the test site. Absent very large terrain features, multipath tends not to be much of a problem at MW at the distances from the antenna that field strength measurements are likely to be taken (1 km to 10 km).

The independent measurements that I am aware of that are soon to be made will be done at MW.

Of equally critical importance is having measurements of transmitted bandwidth. I believe these measurements are to be made as well.

At frequencies of interest to hams (other than the new LF frequencies), a somewhat different protocol should probably be used for many of the reason's Steve elaborated on. Since much, if not most, ham communications is done with sky wave rather than groundwave, determining the elevation pattern (coupled to the efficiency) of the antenna will be of great interest. Unfortunately, making truly meaningful measurements at HF is almost impossible, however with some attention to detail it should be relatively easy to determine of the CFA offers any great advantage over any electrically short monopole.

Gray

VE9SRB wrote:

> Additionally, field strength measurements from the CFA must be presented as
> compared to a standard antenna with the same power delivered to its input
> terminals. I mention this because I have seen absolute measured field
> strength data presented for the CFA with no relative comparison data. Field

> strength data presented with no comparison to a standard antenna is
> virtually meaningless because the measurements will vary as a function of
> ground parameters, terrain topology, multipath, and the presence reflecting
> objects near the CFA antenna.
>
> Comparison data must be presented in evaluating the CFA antenna performance.
> Additionally, the antenna should be tested with no other reflecting resonant
> structures (like existing broadcast towers) nearby.
>
> Just some thoughts ...
>
> Steve VE9SRB

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3769. Quad experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 11:39:45 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <mSoY5.351$XY.7232@newsfeed.slurp.net>
Source record: 175064

I made a 20M sorta-quad by hanging a 35ft catenary wire connecting the ends of the 23ft trapped driven element of a Mosley TA34XL. It looks like a 'curvy-sided' triangle resting on its point.

It gets outta the back garden and seems to have a figure-8 pattern. Feedpoint Z went up according to my hf slotted-line (hard line with access-slots to the center conductor. Next time, I'll build it out of al tubing and a section of al gutter for easier access). Too much rf 'round here for analyzers

Haven't tried the next (logical?) step of putting a catenary on it for 10M. Maybe later today. I think 15M is outta the question cuz of the trap design.

How do I model this thing with EZNEC3?

TIA. 73, Dave, K3BHJ

3770. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 12:21:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90t84g$9ri$1@slb0.atl.mindspring.net>
Source record: 175068

Reg:

Re: Number of humps and tuning ease of lossless coupling circuits.

In general....

the number of "humps" in the "passband" of a "lossless coupling network or circuit coupling a purely resistive source to a purely resistive load will be a function of the number of independent lossless elements [L, C] in the circuit. Or more specifically the number of complex "poles" that the circuit produces. In the cases of even and/or odd order circuits [even number or odd number of independent lossless elements] the number of possible humps has a somewhat different character, for in the odd order case at least one of the humps, if present, must occur at DC and not in the passband.

Of course, depending upon the "damping" of the overall system there may be no "humps" or only one, or several, etc...

Some generic examples of this are: The Butterworth filter in which all of the "humps" are coincident and only one hump appears at the center of the passband. The Chebychev filter in which all of the "humps" are equidistant and spread out evenly [geometrically] throughout the passband. etc...

In general for high order lossless coupling networks, it would be impractical to "tune" them manually and these kinds of filters are always designed [aka tuned] by computer algorithms today. One would find many minima if attempting to adjust high order lossless coupling networks by hand. I've tried this on filters up to the 24th order, heh, heh. Can't be done!

On the other hand, that is generally not what ham transmitter output filters/tanks are all about, heh, heh. i.e. they are not "high order"

A simple output "tank" has but two lossless elements, an L and a C and generally would only have one knob [on the C] to manually adjust, hence one would find only one unique minima or operating point.

A PI output coupling network has three lossless elements and, since it is of odd order, will have only one "hump" in the passband, the other "hump" has to be at DC for mathematical reasons and is no interest to the ham operating the transmitter. But the PI coupling network can have two knobs [one on each C] for tuning. And so , one can find more than one setting of the tuning knobs to give a minima or tuning point. Each such setting corresponds to a single "hump" in the frequency response, but a different "loading" or coupling factor.

Now for a PI - L there are even more lossless elements and consequently more potential tuning knobs, and so... there could easily be several different settings for optimal tuning, unless...

the circuit is set up in such a way that the tuning "ranges" of the adjustable elements are suitably constrained by the original designer.

This is what I believe to be the situation in the commercially available ham transmitter PI - L designs. i.e. it is theoretically possible in such a circuit to have several "minima", but the ranges, values and placement of the tuning controls are such as to "almost" guarantee that the "tuner upper" will never encounter the "other" humps.

Just my opinion...

-Peter K1PO [Old guy who used to be a professional high order lossless coupling network designer.]

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:90obh0plv1@neptunium.btinternet.com...
> With the intention of writing a small program to design Pi-L
> matching networks I looked at the frequency response of the
> impedance presented to the PA plate.
>
> It is in fact double humped, the two humps being spaced
> apart by as much as +/-20% of the center frequency.
>
> This should not be very suprising because the network is
> formed from two closely coupled circuits, the Pi and the L,
> both tuned to the same centre frequency. The circuit
> behaves as a poor sort of bandpass filter. The dip in the
> middle amounts to about 0.6 of the humps.
>
> However, this makes the idea of Q and selectivity somewhat
> meaningless.
>
> Never having used such a circuit I wonder whether the double
> humps cause confusion or doubt when tuning up using the
> minimum-dip method. Or any other method.
>
> I should be interested to hear from any experienced users of
> the network how it behaves during tuning up. Is it just as
> straightforward as the ordinary tank or Pi network ?
> ----
> Reg.
>
>
>
>

3771. Re: Wonderbar Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 13:07:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <90tajg$7i3$1@neptunium.btinternet.com>
Source record: 175069

Program MIDLOAD analyses performance of a short
centre-loaded dipole fed by a link winding over the loading
coil. Advantage of a link coupling is that either balanced
or unbalanced feedline can be used over a range of
impedances.

Disadvantage :- only one narrow frequency band.

Download program and run in a few seconds.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

3772. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 14:46:01 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A3245A9.495E8903@mwci.net>
Source record: 175071

Peter O. Brackett wrote:

> Of course, depending upon the "damping" of the overall system there may be
> no "humps" or only one, or several, etc...

In PA pi network design, it is always the practice to assign a value of loaded Q (the damping factor), a value of plate load resistance and a load (50 ohms). Under those constraints, the L and C values are unique and there is only one "hump". This is at least true for the pi. An examination of Eqs 17 and 18 on page 13.6 of the ARRL Handbook, 1995 or later editions, verifies this. Eq 25 on page 13.7 also uniquely determines XL, after which Q1, Q2, C1 and C2 are uniquely determined. Mathcad and Radio Designer simulations invariably show a single hump.

What about the pi-L? Eq 28 finds an "image" resistance. We then use an equation just like Eq 17 to calculate a pi network from plate to image, then an L network from image to 50 ohms. For a chosen image resistance the L and C values are again unique and there is one response peak.

If I do all of these things and if the output load is a resistance of the right value (50 ohms) the transfer function equation, as plotted with Mathcad or Radio Designer, I do not show double humps. It is possible that if the output load contains reactance of some kind a double-tuned circuit would result that might behave like two coupled resonators.

The pi and pi-L are basically single-tuned circuits, not coupled resonator circuits. The two capacitors do nothing more than transform resistance from plate resistance to a 50 ohm load resistance. The coupled resonator circuit requires two pairs of complex conjugate poles and the pi and pi-L do not normally have these.

Bill W0IYH

3773. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 14:51:56 UTC
From: k1bqt@aol.com
Message-ID: <20001209095156.20958.00004368@ng-fc1.aol.com>
Source record: 175072

>One antenna NOT mentioned is an Eggbeater ot Texas Potatoe Masher.
Now I know these antennas have a horizontal pattern at the horizon...but a
circular patter overhead (30+ degrees?). Would this be an option?<

Why install an antenna with cross-polarization losses that could run as high as
20 dB over the path to the aircraft's vertical radiator? According to at least
one author, a lightbulb might work as well!

Rick K1BQT

3774. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 14:57:53 UTC
From: k1bqt@aol.com
Message-ID: <20001209095753.20958.00004369@ng-fc1.aol.com>
Source record: 175073

It would be interesting to know what the law is (short of actually looking it up). Do "radiomen" need a license for installing airborn equipment, for repair and calibration of airborn radios, for Nav equipment, WX radar, or for everything?? Guess I'd better dig out my license manual.

Rick K1BQT

3775. Grounding my Mag mount to the luggage rack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 15:16:39 UTC
From: Paul Bailey <paulb@america.net>
Message-ID: <3A324CD7.B75E5C44@america.net>
Source record: 175075

I have ben a ham for a few short years. I have been HF mobile for most of the time.

I have NEVER had my tri-mag mount grounded to my luggage rack until yesterday.

Another operator noticed noise on my transmission that was NOT caused by

the lack of this ground wire but it started him asking questions. He suggested that my antenna (ham stick) would work much better on 40 and 75 if I had this wire from my mag mount to my car body.

I never dreamed it would get rid of that S5 or S6 fuel pump noise that I

have put up with for over two years now! A small 12" wire and 90 seconds

of work.

It is completely gone! As is most of my electrical noise.

My question.....
Why did it get rid of the electrical noise?

Any boy want to help Elmer this Extra class ham. I would be thankful.

Paul - K4KJ

--
Thank you.

Paul Bailey

****
Your knowledge of the Bible. Is it based on tradition or the Bible?
Here are some questions, their answers might surprise you!
http://www.america.net/~paulb/biblestudy/q1.html
****

3776. Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 15:17:33 UTC
From: kg4ggx@aol.com
Message-ID: <20001209101733.14756.00001208@ng-xc1.aol.com>
Source record: 175074

Hi all
Why are so many new hams so reluctant to use ladder line for feed line?I'm a relatively new ham and I don't have a problem using balanced feed line, and don't understand why others are so resistant to use it.I have a 160 meter horizontal loop fed with 300 ohm twin lead that gives good results and no TVI problem or any other trouble other than some effect when it's wet.I plan to try ladder line to help with the weather effect.
I also have a parrallel dipole for 80 thru 10 meters that is fed with RG-8.It gives very good results.It seems that many are reluctant to try these antennaas as well.Am I missing something here?I'm pleased with both of my antennas.No they do not give beam performance, I speaking of wire antennas only.Antennas of these types , to me, give very good performance for having one antenna and one feed line to cover multiple bands.I know a few other hams that would like to have one feed line/antenna to cover several bands, but they do not like ladder line, and have no experience with it! Also they seem suspect of the parrallel dipole.Why?I feel that I may be looking at things wrong in liking these types of antennas.
Also is it possible to feed a parrallel dipole with ladder line?I know it seems pointless to feed a 60 or 70 ohm feedpoint with balanced line, but I'm just wondering what the results would be.
Thanks for reading, and thanks for any info to help me see what it is I'm missing on this subject of balanced line and wire antennas.
73!, Rob KG4GGX

3777. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:04:13 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <t5lt09.h7j.ln@mail.specsol.com>
Source record: 175080

KG4GGX <kg4ggx@aol.com> wrote:
> Hi all
> Why are so many new hams so reluctant to use ladder line for feed line?I'm a
> relatively new ham and I don't have a problem using balanced feed line, and
> don't understand why others are so resistant to use it.I have a 160 meter
> horizontal loop fed with 300 ohm twin lead that gives good results and no TVI
> problem or any other trouble other than some effect when it's wet.I plan to try
> ladder line to help with the weather effect.

<snip>

Because all the radios built in the last 50 years or so have coax connectors
on the back of them.

Because you can do things with coax you can't with ladder line, like tape
it tightly to a metal mast and bury it.

Because the only ladder line you can buy at Radio Shack is 300 Ohm TV stuff.

Sure there are sometimes technical reasons why ladder line would be the
"better" choice, but most of the time coax is the path of least
resistance (pun intended).

Jim Pennino

3778. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:06:40 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A325890.9CDF3026@ix.netcom.com>
Source record: 175076

With all the discussions concerning the CFA of late, I have yet to read about it's ground system. Does the claimed performance of the CFA depend on the "broadcast norm" using a 100+ radials? If not, then what does it use? 73, Ed - N5NUG

3779. Re: Grounding my Mag mount to the luggage rack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:14:23 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <1dm43tg7e4fghn5pi4r5sms52a8q85r1sk@4ax.com>
Source record: 175082

On Sat, 09 Dec 2000 10:16:39 -0500, Paul Bailey <paulb@america.net> wrote:

>It is completely gone! As is most of my electrical noise.
>
>My question.....
>Why did it get rid of the electrical noise?

Without the 12" ground wire, the ground for the antenna is made back through the coax to your transceiver. This makes the braid of the coax part of the antenna and therefore places part of the antenna inside the car where it is much closer to the car's wiring and the associated noise. Glad you got it fixed.

73, Bill W7TI

3780. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:22:00 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <mkm43t0jqvridod8guuqsee7d0ivbj8ukf@4ax.com>
Source record: 175083

On 09 Dec 2000 15:17:33 GMT, kg4ggx@aol.com (KG4GGX) wrote:

>Why are so many new hams so reluctant to use ladder line for feed line?I'm a
>relatively new ham and I don't have a problem using balanced feed line, and
>don't understand why others are so resistant to use it.

Ok, here are two reasons:

1. All commercial transceivers are designed to feed 50 ohm coax directly.
Using non-50 ohm balanced line requires something additional - either a balun or
tuner. IOW, coax is plug-and-play.

2. Coax is not as critical as to installation. It can be run through metal
conduit or laid next to a metal gutter or other metal object, or even buried.
Balanced line can not, unless you're talking about shielded balanced line, which
I don't think you are.

The only advantages I can see for balanced line are slightly lower cost and
slightly lower loss. For most hams, those are not sufficient reasons to
outweigh the advantages of coax.

73, Bill W7TI

3781. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:22:30 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A325C46.5C6C1680@ix.netcom.com>
Source record: 175077

I guess I have answered my own question. There is nn ground system
according to the information located at
http://www.hbci.com/~wenonah/cfa/

73, Ed - N5NUG

3782. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:27:15 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <D3tY5.11283$2P3.803019@bgtnsc06-news.ops.worldnet.att.net>
Source record: 175078

Hi Rob!

Can't speak for the new hams, but I've seen the
same reluctance in the older hams as well. (By older
we really mean more experienced...HI!)

Personally, I have been experimenting with wire antennas
for some time, and currently use an 80 meter doublet
fed with 450 ohm ladder line. It works great, and I
usually get asked the question: Why ladder line?

Well... Because with the ladder line and tuner I can
use most any wire to get a signal out with the least
amount of struggles. It's that simple.

I have tried many designs for wire antennas, and in fact,
my favorite is the loop. I plan to try an 80 meter loop
as my next antenna. Sometimes the direct coax feed
is usable, sometimes not.

It all boils down to what works for you and fits the budget.

CUL es 73
Gary, WG7X

KG4GGX <kg4ggx@aol.com> wrote in message
news:20001209101733.14756.00001208@ng-xc1.aol.com...
> Hi all
> Why are so many new hams so reluctant to use ladder line for
feed line?I'm a
> relatively new ham and I don't have a problem using balanced
feed line, and
> don't understand why others are so resistant to use it.

3783. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:27:44 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <90tmk2oho1@iac5.navix.net>
Source record: 175079

I am somewhat amazed by this statement. If not, how is one to interpret any
data produced.

"Gray Frierson Haertig" <gfh@haertig.com> wrote in message
news:3A31FD57.35F967A5@haertig.com...
>
> At MW frequencies the initial measurements of CFA don't necessarily need
> to be done in reference to a "standard" antenna.

3784. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 16:45:23 UTC
From: dinod@deltanet.com
Message-ID: <DktY5.5983$x6.3972254@news2.rdc2.tx.home.com>
Source record: 175081

My answer is NO, and the reason why is because of cross-polarization losses. That would have been the nice way to answer Rick.

Boy you guys are uptight here!

Dino

Dino said...
>>One antenna NOT mentioned is an Eggbeater ot Texas Potatoe Masher.
>>Now I know these antennas have a horizontal pattern at the horizon...
>>but a circular patter overhead (30+ degrees?). Would this be an option?

Now Rick says...
>Why install an antenna with cross-polarization losses that could run as
>high as 20 dB over the path to the aircraft's vertical radiator?
>According to at least one author, a lightbulb might work as well!
>
>Rick K1BQT

3785. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 17:13:52 UTC
From: Doug Hall <kf4kl@pobox.com>
Message-ID: <TmEyOm0R2U7X+hmnkuhSbqY2uJGl@4ax.com>
Source record: 175084

On Sat, 09 Dec 2000 06:09:28 GMT, dinod@deltanet.com (Dino) wrote:

>I'll tell you this...if the letter posted on the web page is correct,
>I will NEVER own a Mosley product! You just don't treat customers like
>that!
>
>Force 12....HERE I COME! Now here is a company that treats people
>well! They also have the best multi-monoband antennas designs (IMHO).
>
>Dino...K6RIX

Hope you have better luck with Force 12 customer support than I have. I bought a Force 12 C-4 in 1996. It's a good antenna, and I like it. But I have NEVER been able to get ANY support from Force 12. When I got the antenna a couple of the elements appeared to be the wrong length. While it was pretty obvious that they needed to be cut, I wanted to double check with Force 12 before cutting them. I called, and was told by the secretary or receptionist that they were "really busy" and I should call back later. Later calls went unreturned. I sent a FAX. It went unanswered. I finally cut the tubing to the correct length and the antenna went together and worked fine. As I said, it's a good antenna.

About a year later I was up the tower doing some work on another antenna when I noticed that the U-bolts holding the 10 and 15m elements on the Force 12 were rusted. The other U-bolts were fine, so I called Force 12 to ask about it. Nobody returned my call. I emailed them. No reply. Finally (after a Usenet post asking if anyone else had experienced any problems) I got a reply from their east coast rep, and he promised to get an answer for me. I never heard anything else. According to the rep, Force 12 was going to send some replacement U-bolts. I never got them, and never heard anything. One more email went unanswered.

They may produce good antennas, but for me, customer support has not just been poor, it has been non-existant. And I was always cordial in my emails and FAX correspondence with them, never demanding or rude.

I know it can be a difficult market - I spent a number of years designing and producing amateur radio products. Margins are typically low, customers won't read the manual, stuff gets hooked up incorrectly, etc. But there is no excuse when a company ignores a customer's phone calls, emails, and FAXes.

Doug Hall, KF4KL

3786. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 17:38:38 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A326E1E.4E82@rpi.edu>
Source record: 175085

Roger Halstead wrote:
>
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Prof. Curt M. Breneman" <brenec@rpi.edu> wrote in message
> news:3A2EF603.5038@rpi.edu...
> > Rick Littlefield wrote:
> > >
> > Ir seems as if people are missing the point here -- the guy said that he
> > was doing this on an authorized CAP or ham band
>
> Quote from original post:
> "I am in the process of installing a transmitter which is designed to
> communicate primarily with aircraft. In a case like this does it make
> more sense to use a 0dB omni antenna as opposed to a gain antenna in
> order to better cover the air?"
> End quote
>
> No he didn't. He only asked about the antenna and talking to aircraft.
> No mention is made in the original post about using CAP, or ham bands.
> Actually no mention was made of using aviation frequencies either.
>
> (that's why it made
> > sense that he was UHF instead of VHF, like civilian air band). I'm not
> > even sure that it would be illegal for an airport FBO operator to set up
> > a Unicom rig on their authorized frequency by themselves either...
> >
> If the FBO is the Unicom operator and they have the paperwork taken care of
> then yes, they may have unicom. But the airport may have only one unicom.
> That it is used in the terminal building, in a car, or at the FBOs doesn't
> matter as far as I've been able to find out.
>
> Roger (K8RI)
>
> > Curt Breneman
> > RPI Chemistry
> > KC2EBP

Roger,

My point was that in a later post he indicated that he was going to be
using legal communications frequencies, thereby invalidating the harse
reactions he received. He shouldn't have had to do this in order to

get a cordial response. The fact that he was referring to legal communication methods emphasizes that he should not have been pre-judged by this community just because he said that he wanted to communicate with an aircraft. If he had said that he wanted to communicate with the Space Shuttle or the International Space Station, would you all have assumed that he was going to pirate NASA TDRS frequencies? And what if that had indeed been his intent? It's arrogant and self-righteous to (pre)judge intent - people should be (and ultimately are) responsible for their own actions. I think people are taking the "self-policing" aspect of ham radio too far here. To me and many others, "self-policing" means one regulates their OWN behavior - it's not a license to indict or criticize others through vigilante-style action - "OO" activities notwithstanding.

To gauge your own position on this, consider the following scenarios:

1) A CB enthusiast asks about how to modify a Henry 3K for 11m.

2) A person interested in pirate FM operations asks about how to redesign a solid-state RF power amp for 3m operation.

What would you do in these cases? Would you:

a) Provide purely technical information without judgemental overtones?
b) Advise them about potential legal problems, but offer technical advice anyway?
c) Refer them to alt.radio.pirate or a CB newsgroup with no technical help?
d) Respond in a condescending legalistic manner, refuse to provide any information, and be filled with righteous indignation?

Which of these responses best characterizes your probably reaction?

Which response puts the best face on ham radio?

Curt Breneman
KC2EBP

3787. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 17:50:51 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <34s43tcs5al9mtotnkis25ujhlag2svs8j@4ax.com>
Source record: 175086

"Roger Halstead" <rdhalste@tm.net>
shared these priceless pearls of wisdom:

->> That does not happen to be true.
->>
->Which brings the question Jim, Does the installer have to be FCC, or FAA
->licensed?

If you are talking about the ground station, if the ground station has the appropriate license for the frequency in question, and if the equipment being installed is type accepted by the FCC for that class of service, any hamhand with a pipe wrench and blowtorch can install the radio. No FAA or FCC ticket for the individual installer required.

->I don't know if the FCC license is available any more, but the installer has
->to work for a FAA licensed facility and I think, like the mechanic, must be
->licensed as well.

Nope.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3788. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 17:57:14 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A32727A.A3D3953F@haertig.com>
Source record: 175087

I think I explained that in the next sentence, with further elaboration in the rest of the post. The method I eluded to is the standard one for determining the performance of MW antennas. There is a body of knowledge and data about MW vertical antennas that extends back at least 75 years. It is in light of this knowledge that the data would be interpreted.

Most of the CFA naysayers will be astonished if it performs within 10 db of a 1/4 lambda vertical monopole over a good ground system, for which there is an enormous amount of measured data.

If the CFA does perform anywhere near as well as a 1/4 lambda vertical monopole, then it might be worthwhile characterizing its performance in greater detail. It isn't necessary to determine whether the emperor is wearing Armani or Brooks Brothers if it is first determined he isn't wearing any clothes at all. (c:

If the CFA doesn't appear to perform any better than any other short fat antenna, it might be useful to some to determine just how much better or worse this is. But this data isn't likely to be of much use in the broadcast industry where most of the current action in the CFA world is.

It will probably be up to hams to get some kind of handle on how the CFA performs at HF, though it is possible the military might get interested. As I eluded to before, meaningful measurements at HF are very hard, if not impossible, to make.

If what we are interested in is determining whether the CFA proponents have indeed managed to reinterpret Maxwell's equations in a new and valid way, then what I would like to see are measurements made at UHF. It is actually possible to make antenna measurements at 450 MHz that are meaningful and reasonably accurate.

Gray

Fred Hambrecht wrote:
>
> I am somewhat amazed by this statement. If not, how is one to interpret any
> data produced.
>
> "Gray Frierson Haertig" <gfh@haertig.com> wrote in message
> news:3A31FD57.35F967A5@haertig.com...
> >
> > At MW frequencies the initial measurements of CFA don't necessarily need
> > to be done in reference to a "standard" antenna.

--
Telecommunications Engineering

Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3789. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 17:58:29 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <i8s43t46gutlb85f7sf00m4greshg7bejc@4ax.com>
Source record: 175088

k1bqt@aol.com (Rick Littlefield)
shared these priceless pearls of wisdom:

->It would be interesting to know what the law is (short of actually looking it
->up). Do "radiomen" need a license for installing airborn equipment, for
repair
->and calibration of airborn radios, for Nav equipment, WX radar, or for
->everything?? Guess I'd better dig out my license manual.

Ah, now we have a horse of a different cruller. Where before we were talking about ground stations, now we are talking about airborne stations.

In short...for relatively minor installations (a simple navcom or for that matter a whole "stack" of avionics) that don't require complex (as the *INSTALLER* defines complex) operations, any certificated airframe mechanic (i.e. the "A" of A&P mechanic) can install and sign off the installation.

For major installations, there is a special form (337) that the installing airframe mechanic must fill out, and then a representative of the FAA with an Inspection Authorization on his/her A&P certificate must approve the installation and return the aircraft to service.

Another way of doing the same thing is for a SHOP to have a certificate and one or more of the shop technicians qualify for a REPAIRMAN certificate that allows them the same privileges as the airframe mechanic, but for one particular class of equipment, in this case radios.

Nowhere is it stated that the mechanic or repairman must be the one that does the actual nuts and bolts of the installation. I can hire a high school kid to do the installation, or for that matter the major installation if I'm willing to put my A (or IA) on the line for the inspection of the work.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3790. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 18:16:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <90tst0$2cf$0@208.207.71.163>
Source record: 175089

don wrote:
>
> This is going to sound pretty wierd, but I'm quite serious...
>
> My annual pilgrimage to San Francisco comes up the week of Jan 14th. While
> standing on the Golden Gate last year, I saw the bridge differently - as an
> array of "potential" vertical antennas, just waiting for a transmitter to come
> along.
>
> Well, this year I have a 706MKIIG and am contemplating taking it along.
> Assuming I don't get locked up on some sort of vandalizm charge, what might all
> of you think about the chances of this working?

What do you plan to do with the huge steel suspension cables?

Dick

3791. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 18:37:36 UTC
From: fazamy@aol.com
Message-ID: <20001209133736.06024.00003326@ng-ck1.aol.com>
Source record: 175090

How's this for a response? I've seen once or twice what I perceived to be ladder line. It was indeed quite unaesthetic, even anti-aesthetic. Perhaps many hams for aesthetic reasons (or their XYLs) are concerned about what the neighbors might think. :)

73,
KB2AMY
Evan

3792. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 18:45:06 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A32A7E3.DF20D80@att.com>
Source record: 175091

Mark Keith wrote:
>
> Pervert_Extraordinaire wrote:
> No, you don't want to do that. You want to stay with your outside ground
> rod. You never want to invite lightning inside the house. Also the water
> pipes may not be low resistance. Plastic parts, pipe dope etc, could eat
> your lunch. I would rather rely on a big fat ground wire that I can see.
> BTW, I see different gauges mentioned as far as NEC. Myself, I would use
> the thickest possible. At least #6. But saying that, if the ground and
> connection are low resistance, a #10 can do the job. I'd rather be
> thicker though to be on the safe side.

Good point. 100' of #6, located outside the house, connecting the
antenna and cable grouding block (male/male thingy) to my original
grounding rod will alleviate both the dual-rod issues as well
as your concern regarding 'keeping the lightning outside the house'.

Thanks again.

3793. Re: Quad experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 19:05:55 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <f3syOsmURwHvMUcuU9wTAombIY7T@4ax.com>
Source record: 175092

On Sat, 9 Dec 2000 06:39:45 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>I made a 20M sorta-quad by hanging a 35ft catenary wire connecting the ends
>of the 23ft trapped driven element of a Mosley TA34XL. It looks like a
>'curvy-sided' triangle resting on its point.
>
>It gets outta the back garden and seems to have a figure-8 pattern.
>Feedpoint Z went up according to my hf slotted-line (hard line with
>access-slots to the center conductor. Next time, I'll build it out of al
>tubing and a section of al gutter for easier access). Too much rf 'round
>here for analyzers
>
>Haven't tried the next (logical?) step of putting a catenary on it for 10M.
>Maybe later today. I think 15M is outta the question cuz of the trap
>design.
>
>How do I model this thing with EZNEC3?
>
>TIA. 73, Dave, K3BHJ
>

Hi Dave,

You want to break the curve up into straight line intervals. For some curves, two or three are enough, for others - more. This cannot be answered any more simply than to keep increasing the number until the results stop changing significantly. What constitutes an insignificant change? Good luck - that's what makes debate in the newsgroups. :->

I like your slotted line project. Another variant is known as a slab line. This is a center conductor between two parallel plates. With such a design, the center wire is oval in cross section. (Proceedings of the IRE, Vol. 38, No.3(Mar.'50)p. 244).

Beware that any probe that over couples will introduce SWR and create false readings across the board. In the lab with milliwatt sources, this cramped our style. At HF with 10's (if not 100) watts available, the coupling of -20 to -30 dB is no great regret.

Following construction you should measure its SWR and insertion loss driven in both directions against a very good 50 Ohm Load.

73's
Richard Clark, KB7QHC

3794. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 19:08:36 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <6ovY5.6644$g77.727979@nntp2.onemain.com>
Source record: 175093

All of the reasons mentioned, plus I think it looks like crap and it tends to be not very rugged. Also it's sometimes nice NOT to need a tuner if the antenna is built.

Pat WB7FFI

3795. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 19:15:27 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3284CF.35A2FFBE@oio.net>
Source record: 175094

KG4GGX,
Another two-cents worth...
People seem to have a phobia about using a tuner, something
to do with being afraid of the losses in the tuner, I guess.
Sure, there will be some loss, but compaired to the 'agility'
you have with a tuner and ladder-line, the losses don't really
amount to much.
I think the 'wive's tales' about ladder-line causing RFI
have a lot to do with it also.
'Doc

3796. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:21:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A329450.55E5@wt.net>
Source record: 175095

Pervert_Extraordinaire wrote:

>
> Good point. 100' of #6, located outside the house, connecting the
> antenna and cable grouding block (male/male thingy) to my original
> grounding rod will alleviate both the dual-rod issues as well
> as your concern regarding 'keeping the lightning outside the house'.
>
> Thanks again.

Where is the cable grounding block? You want the wire from the mast to go to ground in a straight line with no sharp bends. So preferably the wire from the mast would go straight down to ground from the mast. If you go to the first rod, I don't see how you will be able to do this unless this rod is below the mast also. Lightning doesn't really make turns well. MK
--
http://web.wt.net/~nm5k

3797. Re: Grounding my Mag mount to the luggage rack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:35:14 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A3296C6.4BC9A2D7@earthlink.net>
Source record: 175096

Yes indeed. You DO need a good body ground for the magmount if you are using it at HF. At VHF -- though perhaps not at 6 meters -- the capacitance of the mag-mount to the body metal may be enough to act as an RF ground. But at HF, the return current does not flow back through the body, but comes in on the shield of your coax. I have been able to operate on 80 meters with a home-brew magmount -- but I didn'' try to make that work as a ground; I bolted it to the car's body with a short strap. Current has to go somewhere, and I'd rather have it go where it SHOULD go.

Cortland

Paul Bailey wrote:

> I have ben a ham for a few short years. I have been HF mobile for most
> of the time.
>
> I have NEVER had my tri-mag mount grounded to my luggage rack until
> yesterday.
>
> Another operator noticed noise on my transmission that was NOT caused by
>
> the lack of this ground wire but it started him asking questions. He
> suggested that my antenna (ham stick) would work much better on 40 and
> 75 if I had this wire from my mag mount to my car body.
>
> I never dreamed it would get rid of that S5 or S6 fuel pump noise that I
>
> have put up with for over two years now! A small 12" wire and 90 seconds
>
> of work.
>
> It is completely gone! As is most of my electrical noise.
>
> My question.....
> Why did it get rid of the electrical noise?
>
> Any boy want to help Elmer this Extra class ham. I would be thankful.
>
> Paul - K4KJ
>
> --
> Thank you.
>
> Paul Bailey
>

> **********
> Your knowledge of the Bible. Is it based on tradition or the Bible?
> Here are some questions, their answers might surprise you!
> http://www.america.net/~paulb/biblestudy/q1.html
> **********

3798. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:42:07 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A32C34F.3E8DF55C@att.com>
Source record: 175097

Mark Keith wrote:
>
> Pervert_Extraordinaire wrote:
>
> >
> > Good point. 100' of #6, located outside the house, connecting the
> > antenna and cable grouding block (male/male thingy) to my original
> > grounding rod will alleviate both the dual-rod issues as well
> > as your concern regarding 'keeping the lightning outside the house'.
> >
> > Thanks again.
>
> Where is the cable grounding block? You want the wire from the mast to
> go to ground in a straight line with no sharp bends. So preferably the
> wire from the mast would go straight down to ground from the mast. If
> you go to the first rod, I don't see how you will be able to do this
> unless this rod is below the mast also. Lightning doesn't really make
> turns well. MK

I think I need to re-clarify.

I have a metal mast connected to a wooden chimney. On this metal mast
I've installed a cable grounding block (male/male, RG-6 connector with a
screw/screw-hole to enable attachment of #10 wire (might be limited to #10,
I need to check if larger wire is possible) In any event, I've ran a #10
wire to an new grounding rod. This new rod is located directly below the mast.

I gather from your previous post, I should utilize my new rod since it
is optimally located. (directly below the mast, low inductance path).
However, to alleviate the problems inherent with two distantly located
grounding rods, I should also connect these two rods with #6 wire.

Am I still confused? :-)

TIA

3799. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:45:02 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A329913.A6B959AB@earthlink.net>
Source record: 175098

You have to be more careful with ladder line than with coax. Its RF field is not contained inside a neat and easily routed shield, sp you should keep it away from other conductors. The National Electrical Code requires a LARGE spacing to power, telephone and other wiring - I think it may be 12 inches -- and standoffs for mounting. You can't meet the National Electrical Code grounding requirements without a real lighting protector (all you have to do with coax is ground its shield properly). It doesn't take well to being flexed, which can break it. Rigs don't connect directly to it, being made for coax.

Adding up all the installation problems -- if you did follow all the rules -- and making the antenna resonant (which is anyway a good idea) doesn't' seem all that much of a tradeoff.

Cortland

KG4GGX wrote:

> Hi all
> Why are so many new hams so reluctant to use ladder line for feed line?I'm a
> relatively new ham and I don't have a problem using balanced feed line, and
> don't understand why others are so resistant to use it.I have a 160 meter
> horizontal loop fed with 300 ohm twin lead that gives good results and no TVI...

3800. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:49:03 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A329A08.A2ED7739@earthlink.net>
Source record: 175099

I found some highway overpasses near Fort Worth where 40 meter signals came up remarkably due to proximity. However, you'd need to be some kid of /MM to do that with the GOlden Gate BRidge! Or would that be a GG (Golden Gate) amplifier? Heh!

Cortland

Barry Ornitz wrote:

> Those of us old enough to remember the classic "Jeeves" cartoons by Gil in
> QST may recall the one where the auto is parked on the bridge and Jeeves is
> up tangled in the bridge cables with a roll of coax. The caption coming
> from the car says: "OK Jeeves, now let's try shunt feed, off center."
>
> Many of those cartoons would not make sense to today's hams, but they were
> great!
>
> 73, Barry WA4VZQ ornitz@usa.net

3801. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:51:19 UTC
From: WE0H <mikereid1@qwest.net>
Message-ID: <O4xY5.1968$iZ5.308004@news.uswest.net>
Source record: 175102

Mine has a 10:1 SWR on 160. Higher bands work OK though. It is 55' at the
apex and ~25 or 30' at the ends.
Mike> WE0H.

3802. Re: Wonderbar Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 20:52:03 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A329ABC.CA8DB7A7@earthlink.net>
Source record: 175100

I knew a guy who had a Wonderbar dipole. He hung it on his carport wall and did not use it. Let's face it, you can put up a full sized 10 meter dipole more easilty than build a Wonderbar.

Cortland

JGBOYLES wrote:

> Hi All,
> Did a search on this particular antenna and did not come up with much. The 10 meter contest is upon us, and considered playing around with it. The orginal design was in QST circa 1957 or so. In short it is a bow tie dipole with a loading coil and link coupling to the feed. Anybody done this before with any results? One thing I find troublesome in the orginal design, the loading coil is 12 turns 1 inch dia. 3 inch long, but they short out the last 1.5 to 2 turns. Why? Apparently this was a very popular antenna in the 50's when we had ionspheric conditions that were once in a lifetime. Need answers fast cause the contest is about to start:-).
> 73 Gary N4AST

3803. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 21:00:37 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A329E0F.C32499B9@bellatlantic.net>
Source record: 175101

Pervert_Extraordinaire wrote:

> I 'do' have a water faucet located nearby. I think I'll lift the
> vinyl siding and connect the RG-6 male/male grounding block to the
> copper water pipe with my #10 copper wire. This seems to avoid the
> pitfalls generated by my 'additional' grounding rod.

That's how I ground my TV antenna mast. I use #8 aluminum to listed
clamps at the mast and at the water faucet. Atop the mast is my discone.

Regarding the antenna discharge unit, here's what the NEC says:
"810-20. Antenna Discharge Units ï¿½ Receiving Stations
(a) Where Required. Each conductor of a lead-in from an outdoor antenna
shall be provided with a listed antenna discharge unit.
Exception: Where the lead-in conductors are enclosed in a continuous metallic
shield that is either permanently and effectively grounded or is protected by
an antenna discharge unit.
(b) Location. Antenna discharge units shall be located outside the building or
inside the building between the point of entrance of the lead-in and the radio
set
or transformers, and as near as practicable to the entrance of the conductors
to
the building. The antenna discharge unit shall not be located near combustible
material or in a hazardous (classified) location as defined in Article 500.
(c) Grounding. The antenna discharge unit shall be grounded in accordance with
Section 810-21."

Per 820-20 (a) Exception - you are not required to use an antenna discharge
unit if you use coax and if it is properly (per NEC) grounded at the receiver.

That goes to the NEC requirements, and is not intended to say anything
about maximizing protection. The NEC is a **minimum** in terms of
what is required.

People talk about lightning - and we don't have a clue what in the hell
we are talking about. NO ONE can predict what a "lightning strike"
will do. People give "knee jerk" advice, which, for the most part, is correct,

but should nevertheless be dismissed, until you think the suituation through.

Lets put certain kinds of damage aside, and consider electrical damage.
(I'm setting aside damage such as lightning knocking over a tree which
falls on your house, starting a fire which burns down your house - that sort
of thing.) What we are talking about is voltage and current on your
antenna system (including supports, down lead, ground wires etc), either
from a direct strike or induced by a nearby strike.

You MUST go to the basics: E = IR. You MUST have a potential
difference to have a current flow to do any useful - or damaging - work.
If you can establish a system with no potential difference, you prevent
the current flow - and the resultant damage. So in all cases, you are
better off having your grounds bonded together, to minimize the
potential difference. The size of the bonding jumper goes directly
to the potential difference. The larger the jumper, the lower the resistance.
The lower the resistance, the lower the potential difference.
NEC has stipulated that the minimum is #6 copper (or equivalent)
to bond a grounding electrode for your antenna to the house grounding
electrode system. That jumper tends to minimize the potential difference
between electrodes. Remember, the smaller that potential difference,
the less possibility of damage.

The same thing applies to the size of the wire that connects the antenna
mast to ground. NEC specifies a minimum size. The wire will tend to keep
the voltage (potential difference = voltage) between the mast and ground
to a minimum - the bigger the wire, the lower the voltage.

The forgoing nets out to "bigger is better" in terms of grounding conductor
size. But it also nets out to "have a single grounding system". And you
get a single grounding system in one of two ways: do not add a grounding
electrode OR bond any added grounding electrode to the groundning
electrode system. Thus the NEC requires the latter OR allows connection
of the antenna support to the existing grounding electrode system.

If you want to maximize the effectiveness of your saftey grounding system,
by all means add electrodes, maintaining (at least) the minimum requirements.
But if you add an unbonded electrode versus connecting to the existing
system, you violate NEC and potentially increase the possibility of electrical
damage.

>
>
> > For example, you can use #8
> > aluminum or #10 copper and connect to the interior grounded metal
> > water piping, if available. See NEC article 810-21 Note that all
> > of this discussion is directed at grounding the antenna MAST and/or
> > metallic support structure and/or the antenna discharge unit, not the
> > antenna itself.
>
> I've yet to actually see an antenna discharge unit. I assumed it was
> an inline device which was located at the input port of the scanner.
> (indoors, at the end of the RG-6, at the point of connection to my scanner)
>
> Now I think it's an inline RG-6 device which is 'best' located at the
> antenna, and probobly as close to the male/male grounding block as
> possible to enable -easy connection to ground-. Any comments?
>
> Thanks for taking the time to repsond to my query.

3804. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 21:33:58 UTC
From: n2ey@aol.com
Message-ID: <20001209163358.18044.00002437@nso-fz.aol.com>
Source record: 175103

In article <C6jY5.476$FM2.51918@news-east.usenetserver.com>, "Barry Ornitz" <ornitz@dpnet.net> writes:

>Those of us old enough to remember the classic "Jeeves" cartoons by Gil in
>QST may recall the one where the auto is parked on the bridge and Jeeves is
>up tangled in the bridge cables with a roll of coax. The caption coming
>from the car says: "OK Jeeves, now let's try shunt feed, off center."
>
I remember that one!

>Many of those cartoons would not make sense to today's hams, but they were
>great!
>
One of my favorites was "Prop motor? I said prop-PITCH motor, Jeeves" as the spinning beam causes the house to take off like a helicopter...

And who could forget the classic Grommethead Schultz stories, or the limericks recited at the DXHPDS meetings?

73 de Jim "that's WITH anchovies" N2EY

3805. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 21:50:52 UTC
From: k6mhe@arrl.net
Message-ID: <3a32a853.197531@news.mcn.org>
Source record: 175106

12' spacing would be advisable for ladder line with about 5" conductor
to conductor spacing, however, for the so called 450 Ohm window line
the spacing recommended need not be greater than 2ï¿½" as the conductor
to conductor spacing of that line is only 0.8"

Danny, K6MHE

On Sat, 09 Dec 2000 20:45:02 GMT, Cortland Richmond
<ka5s@earthlink.net> wrote:

>You have to be more careful with ladder line than with coax. Its RF field is not
>contained inside a neat and easily routed shield, sp you should keep it away from
>other conductors. The National Electrical Code requires a LARGE spacing to power,
>telephone and other wiring - I think it may be 12 inches -- and standoffs for
>mounting. You can't meet the National Electrical Code grounding requirements
>without a real lighting protector (all you have to do with coax is ground its
>shield properly). It doesn't take well to being flexed, which can break it. Rigs
>don't connect directly to it, being made for coax.
>
>Adding up all the installation problems -- if you did follow all the rules -- and
>making the antenna resonant (which is anyway a good idea) doesn't' seem all that
>much of a tradeoff.
>
>Cortland
>
>KG4GGX wrote:
>

3806. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 21:55:36 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <iTxY5.781$65.785770@newsfeed1.thebiz.net>
Source record: 175104

Sorry to hear about your experience, but it is certainly not universal.

I've received ONLY excellent customer support from Force 12, especially
Natan W6XR/2. Prompt answers to emails, and they sent me some replacement
element sections (on their own initiative).

And yes, they have a superb product. I can't say enough about the li'l
12ft-boomed C3S.

73,
Barry N1EU

Doug Hall <kf4kl@pobox.com> wrote in message
news:TmEyOm0R2U7X+hmnkuhSbqY2uJGl@4ax.com...
> On Sat, 09 Dec 2000 06:09:28 GMT, dinod@deltanet.com (Dino) wrote:
>
> >I'll tell you this...if the letter posted on the web page is correct,
> >I will NEVER own a Mosley product! You just don't treat customers like
> >that!
> >
> >Force 12....HERE I COME! Now here is a company that treats people
> >well! They also have the best multi-monoband antennas designs (IMHO).
> >
> >Dino...K6RIX
>
> Hope you have better luck with Force 12 customer support than I have.
> I bought a Force 12 C-4 in 1996. It's a good antenna, and I like it.
> But I have NEVER been able to get ANY support from Force 12. When I
> got the antenna a couple of the elements appeared to be the wrong
> length. While it was pretty obvious that they needed to be cut, I
> wanted to double check with Force 12 before cutting them. I called,
> and was told by the secretary or receptionist that they were "really
> busy" and I should call back later. Later calls went unreturned. I
> sent a FAX. It went unanswered. I finally cut the tubing to the
> correct length and the antenna went together and worked fine. As I
> said, it's a good antenna.
>
> About a year later I was up the tower doing some work on another
> antenna when I noticed that the U-bolts holding the 10 and 15m
> elements on the Force 12 were rusted. The other U-bolts were fine, so
> I called Force 12 to ask about it. Nobody returned my call. I emailed
> them. No reply. Finally (after a Usenet post asking if anyone else had
> experienced any problems) I got a reply from their east coast rep, and
> he promised to get an answer for me. I never heard anything else.
> According to the rep, Force 12 was going to send some replacement

> U-bolts. I never got them, and never heard anything. One more email
> went unanswered.
>
> They may produce good antennas, but for me, customer support has not
> just been poor, it has been non-existant. And I was always cordial in
> my emails and FAX correspondence with them, never demanding or rude.
>
> I know it can be a difficult market - I spent a number of years
> designing and producing amateur radio products. Margins are typically
> low, customers won't read the manual, stuff gets hooked up
> incorrectly, etc. But there is no excuse when a company ignores a
> customer's phone calls, emails, and FAXes.
>
> Doug Hall, KF4KL
>

3807. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 22:13:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A32AE96.C884EC78@eznec.com>
Source record: 175105

Gray Frierson Haertig wrote:

> . . .

> If what we are interested in is determining whether the CFA proponents
> have indeed managed to reinterpret Maxwell's equations in a new and
> valid way, then what I would like to see are measurements made at UHF.
> It is actually possible to make antenna measurements at 450 MHz that are
> meaningful and reasonably accurate.

Certainly this, or any quantitative measurements, would be enlightening, and would add a great deal to our knowledge of this antenna. However, one of the practical problems of electrically small antennas is that they invariably exhibit a large feedpoint reactance and low feedpoint resistance. (As far as I know, the CFA isn't an exception to this.) Consequently, the necessary matching system is often the dominant and unavoidable source of loss in any useful system involving a small antenna. I don't think it would be possible to accurately translate the loss of the network at 450 MHz to the loss you'd get at a much lower frequency. It looks to me like it would be necessary to independently determine the impedances of the two portions of the antenna while it's operating, a problem like determining the operating impedances of each element of a phased array while operating. With that information, you could calculate or measure the expected losses you'd get in a phasing/matching network at other frequencies. Is this kind of independent measurement of the operating feedpoint impedances of the two sections possible with reasonable accuracy at 450 MHz, considering the values of the impedances involved?

Roy Lewallen, W7EL

3808. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-09 22:57:25 UTC
From: dinoal7lz@aol.com
Message-ID: <20001209175725.08255.00002717@ng-mi1.aol.com>
Source record: 175107

My B&W antenna's apex is at 55' with the ends at 25-30' also and has an SWR of 3:1 on 160. I will admit that it is not a very good performer on 160; starts to work well on 80 which frankly is my interest (MARS freqs far removed from the ham bands and WARC).

Dino KL0S/4

3809. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:00:31 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A32F1CF.F518653D@att.com>
Source record: 175108

ehsjr@bellatlantic.net wrote:
>
<Big, very big, snip>
>
> If you want to maximize the effectiveness of your saftey grounding system,
> by all means add electrodes, maintaining (at least) the minimum requirements.
> But if you add an unbonded electrode versus connecting to the existing
> system, you violate NEC and potentially increase the possibility of electrical
> damage.

Thank you for the comprehensive explaination. I realize this took
some time on your part and it is appreciated.

From your feedback, as well as other posts, I have decided to use
#6 copper to:

1) Connect my antenna mast to a grounding rod which I located directly below
the mast. This allows the least resistive/inductive path for lightning.

2) Connect this grounding rod to the 'original' service grounding rod.

Thanks,

3810. Skip LP versus regular LP ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:07:30 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <3LzY5.5220$4W.684716@nntp1.onemain.com>
Source record: 175109

Ok guys, can someone please explain the difference to me between a M2 'skip log' and a Tennadyne LP or are they more or less the same and just advertising hoopla? Trying to make up my mind here which to purchase..

Comments welcomed and appreciated...

Thanks, Jerry -w7wpx-
jlockett@onemain.com

3811. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:14:45 UTC
From: 2w8ji@contesting.com
Message-ID: <3a32c922.46621504@news.akorn.net>
Source record: 175110

On Sat, 09 Dec 2000 10:22:30 -0600, n5nug <n5nug@ix.netcom.com> wrote:

>I guess I have answered my own question. There is nn ground system
>according to the information located at
>http://www.hbci.com/~wenonah/cfa/
>
>73, Ed - N5NUG

That's right Ed!

Here is an antenna that is purported to eliminate all losses by use of something that simply can not happen, through some kind of "magic".

Even though the ground near the antenna is regular old bare dirt, they would have us all believe like morons that the losses in the dirt go to zero because of the feed system!

To top it all off, they want us to believe the power factor of a short elemebnt can be corrected with a loading inductor the same size used in a mobile antenna, or a capacitor like used in a small loop....yet unlike the mobile antenna the CFA's reactance canceling is lossless using standard components!

Since the loss in any small antenna results from exposure of the lossy media around the antenna to concentrated fields and from loading system losses, and since the CFA does nothing to eliminate the only losses that are a problem....only someone without a basic understanding of antennas would swallow the story they tell.

I suspect that's why, after around ten years or more of having the antenna available, it has degenerated to something talked about in amateur publications that are the equal of the National Enquirer of antennas.

73 Tom

3812. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:23:45 UTC
From: 2w8ji@contesting.com
Message-ID: <3a32cb33.47150397@news.akorn.net>
Source record: 175111

On 08 Dec 2000 23:41:22 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>> I guess people still buy magnetic pillows to releive headaches.<
>
>Now wait a damn minute, Tom! My magnetic pillow cured my headache when I slept
>on it, cured my friend's prostate cancer when he sat on it, saved the life of
>my uncle Ted's horse when it had colic, and increased my gas milage by 25% when
>I threw it in the trunk of my car to bring it home. It's looking a little
>rough these days, but are sure you don't want me to ship it down? Happy to
>share!
>
>73
>
>Rick K!BQT

What is looking a little rough? Your uncle Ted "the Swimmer"
Kennedy's horse? I'd sooner use a CFA than a Subaru with a horse in
the trunk. Phil me in.

73 Tom

3813. Antenna Switching question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:36:52 UTC
From: Murray Neece <radioranch@qth.com>
Message-ID: <3A32D024.A3BF98B0@qth.com>
Source record: 175112
Body handling: Binary attachment payload not displayed: radioranch.vcf

I have two 40 meter Delta loops in the vertical, fed at the top of a 60 foot mast, than I would like to experiment with by feeding them all possible configurations, such as an 80meter dipole (bow tie type) as one LONG wire, and in and out of phase as two deltas....best I can figure it will take a switcher that is 4by 6 to two out...is there such a thing made...that is electrically operated, that I can do from the mast top, OR what if I feed them both with coax (instead of the ladder line Im using now) and do the switching with a plug in matrix at ground level (would be cheaper but may change the success of the deltas as they are now...anybody got some ideas? thanks 73 Murray K5MDM

[One or more binary attachments are retained only in the source text.]

3814. Re: Skip LP versus regular LP ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:40:35 UTC
From: Murray Neece <radioranch@qth.com>
Message-ID: <3A32D103.68337741@qth.com>
Source record: 175113
Body handling: Binary attachment payload not displayed: radioranch.vcf

I have had tremendous help and customer service from Tennadyne....nothing built better...And you may talk to the designer./company owner if you have problem....though I dont know what it would be.....I did have loose screw or two when I took it down to change towers (at least three major storms with 70 mph+ winds had gone thur)...its great get one and Tell Chuck hello from Murray...73 M

RttyMan wrote:

> Ok guys, can someone please explain the difference to me between a M2 'skip
> log' and a Tennadyne LP or are they more or less the same and just
> advertising hoopla? Trying to make up my mind here which to purchase..
>
> Comments welcomed and appreciated...
>
> Thanks, Jerry -w7wpx-
> jlockett@onemain.com

RttyMan wrote:

> Ok guys, can someone please explain the difference to me between a M2 'skip
> log' and a Tennadyne LP or are they more or less the same and just
> advertising hoopla? Trying to make up my mind here which to purchase..
>
> Comments welcomed and appreciated...
>
> Thanks, Jerry -w7wpx-
> jlockett@onemain.com

[One or more binary attachments are retained only in the source text.]

3815. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:44:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90ujn2bqf1@slb1.atl.mindspring.net>
Source record: 175114

Transmission lines for antennas?

Ladder line... "just do it!"

Peter K1PO

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:t5lt09.h7j.ln@mail.specsol.com...
> KG4GGX <kg4ggx@aol.com> wrote:
> > Hi all
> > Why are so many new hams so reluctant to use ladder line for feed
line?I'm a
> > relatively new ham and I don't have a problem using balanced feed line,
and
> > don't understand why others are so resistant to use it.I have a 160
meter
> > horizontal loop fed with 300 ohm twin lead that gives good results and
no TVI
> > problem or any other trouble other than some effect when it's wet.I plan
to try
> > ladder line to help with the weather effect.
>
> <snip>
>
> Because all the radios built in the last 50 years or so have coax
connectors
> on the back of them.
>
> Because you can do things with coax you can't with ladder line, like tape
> it tightly to a metal mast and bury it.
>
> Because the only ladder line you can buy at Radio Shack is 300 Ohm TV
stuff.
>
> Sure there are sometimes technical reasons why ladder line would be the
> "better" choice, but most of the time coax is the path of least
> resistance (pun intended).
>
> Jim Pennino
>

3816. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:47:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90ujrprgr1@slb0.atl.mindspring.net>
Source record: 175115

Real Hams always use "ladder line".

Peter K1PO

"KG4GGX" <kg4ggx@aol.com> wrote in message
news:20001209101733.14756.00001208@ng-xc1.aol.com...
> Hi all
> Why are so many new hams so reluctant to use ladder line for feed
line?I'm a
> relatively new ham and I don't have a problem using balanced feed line,
and
> don't understand why others are so resistant to use it.I have a 160 meter
> horizontal loop fed with 300 ohm twin lead that gives good results and no
TVI
> problem or any other trouble other than some effect when it's wet.I plan
to try
> ladder line to help with the weather effect.
> I also have a parrallel dipole for 80 thru 10 meters that is fed with
RG-8.It
> gives very good results.It seems that many are reluctant to try these
antennaas
> as well.Am I missing something here?I'm pleased with both of my
antennas.No
> they do not give beam performance, I speaking of wire antennas
only.Antennas of
> these types , to me, give very good performance for having one antenna and
one
> feed line to cover multiple bands.I know a few other hams that would like
to
> have one feed line/antenna to cover several bands, but they do not like
ladder
> line, and have no experience with it! Also they seem suspect of the
parrallel
> dipole.Why?I feel that I may be looking at things wrong in liking these
types
> of antennas.
> Also is it possible to feed a parrallel dipole with ladder line?I know
it
> seems pointless to feed a 60 or 70 ohm feedpoint with balanced line, but
I'm
> just wondering what the results would be.
> Thanks for reading, and thanks for any info to help me see what it is
I'm
> missing on this subject of balanced line and wire antennas.
> 73!, Rob KG4GGX

3817. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 00:52:26 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <etAY5.5890$M5.342859@news1.frmt1.sfba.home.com>
Source record: 175116

We have floated a Helium Balloon-Supported moderately long vertical the last two Field Days. The antenna performed well, while it lasted.

The first year it worked until the Balloon failed from stress. The second year we put a parachute over the balloon to alleviate the stress problem, but we put it up in the daytime saturday and the afternoon winds drove it into the trees to destruction.

It only works in very calm winds.

Also, watch for the static generated. It will give a good shock and can damage solid state equipment if not properly protected. We observed voltages sufficient to jump a half centimeter or so, and it appeared that if you waited long enough it would go considerably further.

-- Alan Biocca, WB6ZQZ

3818. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:04:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90ukr6$866$1@slb3.atl.mindspring.net>
Source record: 175118

Bill:

Thanks for that explanation of the PI - L.

[The extra capacitor together with its' mate constitute a simple impedance transformer and not additional dynamic elements in the network.] In this case, as you point out there will only be one "hump".

That's why I qualified my statements up the thread with "number of 'independent' L and C elements".

There are configurations/combinations of multiple capacitors [Known to filter designers as "Norton Transformations".] in which the pair or triple of C's are not "independent dynamic elements" but act together as a single element coupled to an ideal impedance transformer [Norton transformer]. The inductive analogy to this "capacitive Norton Transformation" is the tapped coil in which a single inductive element [L] contributes to the "dynamics" of the network and the tap on the coil acts as an impedance transformer. Capacitors can't be "tapped" like a coil, however the same effect can be achieved by using a pair or triple of capacitors linked so that they form a single capacitive element in the "dynamics" of the network but also act to achieve an impedance transformation.

These are two techniques [tapped coils and capacitive Norton transformations] used by high order filter designers to achieve a practical circuit with a low ratio of element values in a high order filter. Often the calculated theoretical element values for a high order filter have a very wide ratio and make for an impractical circuit design. Then by a process of impedance transformations within the filter network using tapped coils and capacitive Norton transformations, the high order filter designer can often achieve a very practical circuit with a narrow range of element values.

Peter K1PO

"William E. Sabin" <sabinw@mwci.net> wrote in message news:3A3245A9.495E8903@mwci.net...
>
>
> Peter O. Brackett wrote:
>
> > Of course, depending upon the "damping" of the overall system there may be
> > no "humps" or only one, or several, etc...
>
> In PA pi network design, it is always the practice to assign a value of

loaded Q
> (the damping factor), a value of plate load resistance and a load (50
ohms).
> Under those constraints, the L and C values are unique and there is only
one
> "hump". This is at least true for the pi. An examination of Eqs 17 and
18 on
> page 13.6 of the ARRL Handbook, 1995 or later editions, verifies this. Eq
25 on
> page 13.7 also uniquely determines XL, after which Q1, Q2, C1 and C2 are
> uniquely determined. Mathcad and Radio Designer simulations invariably
show a
> single hump.
>
> What about the pi-L? Eq 28 finds an "image" resistance. We then use an
equation
> just like Eq 17 to calculate a pi network from plate to image, then an L
network
> from image to 50 ohms. For a chosen image resistance the L and C values
are
> again unique and there is one response peak.
>
> If I do all of these things and if the output load is a resistance of the
right
> value (50 ohms) the transfer function equation, as plotted with Mathcad or
Radio
> Designer, I do not show double humps. It is possible that if the output
load
> contains reactance of some kind a double-tuned circuit would result that
might
> behave like two coupled resonators.
>
> The pi and pi-L are basically single-tuned circuits, not coupled resonator
> circuits. The two capacitors do nothing more than transform resistance
from
> plate resistance to a 50 ohm load resistance. The coupled resonator
circuit
> requires two pairs of complex conjugate poles and the pi and pi-L do not
> normally have these.
>
> Bill W0IYH
>

3819. Joe Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:05:53 UTC
From: jcarver@netusa1.net
Message-ID: <3a32d61b.454394@news.netusa1.net>
Source record: 175117

Just heard that a Joe Carr K4IPV has died. Is this the same Joe Carr
that wrote Practical Antenna Handbook, Receiving Antenna Handbook,
Loop Antenna Handbook etc. etc etc.?

3820. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:09:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90ul46$9bk$1@slb7.atl.mindspring.net>
Source record: 174969

Golden Gate Bridge...

What about skyscrapers?

The twin Petronas towers in Malayasia are the world's tallest buildings.

I thought that if one could place transmission lines in the right places, one could probably make a close spaced [W8JK style] superdirective 160m vertical beam out of those towers.

Might be worth a trip out to Malayasia for the next 160m contest.

-Peter K1PO

"don" <kg9qm@nomail.net> wrote in message news:A8hY5.119$qk3.89987@news1.iquest.net...
> This is going to sound pretty wierd, but I'm quite serious...
>
> My annual pilgrimage to San Francisco comes up the week of Jan 14th. While
> standing on the Golden Gate last year, I saw the bridge differently - as an
> array of "potential" vertical antennas, just waiting for a transmitter to come
> along.
>
> Well, this year I have a 706MKIIG and am contemplating taking it along.
> Assuming I don't get locked up on some sort of vandalizm charge, what might all
> of you think about the chances of this working?
>
> Figuring out what would be good connection points for ground and the "driven
> element" will require some careful surveying on-site. I assume no one has
> actually tried this, but I'd like to hear if it has. I noticed several
> unpainted galvanized bolts where repairs had been done, which I hope are still
> there.
>
> Thoughts and suggestions are welcome. (Especially if you know where the "blind
> spots" are - regarding the cameras that watch for "jumpers").
>
> One idea was to drop a vertical downward and essentially create a vertical
> dipole, but that seems a bit tricky (harder to conceal) and potentially a
> problem as to the regs on "tossing" anything off the bridge.

>
> don
>

3821. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:27:00 UTC
From: Doug Hall <kf4kl@pobox.com>
Message-ID: <gNcyOs+QfyXA=rW2sAFW8LERJ4r4@4ax.com>
Source record: 174970

On Sat, 09 Dec 2000 21:55:36 GMT, "BarryG" <bgNOSPAM@albany.net>
wrote:

>Sorry to hear about your experience, but it is certainly not universal.
>
>I've received ONLY excellent customer support from Force 12, especially
>Natan W6XR/2. Prompt answers to emails, and they sent me some replacement
>element sections (on their own initiative).
>

Wow. Definitely both ends of the spectrum. I'm glad you received good
support - that's what I would have expected (and did expect) from
Force 12, given what I'd heard about them. And perhaps that's the norm
now. I hope so. But given my own experiences with Force 12 I'm not
likely to find out - I don't generally reward poor customer service
with repeat business.

The nice thing about the C-4 I own is that there's not much that can
go wrong with it that I can't easily fix, even without customer
support. And I do like the antenna.

73,
Doug, KF4KL

3822. Re: Antenna Switching question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:42:42 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A32DF92.47C37692@dvol.com>
Source record: 174971

Murray Neece wrote:

> I have two 40 meter Delta loops in the vertical, fed at the top of a 60
> foot mast, than I would like to experiment with by feeding them all
> possible configurations, such as an 80meter dipole (bow tie type) as one
> LONG wire, and in and out of phase as two deltas....best I can figure it
> will take a switcher that is 4by 6 to two out...is there such a thing
> made...that is electrically operated, that I can do from the mast top,
> OR what if I feed them both with coax (instead of the ladder line Im
> using now) and do the switching with a plug in matrix at ground level
> (would be cheaper but may change the success of the deltas as they are
> now...anybody got some ideas? thanks 73 Murray K5MDM

>
Yoicks, whatta beast! Closest I can come to a usable suggestion is to
acquire remotely controlled coax relays. A buddy of mine n3rd is in that
biz, check http://www.qth.com/topten/
>
w3rv

3823. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:49:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90unfr$7bl$1@nntp9.atl.mindspring.net>
Source record: 174972

Rick:

ec: Tom...

You were lucky enough to find one, eh?

Oh, yeah... youv'e obviously been using the North Pole magnetic pillows.

The South Pole magnetic pillows have the reverse effects.

And... the North Pole magnetic pillows are really scarce. As you well know, Maxwell's Equations [Integral form] show that the maximum likelihood ratio of finding North Pole to South Pole pillows is at least 10 million to one.

I found that if I placed the floating high gorky close to the low yo yo and then put the pillow cover over the South Pole then my headaches are reduced somewhat, but I noticed an interesting side effect of this pillow modification is that when the pillow is used during sex rather than sleep, Viagra effectiveness is enhanced 100 times.

Of course this only works if you are over 75 years of age. This should prove a boon to most hams.

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20001208184122.10987.00000190@ng-fm1.aol.com...
> > I guess people still buy magnetic pillows to releive headaches.<
>
> Now wait a damn minute, Tom! My magnetic pillow cured my headache when I slept
> on it, cured my friend's prostate cancer when he sat on it, saved the life of
> my uncle Ted's horse when it had colic, and increased my gas milage by 25% when
> I threw it in the trunk of my car to bring it home. It's looking a little
> rough these days, but are sure you don't want me to ship it down? Happy to
> share!
>
> 73
>
> Rick K!BQT
>

3824. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:52:31 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a32de2f.16577332@news.azstarnet.com>
Source record: 174973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

On Fri, 08 Dec 2000 16:32:49 -0600, Randy Mclean <rmclean@no_address.com> wrote:

>First, I want to thank all the people for the replies. I do have a few more
>questions. You suggest "Stacking 2 of each". Do you mean stacking them in
>series or parallel to each other. Others replied that I need min of 20db gain,
>would "stacking" two add the gain of two antennas? Also to connect the two
>antenna to the same coax would i use a Y-connector??

Randy,

Stacking of antennas is not a trivial exercise. It is pretty much beyond the
scope of an Internet forum to educate you adequately on this subject.

You should acquire a good antenna book (e.g. ARRL Antenna Book) and do some
study. You can get some good answers to specific questions in these forums,
however, you can get an awful lot of misinformation too, as can be demonstrated
by some of the other answers to your query.

>
>Let me see if I understand if I "stack" 2 2MCP22 antennas each having 16db gain
>would that give me 32db gain??

Alas, it should be so. In theory, you can gain 3 dB by doubling the size of the
antenna ("stacking" two like antennas). In practice a better rule of thumb is
to figure on 2.5 dB.

Wes

3825. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 01:56:08 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a32e2b6.17736279@news.azstarnet.com>
Source record: 174974
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

On Fri, 08 Dec 2000 23:34:57 GMT, KC8JBO <kc8jbo@my-deja.com> wrote:

[snip]

>Translation : "I'm copping out, because I don't know the answer."

Maybe he doesn't but at least he is smart enough to give a good suggestion. You
on the other hand, apparently have nothing worthwhile to add.

>--
>73 de Roger, KC8JBO
>EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
>Yaesu FT-920 |Inverted Vee @ 40 ft.
>Yaesu FT-90R
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

3826. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 02:27:03 UTC
From: KC8JBO <kc8jbo@my-deja.com>
Message-ID: <90uplkflr1@nnrp1.deja.com>
Source record: 174975
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3a32e2b6.17736279@news.azstarnet.com>,
no_spam_n7ws@azstarnet.com (Wes Stewart) wrote:
> On Fri, 08 Dec 2000 23:34:57 GMT, KC8JBO <kc8jbo@my-deja.com> wrote:
>
> [snip]
>
> >Translation : "I'm copping out, because I don't know the answer."
>
> Maybe he doesn't but at least he is smart enough to give a good
suggestion. You
> on the other hand, apparently have nothing worthwhile to add.

Cry me a river. If you don't like what I post, don't read it, FOOL.

There are plenty of books via the ARRL on EME..in particular the ARRL
Antenna Book has a detailed chapter on that particular subject.

--
73 de Roger, KC8JBO
EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
Yaesu FT-920 |Inverted Vee @ 40 ft.
Yaesu FT-90R

Sent via Deja.com http://www.deja.com/
Before you buy.

3827. Re: Joe Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 03:24:02 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A32F752.9070203@hiwaay.net>
Source record: 174976

John- My copy of the 'Practical Antenna Handbook' has the note 'K4IPV' pencilled in at the end of the introduction. The address is given as Falls Church, Va.

Does this help?

Bill-W4BSG

John H. Carver Jr. wrote:

> Just heard that a Joe Carr K4IPV has died. Is this the same Joe Carr
> that wrote Practical Antenna Handbook, Receiving Antenna Handbook,
> Loop Antenna Handbook etc. etc etc.?

3828. Formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 03:42:15 UTC
From: Tom <huber28@home.com>
Message-ID: <rYCY5.3273$55.1402700@news1.rdc1.ne.home.com>
Source record: 174977

Does anybody know of a formula or planning tool to design Helical wound HF antenna's ?

Tom WD0BFO

3829. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 03:50:48 UTC
From: rjmay@ria.net
Message-ID: <3a32fc04.29701987@news.ruralnet.net>
Source record: 174978

On Sun, 10 Dec 2000 00:52:26 GMT, "Alan Biocca" <Alan.Biocca@usa.net>
wrote:

>We have floated a Helium Balloon-Supported moderately long vertical the
>last two Field Days. The antenna performed well, while it lasted.
>
>The first year it worked until the Balloon failed from stress. The
>second year we put a parachute over the balloon to alleviate the stress
>problem, but we put it up in the daytime saturday and the afternoon
>winds drove it into the trees to destruction.
>
>It only works in very calm winds.
>
>Also, watch for the static generated. It will give a good shock and can
>damage solid state equipment if not properly protected. We observed
>voltages sufficient to jump a half centimeter or so, and it appeared
>that if you waited long enough it would go considerably further.
>
>-- Alan Biocca, WB6ZQZ

Many years ago we used an 8' helium baloon using a roll of wire from a
MIG (sp?) welder as both the support and the antenna. It went up over
three hundred feet. The next year we used a 12' helium baloon
figuring it would go much higher. It did. We had to stake the TS-830S
we were using with a tuner firmly to the ground as it picked the radio
off the table. Alan is right about the static shock. It will curl
your hair.

Rick KC0HH

3830. Parallel Dipoles es Ladder line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 03:53:17 UTC
From: kg4ggx@aol.com
Message-ID: <20001209225317.28893.00003638@ng-cl1.aol.com>
Source record: 174979

HI
Thanks for all the replys.Still with all the reasons against ladder line, what about those that want one feed line and one antenna.Yes one can tune an antenna to resonance, but not one wire that works 80 thru 10 meters.Yes one can make a trapped antenna work multiband, but traps are lossy as well as tuners, and make a more complicated antenna.So if someone wanted a simple home brew wire antenna to cover 80 thru 10 meters, ???It seems to me a balanced feed line antenna system will do this fairly well.I don't think a coax fed single wire antenna without traps will do this kind of multiband coverage very well.It would still require a tuner and have much more loss, if it will load up on all bands.
Then if coax was desired for such an antenna for the reasons stated before, what's wrong with a parallel dipole?Once tuned it can cover many bands with out a tuner and a coax feed direct to the rig.Why are they not liked?I have suggested both the balanced feed line antennas and the parallel diploe antennas to some of my ham friends.They seem to not want anything to do with ladder line or the parallel dipole, and have no experience with either.I am currently using both with good results and no problems.What is wrong with a parallel dipole to operate several bands on one feed line and no tunning needed?I know of at least three hams that want as many bands of coverage as they can get , but only have room for one antenna.I'm vey puzzeled.Is there something wrong with the parallel dipole??That would be a good choice if one could not use ladder line it seems to me.They all seem interested in the G5RV.It uses coax and a balun and a tuned ladder line feeder.
Anyway, for my own info, is there something wrong with a parallel dipole??I assembled , and tuned the one I'm using on my own and I'm a new ham.I have been pleased with it for the multi band coverage and no retunning between bands.I have also worked a fair amount of dx with it with good luck in pileups, and good RST's.It's only up 30 feet at the feed point,and flat topped. Also my 160 loop fed with twin lead to a 4 to 1 balun, up 45 feet does reasonably well tuned by the built in ATU in my FT-920 on 160 thru 6 meters.Better on some bands than others, but for one antenna and one feed line they both do well.What am I missing??
Thanks for reading, and thanks for all the replys.
73 Rob KG4GGX

3831. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 03:55:29 UTC
From: ardujenski@aol.com
Message-ID: <20001209225529.22791.00003930@ng-fq1.aol.com>
Source record: 174980

Dino,
LB CEBIK on his website has two articles on the T2FD design and basically confirms your experience(s) (http://www.cebik.com/radio.html). Although there is a power loss say of 75% or more on 160m do you think that the problem on 160m could be it is a cloud burner at that height and good for mostly local contacts (300-500 miles). And unless the conditions are right for a vertical bounce on 160m there may not be much performance? Reason I bring that up is I have run a 66 ft endfed wire at 10 ft and worked out 800+ miles SSB on 1-2 watts using a QRP+ rig but only when conditions are right. I am sure the Effective Radiated Power is very very low for this arrangement. If you check out http://www.spacew.com/www/fof2.html it will give you Near-Real-Time F2-Layer Critical Frequency Map for checking this out. I am not saying that the BWD is an efficient antenna on 160m but can be effective when used within its constraints. If you look at most 160m antennas recommended they typically are capacity hat type verticals anyways not horizontal dipoles. These shortended 160m verticals generally fall in teh 25% or less for efficiency from my readings. (Just my $00.02--smile)
Alan KB7MBI in Woodinville, WA

3832. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 04:30:03 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A3306CB.60649DE2@mwci.net>
Source record: 174981

Peter O. Brackett wrote:

> There are configurations/combinations of multiple capacitors [Known to
> filter designers as "Norton Transformations"].

I know about the Norton transformation, applicable to bandpass filters, and have used it often. One example is a five pole half octave Chebyshev bandpass filter in chapter 17 of "HF Radio Systems and Circuits" by Sabin and Schoenike (ARRL item #7253). The idea is to get five equal inductor values. The disk attached to the book has the software for it, written in Visual Basic.

As you say, the extra capacitors transform impedances but do not introduce additional poles.

Bill W0IYH

3833. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 04:50:41 UTC
From: n5nug <n5nug@ix.netcom.com>
Message-ID: <3A330BA1.2FCA1E95@ix.netcom.com>
Source record: 174982

Tom,

Thanks for your response concerning the CFA. I did loop up the CFA thru a search engine called Dogpile. It pulled up all sorts of paranormal psychic hype along with the antenna URL that I posted.

I guess a lot of the vernacular used to describe psychic events was also contained in the description of the CFA as catalogued by Dogpile.

73, Ed - N5NUG

Tom W8JI wrote:
>
> That's right Ed!
>
> Here is an antenna that is purported to eliminate all losses by use of
> something that simply can not happen, through some kind of "magic".
>
> Even though the ground near the antenna is regular old bare dirt, they
> would have us all believe like morons that the losses in the dirt go
> to zero because of the feed system!
>
> To top it all off, they want us to believe the power factor of a short
> elemebnt can be corrected with a loading inductor the same size used
> in a mobile antenna, or a capacitor like used in a small loop....yet
> unlike the mobile antenna the CFA's reactance canceling is lossless
> using standard components!
>
> Since the loss in any small antenna results from exposure of the lossy
> media around the antenna to concentrated fields and from loading
> system losses, and since the CFA does nothing to eliminate the only
> losses that are a problem....only someone without a basic
> understanding of antennas would swallow the story they tell.
>
> I suspect that's why, after around ten years or more of having the
> antenna available, it has degenerated to something talked about in
> amateur publications that are the equal of the National Enquirer of
> antennas.
>
> 73 Tom

3834. joe carr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 04:58:17 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <t3637g7vaht805@corp.supernews.com>
Source record: 174983

Paul Carr of Jacksonville, FL, has written antenna articles. He is N4PC.

3835. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 05:30:42 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a33149c.30511766@news.azstarnet.com>
Source record: 174984

On 09 Dec 2000 15:17:33 GMT, kg4ggx@aol.com (KG4GGX) wrote:

>Hi all
> Why are so many new hams so reluctant to use ladder line for feed line?I'm a
>relatively new ham and I don't have a problem using balanced feed line, and
>don't understand why others are so resistant to use it.I have a 160 meter
>horizontal loop fed with 300 ohm twin lead that gives good results and no TVI
>problem or any other trouble other than some effect when it's wet.I plan to try
>ladder line to help with the weather effect.

Actually I believe that there are too many new hams that are not reluctant enough about using balanced transmission lines. While they certainly have their place, balanced lines have application problems that many newcomers tend to overlook.

> I also have a parrallel dipole for 80 thru 10 meters that is fed with RG-8.It
>gives very good results.It seems that many are reluctant to try these antennaas
>as well.

I use a combination of trapped and single band dipoles fed with a common balun/coax feeder. Interaction between the individual dipoles can be considerable so I operate them in a "crossing" arrangement, rather than having them all parallel.

Wes N7WS

>Am I missing something here?I'm pleased with both of my antennas.No
>they do not give beam performance, I speaking of wire antennas only.Antennas of
>these types , to me, give very good performance for having one antenna and one
>feed line to cover multiple bands.I know a few other hams that would like to
>have one feed line/antenna to cover several bands, but they do not like ladder
>line, and have no experience with it! Also they seem suspect of the parrallel
>dipole.Why?I feel that I may be looking at things wrong in liking these types
>of antennas.
> Also is it possible to feed a parrallel dipole with ladder line?I know it
>seems pointless to feed a 60 or 70 ohm feedpoint with balanced line, but I'm
>just wondering what the results would be.
> Thanks for reading, and thanks for any info to help me see what it is I'm
>missing on this subject of balanced line and wire antennas.
>73!, Rob KG4GGX

3836. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 06:24:37 UTC
From: k3ky@erols.spamnocom
Message-ID: <90v7j5$2ik$1@bob.news.rcn.net>
Source record: 174985

I have a C4XL. I have been happy with it and I got good telephone
support for both technical questions and replacement parts.
The rusty u-bolts are a fairly well known issue. Force 12 believes
that stainless steel is a poor choice for the u-bolts because it is
subject to galling. This can make it extremely hard to remove the
nuts later. They ship stainless hardware with their antennas
except for the u-bolts, I found. If you read very carefully in the
manual (at least my manual), they clearly state that they recommend
the non-stainless u-bolts be spray painted. I put multiple coats on
mine. It definitely slowed down the appearance of rust, but in time
it does show up. It should be pointed out that this is *not* a major
problem, IMHO. It is at worst unsightly. When the time comes to
remove the nuts from the rusty u-bolts, they are going to come off
pretty easily. The same can not be said for badly galled stainless
hardware. Personally, I buy Force 12's argument about the u-bolts.
There are a lot of stainless u-bolts used out there, however.
Others may disagree. 73, David K3KY

In article <TmEyOm0R2U7X+hmnkuhSbqY2uJGl@4ax.com>
Doug Hall <kf4kl@pobox.com> wrote:

> On Sat, 09 Dec 2000 06:09:28 GMT, dinod@deltanet.com (Dino) wrote:
>
>>I'll tell you this...if the letter posted on the web page is correct,
>>I will NEVER own a Mosley product! You just don't treat customers like
>>that!
>>
>>Force 12....HERE I COME! Now here is a company that treats people
>>well! They also have the best multi-monoband antennas designs (IMHO).
>>
>>Dino...K6RIX
>
> Hope you have better luck with Force 12 customer support than I have.
> I bought a Force 12 C-4 in 1996. It's a good antenna, and I like it.
> But I have NEVER been able to get ANY support from Force 12. When I
> got the antenna a couple of the elements appeared to be the wrong
> length. While it was pretty obvious that they needed to be cut, I
> wanted to double check with Force 12 before cutting them. I called,
> and was told by the secretary or receptionist that they were "really
> busy" and I should call back later. Later calls went unreturned. I
> sent a FAX. It went unanswered. I finally cut the tubing to the
> correct length and the antenna went together and worked fine. As I
> said, it's a good antenna.
>
> About a year later I was up the tower doing some work on another

> antenna when I noticed that the U-bolts holding the 10 and 15m
> elements on the Force 12 were rusted. The other U-bolts were fine, so
> I called Force 12 to ask about it. Nobody returned my call. I emailed
> them. No reply. Finally (after a Usenet post asking if anyone else had
> experienced any problems) I got a reply from their east coast rep, and
> he promised to get an answer for me. I never heard anything else.
> According to the rep, Force 12 was going to send some replacement
> U-bolts. I never got them, and never heard anything. One more email
> went unanswered.
>
> They may produce good antennas, but for me, customer support has not
> just been poor, it has been non-existant. And I was always cordial in
> my emails and FAX correspondence with them, never demanding or rude.
>
> I know it can be a difficult market - I spent a number of years
> designing and producing amateur radio products. Margins are typically
> low, customers won't read the manual, stuff gets hooked up
> incorrectly, etc. But there is no excuse when a company ignores a
> customer's phone calls, emails, and FAXes.
>
> Doug Hall, KF4KL

3837. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 07:13:50 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <90vaga$u72$1@nntp9.atl.mindspring.net>
Source record: 174986

Bill:

Yes... Norton transformers, I thought they were all but forgotten. Heh, heh.

With the advent of modern digital technology, digital filters, etc... these subtle and ingenious circuit design techniques will probably disappear as the older generation of circuit theory practicioners vanishes into that great circuit design laboratory in the sky.

There is nothing more beautiful than a practical, feasible, well designed LC passive filter network.

Art and Science blended perfectly.

Sigh...

-Peter K1PO

"William E. Sabin" <sabinw@mwci.net> wrote in message news:3A3306CB.60649DE2@mwci.net...
>
>
> Peter O. Brackett wrote:
>
> > There are configurations/combinations of multiple capacitors [Known to
> > filter designers as "Norton Transformations"].
>
> I know about the Norton transformation, applicable to bandpass filters, and have
> used it often. One example is a five pole half octave Chebyshev bandpass filter
> in chapter 17 of "HF Radio Systems and Circuits" by Sabin and Schoenike (ARRL
> item #7253). The idea is to get five equal inductor values. The disk attached
> to the book has the software for it, written in Visual Basic.
>
> As you say, the extra capacitors transform impedances but do not introduce
> additional poles.
>
> Bill W0IYH
>

3838. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 07:54:57 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A3336C6.56FBED9E@earthlink.net>
Source record: 174987
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.space

very good advise wes
he will also need a good mast mounted preamp and also understand that EME is ONLY CW
not voice
its not like working any of the satelites which most of them are easy and using
voice
i hope randy does a bit more reseach before he starts spending large amounts of
money on antennas

Wes Stewart wrote:

> On Fri, 08 Dec 2000 12:53:25 -0600, Randy Mclean <rmclean@no_address.com> wrote:
>
> >Hello,
> > Next summer I am planing on setting up a Satellite station. I intend
> >to use the m2 2MCP22(2m 22 element cross polarized yagi) and
> >436CP42UG(440mhz 42 element cross polarized yagi) with the yaesu G-5500
> >azimuth/elevation rotator. My question is, how well would this setup
> >work for EME, if at all? I've been told that you need array of many
> >antennas to work EME, is this true?? Thanks.
>
> Randy,
>
> For 2m EME I would suggest a minimum antenna gain of 20 dBi, at least 1KW to the
> antenna and a noise figure of about 1 dB.
>
> You can work some of the "big guns" (W5UN, KB8RQ, SM5FRH, F3VS, et.al) with less
> but that's about it. I have worked all of these guys using 1KW out, a HB 17 el,
> 3.2 wavelength Yagi, 180' of 1/2" Heliax and a 0.8 dB NF preamp (in the shack).
>
> Before changing QTH, I had four of these Yagis and a short run of RG-17 and
> could hear my echoes about half of the time. I don't believe you are really EME
> capable until you can hear your own echoes.
>
> Wes N7WS
>
> >
> >
> >If you wish to reply via email please use my email address on Qrz.com as
> >I do not use my true email address on Usenet for Spam reasons.
> >
> >--
> >73 de k5drm
> >Randy Mclean
> >

> >
> >

3839. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 08:41:38 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A3341C1.B24D0326@haertig.com>
Source record: 174988

I think that you are right that it would be nigh impossible to
independently measure the operating impedance of the two elements(?) of
the antenna at 450 MHz. However, absent any information as to the
coupling system or how it is designed, I have no idea whether being able
to do this is important or not.

On some level it doesn't matter, because, if measurements show the CFA
(feed system, matching network, warts and all) has significantly more
gain than a short fat monopole over a good ground (and equivalent or
better bandwidth), then the CFA folks are really on to something big,
whatever it is. At that point I don't think there will be any shortage
of folks who are spectacularly brighter than I, who will be devising
measurements and postulating theories for the rest to knock down.

For the time being, I am content to bide my time awaiting the results of
the H&D/dTL&R joint venture measurements. I'll reserve any speculation
on future tests till after the current tests are public.

Gray

Roy Lewallen wrote:
>
> Gray Frierson Haertig wrote:
>
> > . . .
>
> > If what we are interested in is determining whether the CFA proponents
> > have indeed managed to reinterpret Maxwell's equations in a new and
> > valid way, then what I would like to see are measurements made at UHF.
> > It is actually possible to make antenna measurements at 450 MHz that are
> > meaningful and reasonably accurate.
>
> Certainly this, or any quantitative measurements, would be enlightening,
> and would add a great deal to our knowledge of this antenna. However,
> one of the practical problems of electrically small antennas is that
> they invariably exhibit a large feedpoint reactance and low feedpoint
> resistance. (As far as I know, the CFA isn't an exception to this.)
> Consequently, the necessary matching system is often the dominant and
> unavoidable source of loss in any useful system involving a small
> antenna. I don't think it would be possible to accurately translate the
> loss of the network at 450 MHz to the loss you'd get at a much lower
> frequency. It looks to me like it would be necessary to independently
> determine the impedances of the two portions of the antenna while it's
> operating, a problem like determining the operating impedances of each
> element of a phased array while operating. With that information, you

> could calculate or measure the expected losses you'd get in a
> phasing/matching network at other frequencies. Is this kind of
> independent measurement of the operating feedpoint impedances of the two
> sections possible with reasonable accuracy at 450 MHz, considering the
> values of the impedances involved?
>
> Roy Lewallen, W7EL

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3840. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 11:01:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <2oJY5.1504$XY.17747@newsfeed.slurp.net>
Source record: 174989

POB wrote:

BIGsnip
>>
Of course this only works if you are over 75 years of age. This should
prove a boon to most hams.

-Peter K1PO
>>>

JHB3K , evaD ,37

.cixelsyd werbeH-esenihC dlo-raey-75 a ,em ot noob a s'tI

,reteP ,iH

3841. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 11:39:34 UTC
From: Gian Luca Cazzola <glcazzola@iol.it>
Message-ID: <WXJY5.71279$hk4.2659504@news.infostrada.it>
Source record: 174990

I own a Force 12 C4 from about 14 months. Apart that is is a very good antenna, I admit that stainless steel u-bolt give galling problems. Immediately after assembling the 10m elements with steel u-bolts (that I obtained upon my request from Force12) on the boom I have found that one of them had galling.
I think that if I need to remove this element in the future I will need an electric saw -hi!
About the customer service, I have found a lot of infos and help from Nathan W6XR of Force 12.
My experience is that they give first class service, concernig lot of infos and spare parts (sending me stainless steel hadware - special boom to mast assembly plate in a week from my order by air-mailfrom USA to ITALIA).
Concernig tha crazy things happened to the chap that bought the top-end Mosley antenna, losing dollars and antenna, I am sure I will not buy any Mosley product in next 50 yrs (I am 41) - of course.
I am sure that I will buy other Force 12 products - I am thinking about C19XR or C31XR in next future!
73
Ian - IK4EWX

"David Sinclair" <k3ky@erols.spamnocom> ha scritto nel messaggio news:90v7j5$2ik$1@bob.news.rcn.net...
> I have a C4XL. I have been happy with it and I got good telephone
> support for both technical questions and replacement parts.
> The rusty u-bolts are a fairly well known issue. Force 12 believes
> that stainless steel is a poor choice for the u-bolts because it is
> subject to galling. This can make it extremely hard to remove the
> nuts later. They ship stainless hardware with their antennas
> *except* for the u-bolts, I found. If you read very carefully in the
> manual (at least my manual), they clearly state that they recommend
> the non-stainless u-bolts be spray painted. I put multiple coats on
> mine. It definitely slowed down the appearance of rust, but in time
> it does show up. It should be pointed out that this is *not* a major
> problem, IMHO. It is at worst unsightly. When the time comes to
> remove the nuts from the rusty u-bolts, they are going to come off
> pretty easily. The same can not be said for badly galled stainless
> hardware. Personally, I buy Force 12's argument about the u-bolts.
> There are a lot of stainless u-bolts used out there, however.
> Others may disagree. 73, David K3KY
>
> In article <TmEyOm0R2U7X+hmnkuhSbqY2uJGl@4ax.com>
> Doug Hall <kf4kl@pobox.com> wrote:
>
> > On Sat, 09 Dec 2000 06:09:28 GMT, dinod@deltanet.com (Dino) wrote:

> >
> >>I'll tell you this...if the letter posted on the web page is correct,
> >>I will NEVER own a Mosley product! You just don't treat customers like
> >>that!
> >>
> >>Force 12....HERE I COME! Now here is a company that treats people
> >>well! They also have the best multi-monoband antennas designs (IMHO).
> >>
> >>Dino...K6RIX
> >
> > Hope you have better luck with Force 12 customer support than I have.
> > I bought a Force 12 C-4 in 1996. It's a good antenna, and I like it.
> > But I have NEVER been able to get ANY support from Force 12. When I
> > got the antenna a couple of the elements appeared to be the wrong
> > length. While it was pretty obvious that they needed to be cut, I
> > wanted to double check with Force 12 before cutting them. I called,
> > and was told by the secretary or receptionist that they were "really
> > busy" and I should call back later. Later calls went unreturned. I
> > sent a FAX. It went unanswered. I finally cut the tubing to the
> > correct length and the antenna went together and worked fine. As I
> > said, it's a good antenna.
> >
> > About a year later I was up the tower doing some work on another
> > antenna when I noticed that the U-bolts holding the 10 and 15m
> > elements on the Force 12 were rusted. The other U-bolts were fine, so
> > I called Force 12 to ask about it. Nobody returned my call. I emailed
> > them. No reply. Finally (after a Usenet post asking if anyone else had
> > experienced any problems) I got a reply from their east coast rep, and
> > he promised to get an answer for me. I never heard anything else.
> > According to the rep, Force 12 was going to send some replacement
> > U-bolts. I never got them, and never heard anything. One more email
> > went unanswered.
> >
> > They may produce good antennas, but for me, customer support has not
> > just been poor, it has been non-existant. And I was always cordial in
> > my emails and FAX correspondence with them, never demanding or rude.
> >
> > I know it can be a difficult market - I spent a number of years
> > designing and producing amateur radio products. Margins are typically
> > low, customers won't read the manual, stuff gets hooked up
> > incorrectly, etc. But there is no excuse when a company ignores a
> > customer's phone calls, emails, and FAXes.
> >
> > Doug Hall, KF4KL
>
>
>
>

3842. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 12:33:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3377FF.313@wt.net>
Source record: 174991

ehsjr@bellatlantic.net wrote:

> People talk about lightning - and we don't have a clue what in the hell
> we are talking about. NO ONE can predict what a "lightning strike"
> will do. People give "knee jerk" advice, which, for the most part, is correct,
>
> but should nevertheless be dismissed, until you think the suituation through.

I agree with that. I tried to steer him to other sources the other day. There is no way anyone can totally design his system without being there. Or I won't anyway.. And what is safe for me, may not be safe for him. I don't leave my antennas, or grounds connected during storms. So the issue of potential doesn't mean near as much to me as it would him if he leaves his stuff hooked up all the time, and using ground leads coming into the shack. When I'm in the storm mode, my mast is a lighting rod. Nothing else. I have no leads coming into the house. They are all grounded together at the bulkhead outside. So in my case, if I get hit, it's pretty much like it hitting a tree in the backyard except the mast has a low resistance connection. It stays isolated from the house. And the only reason I haven't bonded my power ground to the mast ground is it's been set up that way since 1959 and we haven't had any power line conducted lighting damage in the 30 years we've had the house. And plenty of near hits on the power poles etc. So I decided to leave well enough alone in that dept. I have a pretty good clue what happens when my mast gets hit, but that doesn't help me much at all with his setup. Also to my way of thinking the NEC is not totally flawless. Take for instance this one:

> Per 820-20 (a) Exception - you are not required to use an antenna discharge
> unit if you use coax and if it is properly (per NEC) grounded at the receiver.

I think that ones kinda risky. Sure the coax will arc together at that kind of voltage, but I still wouldn't want it hooked to my rig. Also just because all the grounds in a house are bonded together doesn't always mean they will be at the same exact potential. With the rats nest of wiring in this house"attic" etc, thats one reason I didn't worry about that too much. Unless all the leads are hooked to the central mast ground in a star pattern, it's my thought that they still won't be totally at the same potential as far as the lighting is concerned. Kinda like using a bus in the shack. The ARRL, and maybe even the NEC say this is good practice, but most in the lighting biz prefer a star hookup to a central bulkhead. So my plan was to isolate the "lighting rod". Works for me, but he can't do that in his case.But anyway, just shows there is alot to digest to all the protection, and I sure wouldn't just listen to

any one person. especially me. I'm sure no lightning pro, but I do live in a heavy lighting zone about 8 months out of the year, and have had many near strikes. The last one a direct hit on my mast a couple of years ago." with me at this puter 15 ft away" I've never had any damage yet,"in about a 25 yr span here" so I must be doing something right. But I only do my own dishes in that dept. Thats why I only give kneejerk lightning info on the net. g They are the ones that have to decide what they really need. They are the ones that will have to sleep with what they've done. Or satisfy insurance, etc, MK

--

http://web.wt.net/~nm5k

3843. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 12:36:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3378C6.919EA71A@dvol.com>
Source record: 174992

Alan Biocca wrote:

> Also, watch for the static generated. It will give a good shock and can
> damage solid state equipment if not properly protected. We observed
> voltages sufficient to jump a half centimeter or so, and it appeared
> that if you waited long enough it would go considerably further.

>
. . . an application for a link-coupled tuner.
>

>
> -- Alan Biocca, WB6ZQZ

>
w3rv

3844. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 12:47:16 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A337B54.7020606@hiwaay.net>
Source record: 174993

I know that Gray is a true believer, but certain parts of this post need comment. Note that my comments do NOT have technical content, but concern the blind belief, only. Comments are inside the original.

Gray Frierson Haertig wrote:

> I think that you are right that it would be nigh impossible to
> independently measure the operating impedance of the two elements(?) of
> the antenna at 450 MHz. However, absent any information as to the
> coupling system or how it is designed, I have no idea whether being able
> to do this is important or not.

It's not important. Why go to scaling when there are claimed to be full sized units operating. Offers to measure these have been refused, according to much that I have read.

>
> On some level it doesn't matter, because, if measurements show the CFA
> (feed system, matching network, warts and all) has significantly more
> gain than a short fat monopole over a good ground (and equivalent or
> better bandwidth), then the CFA folks are really on to something big,
> whatever it is.

Gain over a 'Fat monopole over good ground' is not the claim. The claim is that the CFA can replace a conventional vertical with comparable results in a smaller envelope.This claim has never been demonstrated by an independant measurement, at least that I have seen reported.

At that point I don't think there will be any shortage
> of folks who are spectacularly brighter than I, who will be devising
> measurements and postulating theories for the rest to knock down.
>
> For the time being, I am content to bide my time awaiting the results of
> the H&D/dTL&R joint venture measurements. I'll reserve any speculation
> on future tests till after the current tests are public.
>
> Gray
>
>
I remain willing to accept this if reports from reputable experts substantiate even a part of the claims. There are units that are claimed to be operational, but have not been evaluated in believable ways. It seems SO simple to me. Why has it not been done?

>
>

> Roy Lewallen wrote:
>
>> Gray Frierson Haertig wrote:
>>
>>
>>> . . .
>>
>>> If what we are interested in is determining whether the CFA proponents
>>> have indeed managed to reinterpret Maxwell's equations in a new and
>>> valid way, then what I would like to see are measurements made at UHF.
>>> It is actually possible to make antenna measurements at 450 MHz that are
>>> meaningful and reasonably accurate.
>>
>> Certainly this, or any quantitative measurements, would be enlightening,
>> and would add a great deal to our knowledge of this antenna. However,
>> one of the practical problems of electrically small antennas is that
>> they invariably exhibit a large feedpoint reactance and low feedpoint
>> resistance. (As far as I know, the CFA isn't an exception to this.)
>> Consequently, the necessary matching system is often the dominant and
>> unavoidable source of loss in any useful system involving a small
>> antenna. I don't think it would be possible to accurately translate the
>> loss of the network at 450 MHz to the loss you'd get at a much lower
>> frequency. It looks to me like it would be necessary to independently
>> determine the impedances of the two portions of the antenna while it's
>> operating, a problem like determining the operating impedances of each
>> element of a phased array while operating. With that information, you
>> could calculate or measure the expected losses you'd get in a
>> phasing/matching network at other frequencies. Is this kind of
>> independent measurement of the operating feedpoint impedances of the two
>> sections possible with reasonable accuracy at 450 MHz, considering the
>> values of the impedances involved?
>>
>> Roy Lewallen, W7EL

3845. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 12:59:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A337E4A.668D@wt.net>
Source record: 174994

Wes Stewart wrote:
>
> On 09 Dec 2000 15:17:33 GMT, kg4ggx@aol.com (KG4GGX) wrote:
>
> >Hi all
> > Why are so many new hams so reluctant to use ladder line for feed line?I'm a
> >relatively new ham and I don't have a problem using balanced feed line, and
> >don't understand why others are so resistant to use it.I have a 160 meter
> >horizontal loop fed with 300 ohm twin lead that gives good results and no TVI
> >problem or any other trouble other than some effect when it's wet.I plan to try
> >ladder line to help with the weather effect.
>
> Actually I believe that there are too many new hams that are not reluctant
> enough about using balanced transmission lines. While they certainly have their
> place, balanced lines have application problems that many newcomers tend to
> overlook.

I think for the most part new hams are best off with coax. At first
anyway. It's hard to screw up a coax fed dipole or GP or whatever. On
the other hand, it's easy for a newcomer to improperly tune a tuner. And
the poor guy will end up with half the signal he would have with coax
feed. After they get a good grip on things, then try the ladder line and
tuner. I'm sure this will start a flamefest...Suit donned...
>
> > I also have a parrallel dipole for 80 thru 10 meters that is fed with RG-8.It
> >gives very good results.It seems that many are reluctant to try these antennaas
> >as well.
>
> I use a combination of trapped and single band dipoles fed with a common
> balun/coax feeder. Interaction between the individual dipoles can be
> considerable so I operate them in a "crossing" arrangement, rather than having
> them all parallel.

Yep, thats the way I do it. The farther apart the better. You can get a
close spaced set tuned, but why go thru the aggravation. It can be a
real pain unless you are used to them. Also an advantage to 90 degree
spacing is you can lose a leg, and it won't effect the other bands much.
Almost no interaction at all. I have 160,80,40 on one feed. I get a
little interaction on my 40 legs, but nothing to get in a twist over.
And it's actually a guywire problem rather than the other legs. MK
--
http://web.wt.net/~nm5k

3846. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 13:33:51 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <rc173t4s4ini9lajuqr8f290pv9988suh2@4ax.com>
Source record: 174995

On Sun, 10 Dec 2000 02:13:50 -0500, "Peter O. Brackett" <ab4bc@ix.netcom.com>
wrote:

>There is nothing more beautiful than a practical, feasible, well designed LC
>passive filter network.

That is nice, but I always thought the most beautiful thing in radio was the
crossed ellipses of a perfectly tuned RTTY signal, especially when it's a new
country coming back to your CQ.

73, Bill W7TI

3847. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 13:58:19 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A338BFA.85243DC3@dvol.com>
Source record: 174996

KG4GGX wrote:

> . . . .
>
> Thanks for reading, and thanks for any info to help me see what it is I'm
> missing on this subject of balanced line and wire antennas.
> 73!, Rob KG4GGX

>
The basic problem is the worship of 50 ohm feedpoints. Some huge number of hams much prefer putting up lame g5rv's and such for no other reasons than you can get one ready to go for a few bucks, convenience of installation, autotuners, etc., plug 'n play mindsets. Never mind the losses and limitations. Versus putting up an efficient dipole of any length fed with open wire line which can be to tuned to any HF operating freq. But which requires knowing how to tune the thing. Perish that hideous concept.
>
w3rv

3848. Re: Formula

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 14:04:29 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A338D6D.F4DEEDFB@dvol.com>
Source record: 174997

Tom wrote:

> Does anybody know of a formula or planning tool to design Helical wound HF
> antenna's ?

>
Go to http://www.btinternet.com/~g4fgq.regp/ and download "Helical3".
>

>
> Tom WD0BFO

>
w3rv

3849. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 14:14:17 UTC
From: kg4ggx@aol.com
Message-ID: <20001210091417.14835.00001408@ng-xc1.aol.com>
Source record: 174998

Hi Bill
Thanks for the reply.Suppose you want one simple inexpensive antenna with one feed line freely suspended in the clear to operate 80 thru 10 meters?I use such antennas with no problems.I have been asked by a few freinds for suggestions for an antenna that will fit these requirements.They both have big rigs with built in tuners, and manual tuners.They seem to think you can just put up some wire and run coax from the tuner to the wire and work all bands with a big signal.I may be wrong, but I don't think this will do all that.They like G5RV's, but, don't they use ladder line and a balun and require a tuner?I also recommended a parallel dipole.I built one without too much difficulty, and it is coax fed and doesn't require a tuner.It is my main antenna at this time, and I have good results breaking pileups and get good RST's in general with only 100 watts out.But they turn their noses up at this antenna as well.Is there something wrong with these antennas?
Thanks for reading.
73 Rob KG4GGX

3850. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 14:21:01 UTC
From: kg4ggx@aol.com
Message-ID: <20001210092101.14835.00001409@ng-xc1.aol.com>
Source record: 174999

Hi John
Thanks for the reply.Can one simple home built antenna work 80 thru 10 meters without needing a tunner.I have and use a parallel dipole that does this.But those thgat I recommend it to don't want to try one, nor do they want to use ladder line.But they they have room for one antenna and only want one feed line.Yes I know G5RV.It uses 31 ft of ladder line a balun and requires a tuner.
??????????
Thanks for reading.
73 Rob KG4GGX

3851. Re: Antenna needed for EME??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 15:01:27 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a339a53.64747896@news.azstarnet.com>
Source record: 175000

On Sun, 10 Dec 2000 07:54:57 GMT, Dennis Kaylor <k4oxg@earthlink.net> wrote:

>very good advise wes
>he will also need a good mast mounted preamp and also understand that EME is ONLY CW
>not voice
>its not like working any of the satelites which most of them are easy and using
>voice
>i hope randy does a bit more reseach before he starts spending large amounts of
>money on antennas

Actually, there are some working SSB on EME. I worked W5UN on two-way SSB many
years ago. But as you say, it's not easy or a routine thing by any means.

N7WS

3852. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 15:15:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A339E18.E8293D0E@IEEE.org>
Source record: 175001

KG4GGX wrote:
>Can one simple home built antenna work 80 thru 10 meters
> without needing a tuner.

I have one, it works very well, and is just about as efficient
as an antenna can be. If one varies the length of the feedline,
one doesn't need a tuner. It's on my web page. Click on
"W6RCA's No-Tuner All-HF-Band Antenna"
--
http://www.mindspring.com/~w6rca

3853. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 15:20:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A339F21.262694B7@IEEE.org>
Source record: 175002

Mark Keith wrote:
> I think for the most part new hams are best off with coax. At first
> anyway. It's hard to screw up a coax fed dipole or GP or whatever. On
> the other hand, it's easy for a newcomer to improperly tune a tuner. And
> the poor guy will end up with half the signal he would have with coax
> feed.

Please note that the coax loss in dB is the same with or without
the tuner at the transmitter end. A tuner at the transmitter
doesn't change the SWR on the coax. Tuner losses are in addition
to coax losses.
--
http://www.mindspring.com/~w6rca

3854. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 16:56:36 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910cku$67d$1@slb1.atl.mindspring.net>
Source record: 175003

Ladder line vs Coax folks:

Hear Cecil... when he says that the coax loss is in addition to the tuner loss...

that's why it's most efficient to use a tuner with ladder line, and less efficient to use a tuner with coax. Sometimes remarkably less efficient, depending upon how far you want to go with your "tuning". Heh, heh.

Real hams don't use coaxial cable, that's for CBers and Military installations, real hams use open wire feeders or ladder line!

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A339F21.262694B7@IEEE.org...
> Mark Keith wrote:
> > I think for the most part new hams are best off with coax. At first
> > anyway. It's hard to screw up a coax fed dipole or GP or whatever. On
> > the other hand, it's easy for a newcomer to improperly tune a tuner. And
> > the poor guy will end up with half the signal he would have with coax
> > feed.
>
> Please note that the coax loss in dB is the same with or without
> the tuner at the transmitter end. A tuner at the transmitter
> doesn't change the SWR on the coax. Tuner losses are in addition
> to coax losses.
> --
> http://www.mindspring.com/~w6rca

3855. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:02:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910d0q$1n0$1@nntp9.atl.mindspring.net>
Source record: 175004

Thread:

[snip]
>Never mind the losses and limitations. Versus putting up an
> efficient dipole of any length fed with open wire line which can be to
tuned to any
> HF operating freq. But which requires knowing how to tune the thing.
Perish that
> hideous concept.
> >
> w3rv
[snip]

Heh, heh, yes that's right someone might actually learn something about electromagnetics, and gain a deep understanding of the physical principles underlying radio communications to boot, if they used open wire feeders and learned how and why a tuner operates.

Perish the thought of that!

Just use your store bought cell phone if you don't want to learn about electromagnetics.

Real hams use open wire feeders and use tuners or some equivalent... why? Because it builds character...

-Peter K1PO

3856. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:03:33 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <bqd73tgreoaijmb7b4qgtptk8oofnl27mg@4ax.com>
Source record: 175005

On Sun, 10 Dec 2000 11:56:36 -0500, "Peter O. Brackett" <ab4bc@ix.netcom.com>
wrote:

>Real hams don't use coaxial cable, that's for CBers and Military
>installations, real hams use open wire feeders or ladder line!

Obvious troll. Better luck next time.

73, Bill W7TI

3857. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:04:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910d17qbl1@slb6.atl.mindspring.net>
Source record: 175006

Bill:

Well OK, that too...

Sigh again...

-Peter K1PO

"Bill Turner, W7TI" <w7ti@jps.net> wrote in message
news:rc173t4s4ini9lajuqr8f290pv9988suh2@4ax.com...
> On Sun, 10 Dec 2000 02:13:50 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com>
> wrote:
>
> >There is nothing more beautiful than a practical, feasible, well designed
LC
> >passive filter network.
> ----------
>
> That is nice, but I always thought the most beautiful thing in radio was
the
> crossed ellipses of a perfectly tuned RTTY signal, especially when it's a
new
> country coming back to your CQ.
>
> 73, Bill W7TI
>

3858. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:05:15 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <6sd73tsk3s0uq5uho2vllb0s3g9k1juvt0@4ax.com>
Source record: 175008

On Sun, 10 Dec 2000 08:58:19 -0500, Brian Kelly <kelly@dvol.com> wrote:

>Versus putting up an
>efficient dipole of any length fed with open wire line which can be to tuned to any
>HF operating freq. But which requires knowing how to tune the thing. Perish that
>hideous concept.
>>
>w3rv

Spoken like an MFJ stockholder. Or is it Tuners-R-Us?

73, Bill W7TI

3859. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:06:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910d3p$pg9$1@slb6.atl.mindspring.net>
Source record: 175007

David:

[snip]
"David J. Windisch" <davidw@copper.net> wrote in message
news:2oJY5.1504$XY.17747@newsfeed.slurp.net...
> POB wrote:
>
> BIGsnip
> >>
> Of course this only works if you are over 75 years of age. This should
> prove a boon to most hams.
>
> -Peter K1PO
> >>>
>
> JHB3K , evaD ,37
>
> .cixelsyd werbeH-esenihC dlo-raey-75 a ,em ot noob a s'tI
>
> ,reteP ,iH
>
>
[snip]

Agreed!

-Peter K1PO

3860. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:16:30 UTC
From: 2w8ji@contesting.com
Message-ID: <3a33b8f2.108022410@news.akorn.net>
Source record: 175009

All the posts about Force 12 are a good example of what I was trying to point out.

You can see exactly what the danger is in believing one person's experience. One person had a bad experience with Force 12, and others did not.

Now let's say that one person who did (real or not) have a bad experience spent hours upon hours going around badmouthing Force 12. You can easily see, if he had the mindset to be a problem, the people with good experineces would be drowned out.

That's the danger, and it is a very real danger, of believing one person's comments represent the overall experinece of many.

Now if a few dozen people were bitching and whining, it would be a different story. We could be sure there was a problem of at least some extent. I hope we all consider this before jumping to conclusions.

73 Tom

3861. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:25:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910ebtjuc1@slb0.atl.mindspring.net>
Source record: 175010

Hey Bill, trolling is all I have left in life, heh, heh.

Regards,

-Peter K1PO

"Bill Turner, W7TI" <w7ti@jps.net> wrote in message
news:bqd73tgreoaijmb7b4qgtptk8oofnl27mg@4ax.com...
> On Sun, 10 Dec 2000 11:56:36 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com>
> wrote:
>
> >Real hams don't use coaxial cable, that's for CBers and Military
> >installations, real hams use open wire feeders or ladder line!
> --
>
> Obvious troll. Better luck next time.
>
> 73, Bill W7TI
>

3862. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:37:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <910f1n$r76$1@slb0.atl.mindspring.net>
Source record: 175011

Bill:

MFJ... heh, heh.

Well, I'm not a stockholder, but Martin F. Jue is a friend of mine.

And... under a variety of trade names, he makes some damm fine tuners, not as good as my homemade ones, but good...

Sometime Bill, if you ever get a chance, trip on down to Starkville [Missippi State] MS, and visit with Martin at one of his many factories there.

Starkville is just across the AL-MS state line a few miles west of the UA [Crimson Tide] campus in Tuscaloosa, AL. Starkville is the home of Mississippi State University, which has a very neat Engineering school.

The two biggest industries in Starkville are: 1.) Missippi State University (MSU), and 2) Martin's small manufacturing empire consisting of -MFJ, Ameritron, Vectronics, Mirage, HyGain, etc...

If you call or write before your visit, Martin will make a big cheer on you, and you'll get some insight on what it takes to break even and make a little money and stay in business selling neat stuff to hams. Hams are notorious bargain hunters...

-Peter K1PO

"Bill Turner, W7TI" <w7ti@jps.net> wrote in message news:6sd73tsk3s0uq5uho2vllb0s3g9k1juvt0@4ax.com...
> On Sun, 10 Dec 2000 08:58:19 -0500, Brian Kelly <kelly@dvol.com> wrote:
>
> >Versus putting up an
> >efficient dipole of any length fed with open wire line which can be to tuned to any
> >HF operating freq. But which requires knowing how to tune the thing. Perish that
> >hideous concept.
> >>
> >w3rv
> _____
>
> Spoken like an MFJ stockholder. Or is it Tuners-R-Us?
>
> 73, Bill W7TI
>

3863. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 17:55:37 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A33C399.FD01F331@dvol.com>
Source record: 175012

"Bill Turner, W7TI" wrote:

> Spoken like an MFJ stockholder. Or is it Tuners-R-Us?

>
Spoken by an old fart who knew how to cobble together tuners and snag new ones any band any freq with any hunk of end or centerfed wire long before MFJ hit the scene. Lost "art".
>

>
>
> 73, Bill W7TI

>
w3rv

3864. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 18:18:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A33C912.68013E8C@dvol.com>
Source record: 175013

"Peter O. Brackett" wrote:

>
> Heh, heh, yes that's right someone might actually learn something about
> electromagnetics, and gain a deep understanding of the physical principles
> underlying radio communications to boot, if they used open wire feeders and
> learned how and why a tuner operates.
>
> Perish the thought of that!
>
> Just use your store bought cell phone if you don't want to learn about
> electromagnetics.
>
> Real hams use open wire feeders and use tuners or some equivalent... why?
> Because it builds character...

>
Doan give a rat's patooie abt character, do give a rat's patooie abt being able
to get a a 1:1 swr anywhere any time given some wire in the sky, a decent
junquebox and my trusty little 1960 Lafayette swr bridge. Albeit recently aided
by a 259B.
>
So anyway it was the last weekend of June past and the goobers had tossed up a
couple g5rv's for the neighborhood Field Day exercise and plugged the PL259s
into the butt ends of their radios. SWRs were sky high and they spent the rest
of the weekend scratching their heads and trying to work somebody, anybody.
>

> -Peter K1PO

>
w3rv

3865. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 18:27:35 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <omi73tcl04aeu0gfu5cun5vbih9kt0peri@4ax.com>
Source record: 175014

Well said Tom. And good advice.

Dick - W6CCD

On Sun, 10 Dec 2000 17:16:30 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>All the posts about Force 12 are a good example of what I was trying
>to point out.
>
>You can see exactly what the danger is in believing one person's
>experience. One person had a bad experience with Force 12, and others
>did not.
>
>Now let's say that one person who did (real or not) have a bad
>experience spent hours upon hours going around badmouthing Force 12.
>You can easily see, if he had the mindset to be a problem, the people
>with good experineces would be drowned out.
>
>That's the danger, and it is a very real danger, of believing one
>person's comments represent the overall experinece of many.
>
>Now if a few dozen people were bitching and whining, it would be a
>different story. We could be sure there was a problem of at least some
>extent. I hope we all consider this before jumping to conclusions.
>
>73 Tom

3866. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 18:45:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A33CF4D.8C990040@dvol.com>
Source record: 175015

Jim Weir wrote:

>
> Nowhere is it stated that the mechanic or repairman must be the one that does
> the actual nuts and bolts of the installation. I can hire a high school kid to
> do the installation, or for that matter the major installation if I'm willing to
> put my A (or IA) on the line for the inspection of the work.
>
> Jim

>
Here's one for ya: I have a nephew who is at Embry-Riddle, he originally enrolled in their BS in something-or-another four-year "Avionics Tech" program which included acquiring an A&P ticket. Is there an avionics "endorsement" for an A&P or what?? I noticed that the program was a lot more focused on the power systems than it was on the goodies in the panel and the antennas.
>
w3rv

3867. RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 18:46:02 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <910ivm$1260$1@news.gate.net>
Source record: 175017

Ok guys, I need some advice (please)....regarding my station grounds.

Here's my setup right now: The base of my tower is located directly outside my station (within three feet). I've got eight 8' ground rods extending out into the yard from the legs of the tower using #2 bare copper wire. I have a large copper bulkhead attached to the side of the house (also just outside the shack) where each coax cable and rotor cable attaches to I.C.E. lightning protection devices and then the cables run into the shack. The bulkhead (with big insulators on the wall) is about a foot above the ground. There's also a 2' piece of copper strap used to bond the tower base with the "single point" bulkhead. And, there are three additional rods connected to the bulkhead spreading out 12' in each direction underneath it. All of this is for a bit of lightning protection here in south Florida.

From the back of my desk all of my station equipment is attached to a 1 1/2" copper strap running directly outside to the same bulkhead for my "RF ground" connection.

Is this the correct way to attach my RF ground? Should I be running directly to that bulkhead or run it to a couple of independent ground rods? If I should be running it to separate ground rods, they would have to be located within a foot or less of the existing "lightning" rods because of the proximity of the tower. So the question is, do I leave the RF ground strap connected to the bulkhead or run it straight into the ground with a couple of rods not directly connected to the bulkhead? I want the best RF ground connection I can get.

Thanks,
David, K4ZZR

3868. Re: joe carr

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 18:51:21 UTC
From: k1bqt@aol.com
Message-ID: <20001210135121.21469.00003625@ng-fd1.aol.com>
Source record: 175016

Joe and Paul are not the same guy, but both have written about antennas in various ham journals. Joe is a very serious and well-known professional writer with a huge number of publications to his credit. If what you say is true, then amateur radio has lost yet another of its most famous advocates and journalists.

Rick K1BQT

3869. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 19:29:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A33D97D.E5E83072@haertig.com>
Source record: 175018

Pardon my interlineation.

Bill Aycock wrote:
>
> I know that Gray is a true believer, but certain parts of this post need
> comment. Note that my comments do NOT have technical content, but
> concern the blind belief, only. Comments are inside the original.

I am not quite sure exactly what you imagine that I truly believe.
Would you care to elaborate?

>
> Gray Frierson Haertig wrote:
>
> > I think that you are right that it would be nigh impossible to
> > independently measure the operating impedance of the two elements(?) of
> > the antenna at 450 MHz. However, absent any information as to the
> > coupling system or how it is designed, I have no idea whether being able
> > to do this is important or not.
>
> It's not important. Why go to scaling when there are claimed to be full
> sized units operating. Offers to measure these have been refused,
> according to much that I have read.

You may have missed my posts earlier in this thread, but independent
tests are currently underway (or will be shortly) of a test antenna in
GB. It is what you characterize as a "full size" antenna - that is, it
is designed for operation at MW.

As I said previously, if the desire is to determine whether the CFA
operates in some radically different way than conventional antennas (and
such is, I believe, the inventors' claim) then tests at 450 MHz might be
much easier to carry out and more definitive, both because of the size
of the test antennas and the possibility of constructing an antenna test
range that is actually reasonably accurate. Note that these tests would
be of "full sized" antennas designed for operation at 450 MHz.

One of the problems of testing antennas at lower frequencies is the
inability to create a volume on the test range in which the amplitude
and phase of the incident test signal are well characterized, that is
large enough to rotate the antenna in around all three axes. Antenna
tests below mid VHF are really tests of the antenna and the environment
together. At sufficiently low frequencies, mid MW and below, the
wavelength becomes long enough that most terrain features and most
things sitting on the earth are a small enough fraction of a wavelength
that they have little effect, however, ground parameters still have a

strong effect. In order to interpret the results one needs a
sufficiently large body of measured data on a variety of other antennas
and ground conditions to be able to make sense of the data collected for
a new antenna. Fortunately this exists for standard vertical monopoles.

At MW and lower frequencies it is virtually impossible to make
meaningful measurements of the elevation pattern of a vertical monopole.
The elevation pattern is particularly important in MW antenna design
because it determines the skywave performance of the antenna. Current
practice for conventional antennas is to calculate the elevation pattern
from the current distribution in the radiator. The current distribution
is either measured directly or determined theoretically using MOM
techniques or sinusoidal approximations. Because the CFA claims
radically different operation, it is not clear that the conventional
techniques for determining the elevation pattern are applicable.

Tests at HF are particularly troublesome because antenna performance is
acutely sensitive to ground parameters at these frequencies, and god and
man have conspired to make almost everything on earth just the right
size to have an appreciable effect on the antenna and on propagation.

>
> >
> > On some level it doesn't matter, because, if measurements show the CFA
> > (feed system, matching network, warts and all) has significantly more
> > gain than a short fat monopole over a good ground (and equivalent or
> > better bandwidth), then the CFA folks are really on to something big,
> > whatever it is.
>
> Gain over a 'Fat monopole over good ground' is not the claim. The claim
> is that the CFA can replace a conventional vertical with comparable
> results in a smaller envelope.This claim has never been demonstrated by
> an independant measurement, at least that I have seen reported.

You are correct. As I said in a previous post, if the measurements of
the test antenna that are currently underway reveal that the CFA is not
anywhere near as efficient as a standard vertical monopole over a good
ground, then the next logical question is how it compares to a standard
short fat vertical monopole of similar dimension. While this may not be
of any interest to broadcasters, there quite well may be users out there
that could use a more efficient electrically short antenna - hams in
restricted locations, perhaps. If the CFA would offer them more options
for getting their signal out, then this is a good thing.

>
> At that point I don't think there will be any shortage
> > of folks who are spectacularly brighter than I, who will be devising
> > measurements and postulating theories for the rest to knock down.
> >
> > For the time being, I am content to bide my time awaiting the results of
> > the H&D/dTL&R joint venture measurements. I'll reserve any speculation
> > on future tests till after the current tests are public.

> >
> > Gray
> >
> >
> I remain willing to accept this if reports from reputable experts
> substantiate even a part of the claims. There are units that are claimed
> to be operational, but have not been evaluated in believable ways. It
> seems SO simple to me. Why has it not been done?

I, too, await more data.

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3870. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 19:43:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A33DCDC.7121D369@IEEE.org>
Source record: 174920

Brian Kelly wrote:
> So anyway it was the last weekend of June past and the goobers had tossed up a
> couple g5rv's for the neighborhood Field Day exercise and plugged the PL259s
> into the butt ends of their radios. SWRs were sky high and they spent the rest
> of the weekend scratching their heads and trying to work somebody, anybody.

The SWRs were not "sky high", just too high for a fixed-tuned solid-state
transceiver. If they had been using SB-101s, they would have been in good
shape.
--
http://www.mindspring.com/~w6rca

3871. New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 19:48:12 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <06RY5.9578$U4.934179@newsread1.prod.itd.earthlink.net>
Source record: 174919

hello all:
I just came up with a new antenna. The CT Flyer(patent pending).
I was reading some posts the other day and saw one about a bowtie antenna for 10 meters to work the contest over the weekend. At the same time I just happened to glance over at the Christmas tree in the family room and darn if it didn't look a lot like half of a bowtie antenna. I figured if I could find a way to get it to load up and use the HO train tracks around the tree for a counterpoise I might just have something. Well, I can't divulge all the particulars but I got it to work on 10 meters and WOW what a signal it puts out. This is proprietary information so I can't spill it all on this forum but I did get into the contest with it and boy did I work a lot of stations. I can't quite figure out why the were all around the north pole and in that general direction. I'll have to do a little more research as it seems to be somewhat directional.
I just wanted to pass this on as I see it as a new breakthrough in antenna technology.
73's and Happy Holidays
Larry N0SA

PS: For some unknown reason the signal quality goes up if you have a red nosed reindeer close by.

3872. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:15:07 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <9to73t0pvfojnsbaki4tu6ms1ddqqj3s88@4ax.com>
Source record: 174921

Brian Kelly <kelly@dvol.com>
shared these priceless pearls of wisdom:

->>
- Is there an avionics "endorsement" for an A&P or what?? I
->noticed that the program was a lot more focused on the power systems than it
was on
->the goodies in the panel and the antennas.

No, the only "endorsement"for the A&P is the Inspection Authorization, which can only be added after a number of years doing maintenance after getting the A&P. (IA is the equivalent of the FAA doing the inspection, the IA signs on the behalf of the FAA.)

So far as I am concerned, there is no decent school in this country turning out avionics technicians. Most of them turn out A&P who were taught how to spell avionics, but that's about it.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3873. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:16:22 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <b3p73t8075u37rfibetl4ie5hpq78h1ghm@4ax.com>
Source record: 174922

"Larry Naumann" <n0sa@earthlink.net>
shared these priceless pearls of wisdom:

I figured if I could
->find a way to get it to load up and use the HO train tracks around the tree
->for a counterpoise I might just have something.

Prior art. The train tracks were actually parallel wire feedline.

Jim {;-)
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3874. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:30:57 UTC
From: ZsylvanDB+noZs_0011@Zhotmail.Zcom.invalid
Message-ID: <slrn937hph.3b.ZsylvanDB+noZs_0011@p100.dbutler.org>
Source record: 174923

On Fri, 08 Dec 2000 15:33:55 GMT, ehsjr@bellatlantic.net <ehsjr@bellatlantic.net> wrote:
>Sylvan Butler wrote:
>
>> If you had been following along, you should have no trouble
>> identifying the problem.
>
>Now THAT's condescending!

EXACTLY!!!! That was my entire point, just like the original:

>> On Tue, 5 Dec 2000 12:21:38 -0500, Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>> >[If you worked all of these problems along with the text, you should have no
>> >trouble with the phaseï¿½angle questions on the Advanced class exam. Just

sdb

--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb1 and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

3875. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:37:58 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A33E8E6.B6F164C6@earthlink.net>
Source record: 174924

Jim Weir wrote:

> So far as I am concerned, there is no decent school in this country turning out
> avionics technicians. Most of them turn out A&P who were taught how to spell
> avionics, but that's about it.

Wow! I was in avionics about 15 years and taught in the Avionics school at Fort Gordon for almost four years. I figured we did a pretty good job, (especially given the VN war ramp-up). I can tell you that NO WAY would I have considered even our best Avionics guys fit as an A&P. For THAT, we had airframe and powerplant folks.

Cortland
(SFC, USA, Retired -- and now EMC engineer)

3876. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:38:43 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A33E9D3.6090307@hiwaay.net>
Source record: 174925

More interlineation, and some snips

Gray Frierson Haertig wrote:

> Pardon my interlineation.
>
>
> Bill Aycock wrote:
>
>> I know that Gray is a true believer, but certain parts of this post need
>> comment. Note that my comments do NOT have technical content, but
>> concern the blind belief, only. Comments are inside the original.
>
>
> I am not quite sure exactly what you imagine that I truly believe.
> Would you care to elaborate?
>
Gray- several of your posts seem to be kin to 'faith', which is belief
without substantiation. I could be wrong.

>
>> Gray Frierson Haertig wrote:
>>
>
> You may have missed my posts earlier in this thread, but independent
> tests are currently underway (or will be shortly) of a test antenna in
> GB. It is what you characterize as a "full size" antenna - that is, it
> is designed for operation at MW.

Again- these are still 'pie in the sky' until something is published,
with method and data described.

>
>
> One of the problems of testing antennas at lower frequencies is the
> inability to create a volume on the test range in which the amplitude
> and phase of the incident test signal are well characterized, that is
> large enough to rotate the antenna in around all three axes. Antenna
> tests below mid VHF are really tests of the antenna and the environment
> together.

This is all just smoke, because the real test that will be believable,
if not definitive, is a one- to one comparison with a standard antenna.
This will settle the points of claim, even if it does not give complete
data, as a test range would. For the same reason, tests at 450 mHz are
not the ones to use- there are more questions about the scaleability of

the matching networks that cannot be answered without coming back down
to the lower Frequencies, after all.

> At MW and lower frequencies it is virtually impossible to make
> meaningful measurements of the elevation pattern of a vertical monopole.

This is NOT needed to settle the claims

>
> Tests at HF are particularly troublesome because antenna performance is
> acutely sensitive to ground parameters at these frequencies, and god and
> man have conspired to make almost everything on earth just the right
> size to have an appreciable effect on the antenna and on propagation.

Again- this is why one-to-one tests are needed. the quibbles are
short-circuited if identical set-ups are done.

>

>> Gain over a 'Fat monopole over good ground' is not the claim. The claim
>> is that the CFA can replace a conventional vertical with comparable
>> results in a smaller envelope.This claim has never been demonstrated by
>> an independant measurement, at least that I have seen reported.
>
>
>
> You are correct. As I said in a previous post, if the measurements of
> the test antenna that are currently underway reveal that the CFA is not
> anywhere near as efficient as a standard vertical monopole over a good
> ground, then the next logical question is how it compares to a standard
> short fat vertical monopole of similar dimension.

>
> I, too, await more data.
>
> Gray

es Bill-W4BSG

3877. sat.....radio.....decode

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 20:42:22 UTC
From: garry smith <garry@garry96.fsnet.co.uk>
Message-ID: <910ppkosb1@news6.svr.pol.co.uk>
Source record: 174926

anyone got plans to make a ariel for 136---138 mhz to recieve noaah and so on help would be appr

3878. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 21:09:59 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <m5s73t4ommqpqd7sco4oekes2oadv3h8a4@4ax.com>
Source record: 174927

Cortland Richmond <ka5s@earthlink.net>
shared these priceless pearls of wisdom:

->Jim Weir wrote:
->
->> So far as I am concerned, there is no decent school in this country turning
out
->> avionics technicians.

->Wow! I was in avionics about 15 years and taught in the Avionics school at
Fort
->Gordon for almost four years. I figured we did a pretty good job

AARK>>>BLIPPP>>>>BZZZT
AMENDMENT 1
...there are no decent CIVILIAN schools in this country...

Yes, I agree, all five branches of the military turn out some of the best
avionikers in the world. Unfortunately, they do need retraining to work on the
civilian crap that we call avionics.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3879. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 21:27:50 UTC
From: wrice@olypen.com
Message-ID: <3a33f3f9.15277851@news.olypen.com>
Source record: 174928

Jim Weir <jim@rst-engr.com> wrote:

>"Larry Naumann" <n0sa@earthlink.net>
>shared these priceless pearls of wisdom:
>
> I figured if I could
>->find a way to get it to load up and use the HO train tracks around the tree
>->for a counterpoise I might just have something.
>
>Prior art. The train tracks were actually parallel wire feedline.
>
>Jim {;-)
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

So it loads well, and is low loss?

But I'm curious, does the radiation patern skew if operating the train
and ragchewing all at the same time? Kinda like a rotating radar beam?
wayne rice - kd7kcr

3880. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 21:42:39 UTC
From: Gian Luca Cazzola <glcazzola@iol.it>
Message-ID: <jNSY5.75466$hk4.2820432@news.infostrada.it>
Source record: 174929

Hi Tom, I can agree with your thinking.
But I am sure that if the Mosley antenna saga was false, after the US ham has shooted so many time against Mosley on his web site, on towertalk and other antenna reflector, the Mosley firm sure would have taken law action against him and they also would have answered on ham reflectors to all these attacks.
It seem they dont reply so really this history seem true.
73
Ian IK4EWX

"Tom W8JI" <2w8ji@contesting.com> ha scritto nel messaggio
news:3a33b8f2.108022410@news.akorn.net...
> All the posts about Force 12 are a good example of what I was trying
> to point out.
>
> You can see exactly what the danger is in believing one person's
> experience. One person had a bad experience with Force 12, and others
> did not.
>
> Now let's say that one person who did (real or not) have a bad
> experience spent hours upon hours going around badmouthing Force 12.
> You can easily see, if he had the mindset to be a problem, the people
> with good experineces would be drowned out.
>
> That's the danger, and it is a very real danger, of believing one
> person's comments represent the overall experinece of many.
>
> Now if a few dozen people were bitching and whining, it would be a
> different story. We could be sure there was a problem of at least some
> extent. I hope we all consider this before jumping to conclusions.
>
> 73 Tom

3881. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 22:12:45 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <910v5s$b2k$1@iac5.navix.net>
Source record: 174930

Be advised that your idea comes dangerously close to my "Thinking about, maybe, applying for a patient". While you purpose using a tree as the radiating element, I have used them for years as antenna support and just not got around to determining the re-radiation of the tree. My lawyers inform me that your train track is prior art, I.E.. Standard ladder line. It is at this point you tread upon my yet to be determined discoveries.

Please be advised that I have instructed my consul to do a Deja news search for any other occasions of you attempting to infringe on any Idea I have ever had. Please govern yourself accordingly.

Cordially
FH
"Larry Naumann" <n0sa@earthlink.net> wrote in message
news:06RY5.9578$U4.934179@newsread1.prod.itd.earthlink.net...
> hello all:
> I just came up with a new antenna. The CT Flyer(patent pending).
> I was reading some posts the other day and saw one about a bowtie antenna
> for 10 meters to work the contest over the weekend. At the same time I
just
> happened to glance over at the Christmas tree in the family room and darn
if
> it didn't look a lot like half of a bowtie antenna. I figured if I could
> find a way to get it to load up and use the HO train tracks around the
tree
> for a counterpoise I might just have something. Well, I can't divulge all
> the particulars but I got it to work on 10 meters and WOW what a signal it
> puts out. This is proprietary information so I can't spill it all on this
> forum but I did get into the contest with it and boy did I work a lot of
> stations. I can't quite figure out why the were all around the north pole
> and in that general direction. I'll have to do a little more research as
it
> seems to be somewhat directional.
> I just wanted to pass this on as I see it as a new breakthrough in
antenna
> technology.
> 73's and Happy Holidays
> Larry N0SA
>
> PS: For some unknown reason the signal quality goes up if you have a red
> nosed reindeer close by.
>
>

3882. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 22:45:14 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A34077A.812DB37D@dvol.com>
Source record: 174931

Cecil wrote:

>
> The SWRs were not "sky high", just too high for a fixed-tuned solid-state
> transceiver. If they had been using SB-101s, they would have been in good
> shape.
> --
> http://www.mindspring.com/~w6rca

>
SWRs were in the 5-6:1 range with one of 'em, the other was simply kaput and they had no clue what was wrong with it. You're no doubt right, given a radio which actually had tuning knobs they might have been able to toss some RF beyond the trees. But then they'd have to know how to dip & load.
>
w3rv

3883. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 22:50:23 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A3408B0.9BABA6F@haertig.com>
Source record: 174933

Bill Aycock wrote:

> >
> Gray- several of your posts seem to be kin to 'faith', which is belief
> without substantiation. I could be wrong.

I am hard pressed to see how you can construe my posts as having blind belief in anything other than testing. But we don't always see our own posts as others see them. Just because I am willing to consider further measurements and investigation into the CFA doesn't mean I have any preconceived idea as to it performance. I think that you have read my unwillingness to jump on the vituperative bandwagon, trashing the CFA as snake oil, as some evidence that I am a "true believer" in the CFA.

I DO have faith in the team that is making the measurements at the test antenna in GB. I know the principle investigator personally and his reputation as a MW antenna engineer is international.

In reality, I am highly skeptical that the CFA will perform anywhere near as well as it's inventor's claim. I can't think of any antenna developments in the last 50 years, maybe 100, that have called into doubt any of the underlying electromagnetic physics. Certainly there have been many discoveries in technique in that time, but no substantial changes in electromagnetics. This is what makes me highly skeptical of the CFA.

As to whether it will perform as well or better than a short fat monopole over a good ground, I am considerably less skeptical about this possibility. Any improvement in electrically short antennas - even if only rather modest - will be welcome. But if this is the case, it would clearly be a matter of improved antenna technique rather than a shift in the underlying electromagnetics.

> >>
> >
> > You may have missed my posts earlier in this thread, but independent
> > tests are currently underway (or will be shortly) of a test antenna in
> > GB. It is what you characterize as a "full size" antenna - that is, it
> > is designed for operation at MW.
>
> Again- these are still 'pie in the sky' until something is published,
> with method and data described.

Of course, did I somehow imply something else?

> >
> > One of the problems of testing antennas at lower frequencies is the

> > inability to create a volume on the test range in which the amplitude
> > and phase of the incident test signal are well characterized, that is
> > large enough to rotate the antenna in around all three axes. Antenna
> > tests below mid VHF are really tests of the antenna and the environment
> > together.
>
> This is all just smoke, because the real test that will be believable,
> if not definitive, is a one- to one comparison with a standard antenna.
> This will settle the points of claim, even if it does not give complete
> data, as a test range would. For the same reason, tests at 450 mHz are
> not the ones to use- there are more questions about the scaleability of
> the matching networks that cannot be answered without coming back down
> to the lower Frequencies, after all.

I have to disagree with you, Bill, this is not smoke, it is the reality of antenna performance assessment. Of course, range testing IS comparison to a standard antenna.

The CFA's inventor's primary application seems to be MW and LW broadcasting. As I said in a previous post, there is a sufficiently large body of MW data about the performance of 1/4 lambda vertical monopoles over ground systems that it is not really necessary at this point for the tests being made in GB to include measurements made with a standard radiator. If the CFA performs anywhere near as well as a standard radiator, there will be plenty of clamor to determine just how well, and I am sure side-by-side (as it were) tests would be undertaken.

The tests being done by the H&D/dTL&R joint venture should answer the question of the CFA's efficiency (actually, gain) at the horizon. However, before this antenna could be applied in the US the matter of determining its elevation pattern would have to be settled.

I don't think I implied that there should only be one set of tests and that they should be at 450 MHz. However, the results of the H&D/dTL&R tests are very likely to lead to the need for further testing, regardless of their outcome. If the CFA performs anywhere near as well as a 1/4 lambda monopole over a good ground system, then the question will be why, when theory predicts the opposite. It would indeed be a very exciting thing if the inventors did somehow manage to invent an antenna that required us to reassess the underlying electromagnetics. I am not holding my breath, however. However if, for argument's sake, the H&D/dTL&R measurements show the CFA to be a good radiator approaching the performance of a 1/4 lambda monopole over a good ground, then what direction should the research into understanding this phenomenon go?

On the other hand, if the results show that the CFA is just another short fat monopole, then that begs the question, just how good a short fat monopole is it?

If the results show that the CFA is nothing but an expensive dummy load, then the question to be answered is how did they manage to dupe all those folks in Egypt. Or maybe, some how the Egyptians have invented an

AM receiver that can suck the signal out of the transmitter! (c:

I agree that measurements at 450 MHz would introduce a different set of problems than measurements at lower frequencies, but it solves some other problems. Regardless of the efficiency question, measurements at 450 MHz might be very useful for determining the elevation pattern.

I understand this is all idle speculation, but on a Sunday afternoon when it is cold outside, I find idle speculation amusing and a bit of an intellectual exercise. That is good enough for me.

>
> > At MW and lower frequencies it is virtually impossible to make
> > meaningful measurements of the elevation pattern of a vertical monopole.
>
> This is NOT needed to settle the claims

It may not be necessary to settle the claims, but it IS necessary in order to apply the antenna.

I am not particularly interested in whether the inventor's claims are settled or not. I am interested in how the antenna performs and whether or not it might be a useful addition to my arsenal of techniques to solve my client's problems. I don't view the CFA's inventors as an evil that needs to be scourged; that once we've shown what charlatans they are, we can move on to other more important work.

It seems, at long last, they are doing what they should have done years ago and have invited an independent team of competent antenna engineers to assess the CFA's performance in situ. But I don't think that these measurements, regardless of the results, will spell and end to the interest in the CFA. I hope the CFA's proponents remain open and will provide information as to the design details of the antenna so that others can go on to do further research. Whether or not the CFA is the answer to a broadcaster's dilemma, doesn't mean that the CFA might not have application elsewhere, at other frequencies and in different situations.

On the other hand the CFA may well prove out to be as good an antenna as any other randomly shaped piece of metal of approximately the same size.

>
> >
> > Tests at HF are particularly troublesome because antenna performance is
> > acutely sensitive to ground parameters at these frequencies, and god and
> > man have conspired to make almost everything on earth just the right
> > size to have an appreciable effect on the antenna and on propagation.
>
> Again- this is why one-to-one tests are needed. the quibbles are
> short-circuited if identical set-ups are done.
>

However, in practice, one-to-one tests with identical setups really aren't terribly useful at HF, especially in situations that most hams

are likely to encounter. It IS possible to infer some information about an antenna from tests like this, but whether it is possible to infer information that is useful in applying the antenna to a completely different environmental situation is very questionable.

The bad news (and the thing that is hardest for most people to accept) is that antenna measurements at HF are not terribly useful except in the broadest of senses. The good news is that it doesn't much matter. HF circuit performance is so dominated by local environmental conditions and propagation conditions that any subtlety in antenna design is mostly lost. While you will always improve your chances of a QSO by putting out the most power in the direction needed, the ether gods will always be the ones that determine whether that QSO happens or not. Just because a set of measurements taken under one set of conditions indicates a certain power radiated in a given direction, doesn't mean that Joe Ham will see that at his QTH. Most hams just don't have the bucks (or spouses) to control their environment to the extent necessary to assure reasonably similar performance.

>
> es Bill-W4BSG

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3884. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:10:59 UTC
From: 2w8ji@contesting.com
Message-ID: <3a34081a.128289934@news.akorn.net>
Source record: 174932

On Sun, 10 Dec 2000 11:29:00 -0800, Gray Frierson Haertig
<gfh@haertig.com> wrote:
>You may have missed my posts earlier in this thread, but independent
>tests are currently underway (or will be shortly) of a test antenna in
>GB. It is what you characterize as a "full size" antenna - that is, it
>is designed for operation at MW.

Gary, get serious!

The guys hawking the CFA have been milking this out for ten years or
so now.

A reasonable person would conclude any honest vendor would:

1.) Test and document performance accurately on several antennas
BEFORE filing for a patent

2.) Test and document several antennas before selling them for big
bucks.

In addition, anyone selling antennas that had normal business sense
would:

1.) Test and document a few practical installations with independently
verified data by a well know consultant or engineerring firm

2.) Allow other to see the power being run, and measure the FS in a
working installation if they wish.

I find it unfathomable that for ten years we have heard constantly the
same excuse "we'll have a FS reading soon". Hey, if the thing was on
the up-and-up they'd have done that ten years ago, before trying to
take anyone's money.

>As I said previously, if the desire is to determine whether the CFA
>operates in some radically different way than conventional antennas (and
>such is, I believe, the inventors' claim) then tests at 450 MHz might be
>much easier to carry out and more definitive, both because of the size
>of the test antennas and the possibility of constructing an antenna test
>range that is actually reasonably accurate. Note that these tests would
>be of "full sized" antennas designed for operation at 450 MHz.

You onviously don't know anything about the antenna design, or the
claims, or you never would have made the statement above.

The antenna would be all but impossible to build accurately on 450
MHz, because of the scaling problems.

Not only that, the claim is the CFA eliminates ground losses (not only at the feedpoint, but in the area surrounding the antenna for a large distance). Since ground losses are impossible to scale at 450 MHz, the suggestion of a 450 MHz test is totally unreasonable.

This is all especially foolish, since they claim they have working antennas. Yet the antennas that work work only in countries that do not require serious documemntation of performance, and there is no documentation!

>One of the problems of testing antennas at lower frequencies is the
>inability to create a volume on the test range in which the amplitude
>and phase of the incident test signal are well characterized, that is
>large enough to rotate the antenna in around all three axes. Antenna
>tests below mid VHF are really tests of the antenna and the environment
>together. At sufficiently low frequencies, mid MW and below, the
>wavelength becomes long enough that most terrain features and most
>things sitting on the earth are a small enough fraction of a wavelength
>that they have little effect, however, ground parameters still have a
>strong effect. In order to interpret the results one needs a
>sufficiently large body of measured data on a variety of other antennas
>and ground conditions to be able to make sense of the data collected for
>a new antenna. Fortunately this exists for standard vertical monopoles.

None of the above means anything in the context of this antenna and the claims made for the antenna.

>At MW and lower frequencies it is virtually impossible to make
>meaningful measurements of the elevation pattern of a vertical monopole.
> The elevation pattern is particularly important in MW antenna design
>because it determines the skywave performance of the antenna. Current
>practice for conventional antennas is to calculate the elevation pattern
>from the current distribution in the radiator. The current distribution
>is either measured directly or determined theoretically using MOM
>techniques or sinusoidal approximations. Because the CFA claims
>radically different operation, it is not clear that the conventional
>techniques for determining the elevation pattern are applicable.

That isn't true. All you need do is a simple A-B groundwave test. It is a vertical, close to ground.

>Tests at HF are particularly troublesome because antenna performance is
>acutely sensitive to ground parameters at these frequencies, and god and
>man have conspired to make almost everything on earth just the right
>size to have an appreciable effect on the antenna and on propagation.

It's easy as pie to prove the thing works. Since the theory is totally screwed up like a rubber watch, the reason there are no measurements is because they can't prove it works as claimed.

>You are correct. As I said in a previous post, if the measurements of
>the test antenna that are currently underway reveal that the CFA is not
>anywhere near as efficient as a standard vertical monopole over a good
>ground, then the next logical question is how it compares to a standard

>short fat vertical monopole of similar dimension. While this may not be
>of any interest to broadcasters, there quite well may be users out there
>that could use a more efficient electrically short antenna - hams in
>restricted locations, perhaps. If the CFA would offer them more options
>for getting their signal out, then this is a good thing.

Ten years later, after taking or trying to take people's money, they
still haven't measured one. Anyone smell something foul in all of
this???

>I, too, await more data.

I suggest you be patient. It will probably take at least ten more
years to run through all the fools who swallow tall tales about
converting induction fields directly into radiation fields, and having
a type of radiation that does not induce currents in the earth below
the antenna....let alone having a lossless loading system for a small
antenna.

The false claims are so obvious, I'm amazed people waste their time
with this stuff.

73 Tom

3885. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:16:58 UTC
From: WE0H <mikereid1@qwest.net>
Message-ID: <99UY5.2057$yC6.408554@news.uswest.net>
Source record: 174934

They usually go to the radio shop on the field if there is one, and have those people do the install. Mike> WE0H.

3886. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:18:49 UTC
From: 2w8ji@contesting.com
Message-ID: <3a340d98.129696168@news.akorn.net>
Source record: 174935

On Sun, 10 Dec 2000 21:42:39 GMT, "Gian Luca Cazzola"
<glcazzola@iol.it> wrote:

>Hi Tom, I can agree with your thinking.
>But I am sure that if the Mosley antenna saga was false, after the US ham
>has shooted so many time against Mosley on his web site, on towertalk and
>other antenna reflector, the Mosley firm sure would have taken law action
>against him and they also would have answered on ham reflectors to all these
>attacks.
>It seem they dont reply so really this history seem true.
>73
> Ian IK4EWX

Hi Ian,

The expense of fighting something like that is prohibitive, no matter
if the statements are false. Damages are often not recovered, even if
the claims are false.

In the USA, we almost have a right to say anything we want to say
without paying any penalty, it is not like other countries.

There has to be millions of dollars at stake to justify the expense of
a lawsuit, and you would have to have some hope of collecting the
money at the end.

3887. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:35:45 UTC
From: k6mhe@arrl.net
Message-ID: <3a3412bf.11599130@news.mcn.org>
Source record: 174941

On Sun, 10 Dec 2000 17:45:14 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>>
>SWRs were in the 5-6:1 range with one of 'em, the other was simply kaput and they
>had no clue what was wrong with it. You're no doubt right, given a radio which
>actually had tuning knobs they might have been able to toss some RF beyond the
>trees. But then they'd have to know how to dip & load.
>>
>w3rv
>

Heck, 5 :1 SWR on 80 meters with 100 foot run of Rg-213 is only about
an additional signal loss of 1 dB... That shouldn't keep you off the
air.

Danny, K6MHE

3888. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:40:09 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A341459.A128AFA6@oio.net>
Source record: 174936

David,
With all that, why would you even thing about seperate
grounds? Connect to the bulkhead as you would any other
ground.
'Doc

3889. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-10 23:58:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3418B5.8D05EF3F@IEEE.org>
Source record: 174938

Brian Kelly wrote:
>
> Cecil wrote:
> > The SWRs were not "sky high", ...

> SWRs were in the 5-6:1 range with one of 'em, ...

Well, I challenge you to take back your claim that the SWR was
"sky high". :-) Remember, SWR can vary from 1 to infinity and
"5-6:1" is a lot closer to 1:1 than it is to infinity. :-)
--
http://www.mindspring.com/~w6rca

3890. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:02:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3419B1.B32E2878@IEEE.org>
Source record: 174939

Fred Hambrecht wrote:
> Be advised that your idea comes dangerously close to my "Thinking about,
> maybe, applying for a patient".

Your patent is obsolete. I have perfected a superconductive
plasma stream that is lossless for any number of elements. All
you have to do is dial in your frequency, direction, and desired
beamwidth.
--
http://www.mindspring.com/~w6rca

3891. Re: HP803A VHF Impedance Bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:06:37 UTC
From: atkes@imap1.asu.edu
Message-ID: <9115qd$mq7$1@news.asu.edu>
Source record: 174937

tom_bruhns@agilent.com wrote:
: Hi Kevin...and lurkers.

: I looked up the manual, and the "Principles of Operation" section is
: just a single page. Paraphrasing and condensing: The generator input
: feeds a short loop of coax to the "unknown" port. As close as possible
: to the "unknown" port is a pair of probes, one magnetically coupled and
: one electrically coupled to the through line. Those two probes feed the
: two ends of a loop of slotted line. Each probe appears to be
: terminated, presumably to prevent reflections on the slotted line loop
: of the signal from the probe at the opposite end. There are two
: front-panel adjustments which the operator makes to get a null on the
: receiver port, those being magnitude and phase. The phase adjustment
: (really a time-difference adjustment, but calibrated to read phase
: directly at 100MHz) is just the slotted line pickoff position (which
: feeds the detector port). The magnitude adjustment changes the spacing
: of the probes from the line, presumably increasing one while decreasing
: the other, though they never 'zactly say that. At any rate, the ratio
: between the couplings is variable.

: Without thinking too carefully about it, I suspect the only two
: resistors--the ones that terminate the probes--are OK if you got a
: constant error, independent of frequency. If one of those was bad,
: you'd have reflections on the slotted line that would cause
: frequency-dependent effects, no? And in fact, there may be a mechanical
: adjustment to set the coupling ratio correctly, and that may be all you
: need to do. Comments (especially ones to make my thinking on this
: clearer) are most welcome.

: Cheers,
: Tom

Thanks Tom,

I took your advice and looked for a mechanical adjustment. While there isn't
an obvious one, I was able to loosen and reposition one of the gears in
the gear drive of the probes, and it now tracks the impedance within about
two percent. At the two ends of the range, the probe carriage is no longer
symmetric about the 50 ohm position like it was to begin with, so
my current theory is that one of the probes is somehow displaced
from the original position. However the mechanical adjustment seems to have
taken care of the problem, and the results now agree within a few percent
with my old General Radio 1601A and 1602B, and they all agree within the
same errors when measuring standards checked on modern equipment.

73 Kevin w9cf

3892. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:14:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <911665$8f4$1@slb6.atl.mindspring.net>
Source record: 174940

Tom:

Your objections will fall on deaf ears, or blind eyes...

Remember P. T. Barnum's comment at the early part of the last century,
"There's a sucker born every minute."

Well there is a difference here in the new century, instead of the above, we
now have, "there's a thousand suckers born every minute."

Anyone want to buy the Brooklyn Bridge?

I got a CFA for sale in Egypt, shipping is extra...

-Peter K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a34081a.128289934@news.akorn.net...
> On Sun, 10 Dec 2000 11:29:00 -0800, Gray Frierson Haertig
> <gfh@haertig.com> wrote:
> >You may have missed my posts earlier in this thread, but independent
> >tests are currently underway (or will be shortly) of a test antenna in
> >GB. It is what you characterize as a "full size" antenna - that is, it
> >is designed for operation at MW.
>
> Gary, get serious!
>
> The guys hawking the CFA have been milking this out for ten years or
> so now.
>
> A reasonable person would conclude any honest vendor would:
>
> 1.) Test and document performance accurately on several antennas
> BEFORE filing for a patent
>
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> bucks.
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> In addition, anyone selling antennas that had normal business sense
> would:
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> 1.) Test and document a few practical installations with independently
> verified data by a well know consultant or engineerring firm
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> 2.) Allow other to see the power being run, and measure the FS in a
> working installation if they wish.

>
> I find it unfathomable that for ten years we have heard constantly the
> same excuse "we'll have a FS reading soon". Hey, if the thing was on
> the up-and-up they'd have done that ten years ago, before trying to
> take anyone's money.
>
> >As I said previously, if the desire is to determine whether the CFA
> >operates in some radically different way than conventional antennas (and
> >such is, I believe, the inventors' claim) then tests at 450 MHz might be
> >much easier to carry out and more definitive, both because of the size
> >of the test antennas and the possibility of constructing an antenna test
> >range that is actually reasonably accurate. Note that these tests would
> >be of "full sized" antennas designed for operation at 450 MHz.
>
> You onviously don't know anything about the antenna design, or the
> claims, or you never would have made the statement above.
>
> The antenna would be all but impossible to build accurately on 450
> MHz, because of the scaling problems.
>
> Not only that, the claim is the CFA eliminates ground losses (not only
> at the feedpoint, but in the area surrounding the antenna for a large
> distance). Since ground losses are impossible to scale at 450 MHz, the
> suggestion of a 450 MHz test is totally unreasonable.
>
> This is all especially foolish, since they claim they have working
> antennas. Yet the antennas that work work only in countries that do
> not require serious documemntation of performance, and there is no
> documentation!
>
> >One of the problems of testing antennas at lower frequencies is the
> >inability to create a volume on the test range in which the amplitude
> >and phase of the incident test signal are well characterized, that is
> >large enough to rotate the antenna in around all three axes. Antenna
> >tests below mid VHF are really tests of the antenna and the environment
> >together. At sufficiently low frequencies, mid MW and below, the
> >wavelength becomes long enough that most terrain features and most
> >things sitting on the earth are a small enough fraction of a wavelength
> >that they have little effect, however, ground parameters still have a
> >strong effect. In order to interpret the results one needs a
> >sufficiently large body of measured data on a variety of other antennas
> >and ground conditions to be able to make sense of the data collected for
> >a new antenna. Fortunately this exists for standard vertical monopoles.
>
> None of the above means anything in the context of this antenna and
> the claims made for the antenna.
>
> >At MW and lower frequencies it is virtually impossible to make
> >meaningful measurements of the elevation pattern of a vertical monopole.
> > The elevation pattern is particularly important in MW antenna design

> >because it determines the skywave performance of the antenna. Current
> >practice for conventional antennas is to calculate the elevation pattern
> >from the current distribution in the radiator. The current distribution
> >is either measured directly or determined theoretically using MOM
> >techniques or sinusoidal approximations. Because the CFA claims
> >radically different operation, it is not clear that the conventional
> >techniques for determining the elevation pattern are applicable.
>
> That isn't true. All you need do is a simple A-B groundwave test. It
> is a vertical, close to ground.
>
> >Tests at HF are particularly troublesome because antenna performance is
> >acutely sensitive to ground parameters at these frequencies, and god and
> >man have conspired to make almost everything on earth just the right
> >size to have an appreciable effect on the antenna and on propagation.
>
> It's easy as pie to prove the thing works. Since the theory is totally
> screwed up like a rubber watch, the reason there are no measurements
> is because they can't prove it works as claimed.
>
> >You are correct. As I said in a previous post, if the measurements of
> >the test antenna that are currently underway reveal that the CFA is not
> >anywhere near as efficient as a standard vertical monopole over a good
> >ground, then the next logical question is how it compares to a standard
> >short fat vertical monopole of similar dimension. While this may not be
> >of any interest to broadcasters, there quite well may be users out there
> >that could use a more efficient electrically short antenna - hams in
> >restricted locations, perhaps. If the CFA would offer them more options
> >for getting their signal out, then this is a good thing.
>
> Ten years later, after taking or trying to take people's money, they
> still haven't measured one. Anyone smell something foul in all of
> this???
>
> >I, too, await more data.
>
> I suggest you be patient. It will probably take at least ten more
> years to run through all the fools who swallow tall tales about
> converting induction fields directly into radiation fields, and having
> a type of radiation that does not induce currents in the earth below
> the antenna....let alone having a lossless loading system for a small
> antenna.
>
> The false claims are so obvious, I'm amazed people waste their time
> with this stuff.
>
> 73 Tom

3893. ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:36:40 UTC
From: Mike <w4mjr@home.com>
Message-ID: <3A34218F.9C6E404@home.com>
Source record: 174942

I came across one all tangled up. I am not interested in getting it back like it should be.My question is what ratio is the large balun on it and could this be of any use for making up another antenna. Also the large resistor in the center of the antenna can it be of use other than a dunny load.

3894. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:40:53 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A342295.58926511@dvol.com>
Source record: 174943

Cecil wrote:

> Brian Kelly wrote:
> >
> > Cecil wrote:
> > > The SWRs were not "sky high", ...
>
> > SWRs were in the 5-6:1 range with one of 'em, ...
>
> Well, I challenge you to take back your claim that the SWR was
> "sky high". :-) Remember, SWR can vary from 1 to infinity and
> "5-6:1" is a lot closer to 1:1 than it is to infinity. :-)

>
Yeah, yeah, you *know* I didn't just get off the boat and land in
antennaburg, Cecil. Problem was that the barefoot radio shut itself down
when they tied the g5rv to it even though the SWR was low vs. feeding
the end of a half-wavelength wire.

> --
> http://www.mindspring.com/~w6rca

>
w3rv

3895. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:44:53 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A342385.A5F13E34@dvol.com>
Source record: 174945

Dan Richardson wrote:

>
> Heck, 5 :1 SWR on 80 meters with 100 foot run of Rg-213 is only about
> an additional signal loss of 1 dB... That shouldn't keep you off the
> air.

>
It will if the radio shuts itself down if the SWR gets much over 3:1. 'Tis a hidden
cost of convenience.
>

>
> Danny, K6MHE

>
w3rv

3896. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:46:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3423CE.2EBF47B7@IEEE.org>
Source record: 174946

Dan Richardson wrote:
> Heck, 5 :1 SWR on 80 meters with 100 foot run of Rg-213 is only about
> an additional signal loss of 1 dB... That shouldn't keep you off the
> air.

Brian's point is that it keeps you off the air if all you have is a
fixed tuned solid-state transceiver, no tuner, a G5RV, and hope. :-)
--
http://www.mindspring.com/~w6rca

3897. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 00:46:21 UTC
From: paul@p.mooney2.ntlworld.com
Message-ID: <3a342345.3489217@news.ntlworld.com>
Source record: 174944

Do you think there's any chance of heavier than air flight one day, I heard about a couple of guys who reckon they've done it - usual sort of false 'snake oil' statements.

3898. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 01:05:15 UTC
From: k6mhe@arrl.net
Message-ID: <3a352772.16898335@news.mcn.org>
Source record: 174949

On Sun, 10 Dec 2000 23:35:45 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:

>On Sun, 10 Dec 2000 17:45:14 -0500, Brian Kelly <kelly@dvol.com>
>wrote:
>
>>
>>>
>>>SWRs were in the 5-6:1 range with one of 'em, the other was simply kaput and they
>>>had no clue what was wrong with it. You're no doubt right, given a radio which
>>>actually had tuning knobs they might have been able to toss some RF beyond the
>>>trees. But then they'd have to know how to dip & load.
>>>
>>>w3rv
>>
>
>Heck, 5 :1 SWR on 80 meters with 100 foot run of Rg-213 is only about
>an additional signal loss of 1 dB... That shouldn't keep you off the
>air.
>
>Danny, K6MHE

Nuts! I screwed up.

Let me try it again. Here's the run down on the 5:1 SWR;

Band additional loss due to SWR of 5:1

80 0.45 dB

40 0.64 dB

20 0.9 dB

15 1.09 dB

10 1.25 dB

That sure doesn't look like a killer to me!

Danny K6MHE

3899. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 01:23:09 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <8ZVY5.2249$9U1.84396@news.inreach.com>
Source record: 174947

Mike:

To the best of my recollection, the balun is a 12:1 ratio.

Roger K6XQ

3900. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 01:32:15 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A342E9F.60001@hiwaay.net>
Source record: 174948

What's your point?, If you are comparing this ridiculous CFA situation to the Wrights, think again- heavier than air flight was known to be possible LONG before the event at Kitty Hawk. All the physics needed was known, and no new interpretation was applied.

Bill-W4BSG

paul@p.mooney2.ntlworld.com wrote:

> Do you think there's any chance of heavier than air flight one day, I
> heard about a couple of guys who reckon they've done it - usual sort
> of false 'snake oil' statements.

3901. Re: resonant frequency and patch antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 02:15:03 UTC
From: me <wshanks3@home.com>
Message-ID: <3A341063.90B3DBC3@home.com>
Source record: 174950

Some years ago I made a MathCad program that calculated resonant
frequency and feed point from a geometric description of the patch.

I used it to design the 2m patch antenna (with the vertical stripe)
seen at

http://w3eax.umd.edu/spre/spre.html
http://w3eax.umd.edu/spre/tech_ref.html#antennas

E-mail me and I will dig up the program.

Wayne Shanks

Dimitris Anagnostou wrote:
>
> Hello all,
> I'm new to this group, so sorry if this posting is out of subject.
> Does anyone know what is the 'resonant frequency' in a microstrip
> antenna? I have heard a lot of things, like 'the frequency where Mag(S11)
> becomes minimum', 'the frequency where 'Re(Zin) becomes maximum' and
> 'the frequency where Im(Zin) becomes zero'. None of these is the same with
> each other, especially with coaxial cable feed.
> Also, is there any specific design procedure to find the 50+j0 Ohms point
> in a patch antenna?
>
> Please reply at: danagn@avdira.cc.duth.gr
>
> Thank you very much,
> Dimitris

3902. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 02:26:30 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <911e1ngsc1@iac5.navix.net>
Source record: 174951

Great Cecil! I will be looking forward to the data from your web site. I have had a surplus transgronafacator laying around for several years now, just waiting for someone to come up with the plasma interface.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A3419B1.B32E2878@IEEE.org...
> Fred Hambrecht wrote:
> > Be advised that your idea comes dangerously close to my "Thinking about,
> > maybe, applying for a patient".
>
> Your patent is obsolete. I have perfected a superconductive
> plasma stream that is lossless for any number of elements. All
> you have to do is dial in your frequency, direction, and desired
> beamwidth.
> --
> http://www.mindspring.com/~w6rca

3903. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 02:29:19 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <911e70guq1@iac5.navix.net>
Source record: 174952

Gee! I thought your description exactly fit a G5RV. What is it I do not understand?

"Brian Kelly" <kelly@dvol.com> wrote in message news:3A338BFA.85243DC3@dvol.com...
> The basic problem is the worship of 50 ohm feedpoints. Some huge number of hams
> much prefer putting up lame g5rv's and such for no other reasons than you can get
> one ready to go for a few bucks, convenience of installation, autotuners, etc.,
> plug 'n play mindsets. Never mind the losses and limitations. Versus putting up an
> efficient dipole of any length fed with open wire line which can be to tuned to any
> HF operating freq. But which requires knowing how to tune the thing. Perish that
> hideous concept.
> >
> w3rv
>
>
>

3904. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 02:32:41 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a343d49_2@news3.prserv.net>
Source record: 174953

Do a Deja search, this was thoroughly discussed on this ng a few months ago.
And see W4RNL's discussions of the T2FD, www.cebik.com/ He says 900 ohms,
or 18:1 for 50 ohm coax.

--
Crazy George
Roger Leone <arleone@inreach.com> wrote in message
news:8ZVY5.2249$9U1.84396@news.inreach.com...
> Mike:
>
> To the best of my recollection, the balun is a 12:1 ratio.
>
> Roger K6XQ
>
>

3905. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:05:10 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A34445E.26C0619@att.net>
Source record: 174954

Peter, did you also take Ernie Guillemin's network design and synthesis
courses at MIT? Your comments surely bespeak Ernie's influence which has
remained with me for many, many years.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

"Peter O. Brackett" wrote:
>
> There is nothing more beautiful than a practical, feasible, well designed LC
> passive filter network.
>
> Art and Science blended perfectly.
>
> Sigh...

3906. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:06:19 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3444AB.779D@wt.net>
Source record: 174955

Cecil wrote:
>
> Mark Keith wrote:
> > I think for the most part new hams are best off with coax. At first
> > anyway. It's hard to screw up a coax fed dipole or GP or whatever. On
> > the other hand, it's easy for a newcomer to improperly tune a tuner. And
> > the poor guy will end up with half the signal he would have with coax
> > feed.
>
> Please note that the coax loss in dB is the same with or without
> the tuner at the transmitter end. A tuner at the transmitter
> doesn't change the SWR on the coax. Tuner losses are in addition
> to coax losses.
> --
> http://www.mindspring.com/~w6rca

Of course. But I don't use a tuner with coax. Unless trying to match
something weird. Normally no need for a tuner with coax. Thats another
plus to coax BTW..g MK
--
http://web.wt.net/~nm5k

3907. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:12:44 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A3446C0.86C8DCBB@bellatlantic.net>
Source record: 174956

Doesn't seem that way to me.

In the first case - the quoted material from the ARRL text -
it is a checkpoint, similar to those found in many electronic kits.
It tells you what you should be capable of by a particular point
in the course, if you did the exercises. Many self-study courses
contain checkpoints. Some have tests at the end of each
section, which tell you to go back and review the section if you
got any questions wrong. And some have exercise "flows"
which allow you to skip some or all exercises. It is very
helpful to have checkpoints at the end of the sections that
tell you what you should have learned by doing the exercises.
(They should also tell you what you will learn by doing the exercises
at the beginning of the section.)

In the other case - what you posted - was intended to be, and was,
condescending, as you have stated. Context makes a big difference!

Sylvan Butler wrote:

> On Fri, 08 Dec 2000 15:33:55 GMT, ehsjr@bellatlantic.net <ehsjr@bellatlantic.net> wrote:
> >Sylvan Butler wrote:
> >
> >> If you had been following along, you should have no trouble
> >> identifying the problem.
> >
> >Now THAT's condescending!
>
> EXACTLY!!!! That was my entire point, just like the original:
>
> >> On Tue, 5 Dec 2000 12:21:38 -0500, Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
> >> >[If you worked all of these problems along with the text, you should have no
> >> >trouble with the phaseï¿½angle questions on the Advanced class exam. Just
>
> sdb
>
> --
> More guns means less crime. ISBN:0-226-49363-6
> ***
> Watch out for munged e-mail address.
> User should be sylvandb1 and host is at bigfoot.com
> Do NOT send me unsolicited commercial e-mail (UCE)!

3908. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:17:10 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A344736.8060204@hiwaay.net>
Source record: 174957

Any discussion of characterizing the CFA, at any scale, at any frequency, and to any degree of thoroughness is premature, if there has been no proof of ANY of the claims of the originators. Once some of the claims are proven to be even approximately true, then the number of people willing to help characterize it will be legion. Once a clear, independant statement of evidence is out there, you will have to beat the 'Me-too'ers off with a stick.

Bill-W4BSG

3909. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:30:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <911hpj$2gd$1@nntp9.atl.mindspring.net>
Source record: 174958

George:

[snip]
"George, W5YR" <w5yr@att.net> wrote in message
news:3A34445E.26C0619@att.net...
> Peter, did you also take Ernie Guillemin's network design and synthesis
> courses at MIT? Your comments surely bespeak Ernie's influence which has
> remained with me for many, many years.
[snip]

Nope, never attended MIT and never met Ernie, however... as you can probably surmise, I do have a couple of his textbooks and numerous of his papers in my collections.

My all time favorite, sits on my bookshelf not three feet from me, as I sit here typing this...

Synthesis of Passive Networks, Ernst A. Guillemin, John Wiley and Sons, New York, 1957, 741 pages, LC Call Number TK3226.G84, LC Cat Number 57-8886.

Guillemin, now there was an Engineer, they don't make em like that any more.

There are a few texts that go beyond Ernie's classic, but none approach his for style, lucidity, and elementary approach. A bunch of Ernie's graduate students also wrote some great textbooks after they left Ernie's tutiledge.

George, what era were you at MIT?

Happy Holidays,

-Peter K1PO

> "Peter O. Brackett" wrote:
> >
> > There is nothing more beautiful than a practical, feasible, well
designed LC
> > passive filter network.
> >
> > Art and Science blended perfectly.
> >
> > Sigh...

3910. Re: sat.....radio.....decode

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:45:45 UTC
From: Bigdad <Bigdad@rworld.com>
Message-ID: <J5YY5.589$1%2.33561@sjc-read.news.verio.net>
Source record: 174959

"garry smith" <garry@garry96.fsnet.co.uk> wrote in message
news:910ppkosb1@news6.svr.pol.co.uk...
> anyone got plans to make a ariel for 136---138 mhz to recieve noaah and so
> on help would be appr
>
I built the antenna in the ARRL Weather Satellite Handbook and had excellent
results with it. Grab a copy if yer serious about NOAA sats its worth its
weight in gold.

3911. Re: Diamond CP6

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 03:47:33 UTC
From: rbutler322@aol.com
Message-ID: <20001210224733.13755.00001583@ng-mk1.aol.com>
Source record: 174960

Adam--

I've been using one for about 2 months with a Yaesu 847 & FC 20 tuner.

Its a fantastic antenna on 10, 15, 17, & 20. I've made contacts from Bangkok, Thailand to the Kingdom of Jordan and all over Europe and many more places. The other bands are probably just as good, I just don't use them.

Bob Butler W4RBB

3912. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 04:42:05 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A345BA9.35DBF4C3@bellatlantic.net>
Source record: 174961

Mark Keith wrote:

> Also to my way of thinking the NEC is not totally flawless. Take for
> instance this one:
>
> > Per 820-20 (a) Exception - you are not required to use an antenna discharge
> > unit if you use coax and if it is properly (per NEC) grounded at the receiver.
>
> I think that ones kinda risky.

Two points. First - Yes it is risky to your receiver if you do not disconnect the lead in. But that does not support the idea that the NEC is flawed. The NEC is a minimum. The fact is that it does not require you to disconnect. That would be an unenforceable provision, and would itself violate the purpose of the NEC (90-1 (a), which is practical safeguarding of people and property - NOT equipment - from possible dangers of using electricity. The requirement to disconnect, if it were in the NEC, would not be practical, as a matter of law. It is impossible for an electrical inspector to verify that all equipment is disconnected when a thunderstorm occurs. It would also violate 90-1 (b) which says that the code will contain provisionsconsidered necessary for safety. Disconnecting the coax from the receiver in the example you assume from what I wrote (ie the receiver is grounded and the coax is connected to it, thereby getting its ground) would violate 820 and 90-1 (b). (The flaw here is assuming that "at the receiver" means *via* the receiver.) Finally, it would violate 90-1 (c) which states that the code is not a design specification or an instruction manual for untrained people. It cannot instruct people to disconnect their coax when not in use without violating 90-1 (c)

Second - The NEC has the force of law, once it is adopted by the town, county, municipality - whichever governmental agency has jurisdiction. The exception goes to legality - it is not illegal to install coaxial lead in from your antenna without using a discharge unit. It also goes to the technical side: the coax will be at least as effective as the minimum size wire that the NEC specifies in conducting current to ground.

The key to this discussion is to treat the NEC as what it is: MINIMUM requirements for safety. If you do less than the minimum, you are exposed to possible danger - and you violate the law. If you do the minimum, you are less exposed to possible danger, and comply with the law. To illustrate, lets take your installation. A catastrophic short circuit occurs when a tree limb crashes through your wall and smashes your wiring so that a 110 volt cable contacts your "grounded" coax. Your coax will conduct current to "ground" via the bulkhead and thence to your antenna ground rod. How much potential difference will exist between

the coax and the house ground? Will the circuit breaker trip? The
answer is, you don't know. However, if the antenna ground rod is
bonded to the house grounding electrode system via a #6 bonding
jumper, the breaker will trip - whether the 110 volts got onto the shield
via the catastrophic tree limb caused failure or via a short circuit
within the equipment. And, by the way, there have been plenty of
cases where coax was "hot" with 60 Hz ac with respect to house
ground in television installations. If the receiver was properly grounded,
that could not happen. But if the receiver was not properly grounded as
mentiopned in 820, all the antenna discharge units in the world would do
nothing to provide the operator with safety. Those units will ignore 110 V ac.
So - your installation could possibly have superb lightning protection,
and NO protection against a short circuit that places 110 V ac
on your antenna lead in.

3913. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 04:51:36 UTC
From: k6mhe@arrl.net
Message-ID: <3a345d24.30646439@news.mcn.org>
Source record: 174964

On Sun, 10 Dec 2000 19:44:53 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>
>Dan Richardson wrote:
>
>>
>> Heck, 5 :1 SWR on 80 meters with 100 foot run of Rg-213 is only about
>> an additional signal loss of 1 dB... That shouldn't keep you off the
>> air.
>
>>
>It will if the radio shuts itself down if the SWR gets much over 3:1. 'Tis a hidden
>cost of convenience.
>>
>
>>
>> Danny, K6MHE
>
>>
>w3rv
>
Then, I suggest, that you would be better to assign the problem to the
radio rather than the antenna system.

Danny

3914. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 05:20:00 UTC
From: David <k4zzrNONSPAM@gate.net>
Message-ID: <911o4baeg1@news.gate.net>
Source record: 174963

I read somewhere on the newsgroups that one shouldn't connect the RF ground wire with the lightning ground and was wondering if that was true. Apparently it's not?

>
> David,
> With all that, why would you even thing about seperate
> grounds? Connect to the bulkhead as you would any other
> ground.
> 'Doc

3915. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 05:25:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A346532.240F@wt.net>
Source record: 174962

n5nug wrote:
>
> I guess I have answered my own question. There is nn ground system
> according to the information located at
> http://www.hbci.com/~wenonah/cfa/
>
> 73, Ed - N5NUG

Hummm, I just pulled up that site as I hadn't looked at a cfa yet. I
read:
>Imagine an AM antenna oneï¿½fiftieth of a wavelength long, that needs no
>radial ground system, occupies a small parcel of land, produces little or no
>RFI (Radio Frequency Interference), has great bandwidth and performs
>better than a fullï¿½sized vertical radiator.

>Does this sound like a fantasy?

Sure does to me. If this magic radiator really worked as claimed, it
sure wouldn't be any big secret. Everyone and their sister would be
trying one on 160m. I haven't heard a single one tried yet. Maybe I need
to tune into the "magic" part of the band. I must be missing them all
with me constantly hanging out in the cw no mans land down at the
bottom. It's the last statement they make which really has me rolling.
An antenna 1/50 wl with no radial system is gonna outdo a 1/4 wl with
120 radials on MW. " I assume any self respecting BC would run 120
radials with a 1/4 whip"... Okeee dokeee...Maybe I should start
believing in the tooth fairy. MK
--
http://web.wt.net/~nm5k

3916. 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:00:08 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <2vq83t8624ebidjr0jf890rr1b1mf24r19@4ax.com>
Source record: 174871

I read in this news group a while back on the best height for a six meter antenna, if I recall right someone was saying that one wavelength above ground,,,,, I think,,,,,,I understand it will work better the higher it is,,,,,,,,,,,,,,,,,,,,,,, but what I wanted to know ,,,,, what was the least elevation above ground that would work really well. Appreciate your refreshing my memory. thanks. Chuck Lorentson "73"

3917. "V" dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:06:53 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A345FBF.F412C38D@home.com>
Source record: 174965

Greetings,

Does anyone have any info or advice about placing a dipole in a "V"
configuration, that is, with the ends higher than the center, the
reverse of an inverted "V". How would the radiation pattern be affected
compared to a "srraight" dipole? Better, worse or no real difference?
Thanks in advance.

Rich A.

3918. Re: Balloon Supported 160M Vertical Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:32:12 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A3474F2.A1D7AF6C@home.com>
Source record: 174966

Birken Vogt wrote:
>
> I thought I remembered reading about a 160M antenna supported by a
> balloon on the one end in QST. It was a full length vertical or
> something like that. It was used to work some contest and it worked so
> well that some people were accusing the owner of using illegal power. I
> can't find it in the ARRL index search and was wondering if anybody knew
> where I had read that.
>
> Birken KE6DLT/AG

The article you seek was in the May 1997 issue of QST.

3919. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:32:53 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A347515.3583@wt.net>
Source record: 174967

ehsjr@bellatlantic.net wrote:

> So - your installation could possibly have superb lightning protection,
> and NO protection against a short circuit that places 110 V ac
> on your antenna lead in.

Sure, but not in my case. I have no wiring that could be crashed down on my coax. Also my power electrical ground is still at a close ground potential with the rest. It's a dead short with any ohm meter from the box to any point in my ground system. It'll blow the breaker if that happened in my case. But again that proves my point, there is no way anyone can really judge what the other person is dealing with unless they see it all. And nowhere have I suggested anyone should ignore NEC specs. I've only stated what I do, and my reasons behind it. It works here, but I'm not suggesting he should do the same. With his setup, quite the opposite. In my first posts I had no concerns about his rig, I just wanted to steer him away from burning his house down. And thats mainly the concern of the NEC, so obviously he would want to look into that. Where I think the NEC falls short is the protection of a radio that is left hooked up in such a case. But, I don't do this, so I don't have to worry about it. I don't feel comfortable in a room with a connection to lightning, gas tube protected or not. At this point I still don't even know if he plans to stay hooked up or not during storms. That would have a big bearing on what he needs to do. If he's considering arrestors, I'll assume he will be, and he would sure want all at the same potential in the shack. Every single wire leading in would need to be suppressed to a common bulkhead to be really safe. But again in my case, I don't have to worry about any of that. I'm totally unhooked from the outside world. The only way I could further improve my setup is to add power line protection to the breaker boxes, but I'm too cheap. Also I really don't think I need them. Or at least with the past track record, I'm willing to take the risk of a big power line hit. That would nail me ham shack or not. But it's never happened yet in many years. The worst hit I've had power line led was a hit to a streetlight pole across the street. I got a spike, but was only enough to blow the fuse in my drake r4. Turned it black. But replaced fuse, and was back at it. No damage at all. Thats only happened once and was over ten years ago. So seems unless the hit was ultra close, most of the nasty stuff is damped down by the time it gets here. The pole strike was pretty close. Myself, I find lightning fascinating stuff. And it scares the crap out of me, when it's popping left and right around here, so I sure don't want to make mistakes. When it actually hits you direct , it's really pretty quiet, and ultra quick. Sounds like a lightbulb being thrown on the ground, with the overhead boom a split second later. Also the connection of the strike leader to streamer is above the mast about 150

ft or so I think. So the nasty bright stuff is overhead a bit assuming the mast is acting as a lightning rod. MK
--
http://web.wt.net/~nm5k

3920. Re: "V" dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:38:10 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A347652.46CC@wt.net>
Source record: 174968

rich a wrote:
>
> Greetings,
>
> Does anyone have any info or advice about placing a dipole in a "V"
> configuration, that is, with the ends higher than the center, the
> reverse of an inverted "V". How would the radiation pattern be affected
> compared to a "srraight" dipole? Better, worse or no real difference?
> Thanks in advance.
>
> Rich A.

A friend of mine calls that a perverted vee. Yep, they work ok. But I'd
prefer to get the center higher than the ends. The pattern about the
same basically, but I'd assume more ground losses with the max current
portions lower to the ground. Also I prefer a flat top over an inv vee
most of the time. Less ground losses if it's low, and more in the clear.
MK
--
http://web.wt.net/~nm5k

3921. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:47:27 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A34A2B0.129FA503@att.com>
Source record: 174869

Mark Keith wrote:
> ehsjr@bellatlantic.net wrote:
> > So - your installation could possibly have superb lightning protection,
> > and NO protection against a short circuit that places 110 V ac
> > on your antenna lead in.
>
> Sure, but not in my case. I have no wiring that could be crashed down on

<SNIP>
> At this point I
> still don't even know if he plans to stay hooked up or not during
> storms. That would have a big bearing on what he needs to do. If he's
> considering arrestors, I'll assume he will be, and he would sure want
> all at the same potential in the shack. Every single wire leading in
> would need to be suppressed to a common bulkhead to be really safe.
<SNIP>

I don't intend to require the removal of coax during storms. This
would mean I would have to connect/disconnect the scanner every time
I use it. I know this requirement would fall to human errer and lazyness.

FTR, I intend to ground my antenna mast via a #6 copper from the mast
coax/coax grounding block to a rod located directly beneath it. I also
intend to connect the two grounding rods (new/old) via #6 copper.
I'm still debating the spark arrestors. If I decide to use a spark
arrestor, I was planning -one- for the signal feed only.

Thanks again to both of you. The conversation is intriguing.

3922. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 06:51:56 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A34798C.76B3@wt.net>
Source record: 174870

David wrote:

> Is this the correct way to attach my RF ground? Should I be running
> directly to that bulkhead or run it to a couple of independent ground rods?
> If I should be running it to separate ground rods, they would have to be
> located within a foot or less of the existing "lightning" rods because of
> the proximity of the tower. So the question is, do I leave the RF ground
> strap connected to the bulkhead or run it straight into the ground with a
> couple of rods not directly connected to the bulkhead? I want the best RF
> ground connection I can get.
>
> Thanks,
> David, K4ZZR

According to most I've read, you would want all ground wires going to a single point on the bulkhead. You want all at the same potential. So according to some, even the bus is a bad idea. You would preferably want a seperate ground wire from each piece of gear to the common bulkhead. The bus is a daisy chain, and will not keep all at the same potential. As far as rf grounds, I wouldn't be overly worried about that. #1, if all your antennas are complete , you don't need a rf ground. And anyway, an rf ground wire will act different on each band, and you never know whats gonna happen. I would just treat the present ground wires as the rf ground, and forget it. The lightning aspect much more important. I don't use a rf ground at all, and it's never hurt me yet. Actually, I don't like rf grounds in the shack. They like to play antenna too often. The rf ground should be at the antenna if one is indeed needed. Say with a vertical etc. You don't need one at all with a dipole, or any other complete antenna. BTW, treat anything I say with a grain of salt, and get plenty of other opinions. There is a boatload of stuff in deja news. Also the usual lighting co's. polyphasor etc. MK

--
http://web.wt.net/~nm5k

3923. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 08:36:36 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A349215.544C96C2@haertig.com>
Source record: 174872

Tom,

I find it interesting that by championing the independent tests that you clearly state should have been done ten years ago, I am characterized as being somehow duped by the inventor's of the CFA and completely unknowledgable. The clear implication, though please correct me if I am wrong, is that you think I am a fool for this.

It appears that you are unable to differentiate between my support of the tests and support of the antenna. As I have repeatedly stated, I will be very surprised if the CFA lives up to the claims of its inventors, but I fully support the tests that are currently under way. If the proponents of the CFA somehow stymie the investigators in their tests, that is what will be said in the report and no conclusions drawn. If the the investigators have full access (which they have been promised) then their report will reflect their results and conclusions. Isn't that how it is supposed to work?

As to making measurements at 450 MHz, I will bow to your superior knowledge about the workings of the CFA. Perhaps it wouldn't be the thing to do. Though, since I was in no way attacking you I would appreciate being told this in a civil manner and not being attacked.

As to whether measuring the elevation pattern is important or not, how do you determine skywave performance of a MW antenna without knowing the elevation pattern. And if you decide the elevation pattern IS important, how do you determine what it is - in any antenna, not just the CFA? How is it currently done? How can you determine the elevation pattern from the A-B test that you propose?

Bill Aycock takes me to task for speculating in advance of the tests what might be interesting avenues of research after the results of the tests are known. As I've said, I find idle speculation amusing, so I probably will continue to engage in it. It seems as if some consider any speculation or discussion as some sort of fraternizing with the enemy.

I don't think of this a a great moral battle between good and evil. I don't fear that Maxwell's laws will be struck asunder just because some folks are trying to make some money off some broadcasters (which they seem to have done). I am not part of a great electromagnetic army marching to war to protect electromagnetics as we know it today. I'm sure Mr. Maxwell's fine equations will continue to protect themselves quite well without any help from the members of this NG, as they have for the last 150 years or so.

In fact, I don't care a whit if the CFA's inventors are snake oil
salesmen of the highest rank, all I really care about is how this
proposed antenna performs, so I can decide for myself if it is of any
use to my clients.

God willing and the ether don't rise, we will soon have sufficient grist
to keep our mills safely away from the dangerous waters of premature
speculation (to mix a metaphor or two). Besides which, don't they have
drugs now for premature speculation? (c:

Gray

P.S. The name is Gray, not Gary. Gary's the one that doesn't belive
that there is power in transmission lines. (c:

Tom W8JI wrote:
>
> On Sun, 10 Dec 2000 11:29:00 -0800, Gray Frierson Haertig
> <gfh@haertig.com> wrote:
> >You may have missed my posts earlier in this thread, but independent
> >tests are currently underway (or will be shortly) of a test antenna in
> >GB. It is what you characterize as a "full size" antenna - that is, it
> >is designed for operation at MW.
>
> Gary, get serious!
>
> The guys hawking the CFA have been milking this out for ten years or
> so now.
>
> A reasonable person would conclude any honest vendor would:
>
> 1.) Test and document performance accurately on several antennas
> BEFORE filing for a patent
>
> 2.) Test and document several antennas before selling them for big
> bucks.
>
> In addition, anyone selling antennas that had normal business sense
> would:
>
> 1.) Test and document a few practical installations with independently
> verified data by a well know consultant or engineerring firm
>
> 2.) Allow other to see the power being run, and measure the FS in a
> working installation if they wish.
>
> I find it unfathomable that for ten years we have heard constantly the
> same excuse "we'll have a FS reading soon". Hey, if the thing was on
> the up-and-up they'd have done that ten years ago, before trying to
> take anyone's money.
>
> >As I said previously, if the desire is to determine whether the CFA

> >operates in some radically different way than conventional antennas (and
> >such is, I believe, the inventors' claim) then tests at 450 MHz might be
> >much easier to carry out and more definitive, both because of the size
> >of the test antennas and the possibility of constructing an antenna test
> >range that is actually reasonably accurate. Note that these tests would
> >be of "full sized" antennas designed for operation at 450 MHz.
>
> You onviously don't know anything about the antenna design, or the
> claims, or you never would have made the statement above.
>
> The antenna would be all but impossible to build accurately on 450
> MHz, because of the scaling problems.
>
> Not only that, the claim is the CFA eliminates ground losses (not only
> at the feedpoint, but in the area surrounding the antenna for a large
> distance). Since ground losses are impossible to scale at 450 MHz, the
> suggestion of a 450 MHz test is totally unreasonable.
>
> This is all especially foolish, since they claim they have working
> antennas. Yet the antennas that work work only in countries that do
> not require serious documemntation of performance, and there is no
> documentation!
>
> >One of the problems of testing antennas at lower frequencies is the
> >inability to create a volume on the test range in which the amplitude
> >and phase of the incident test signal are well characterized, that is
> >large enough to rotate the antenna in around all three axes. Antenna
> >tests below mid VHF are really tests of the antenna and the environment
> >together. At sufficiently low frequencies, mid MW and below, the
> >wavelength becomes long enough that most terrain features and most
> >things sitting on the earth are a small enough fraction of a wavelength
> >that they have little effect, however, ground parameters still have a
> >strong effect. In order to interpret the results one needs a
> >sufficiently large body of measured data on a variety of other antennas
> >and ground conditions to be able to make sense of the data collected for
> >a new antenna. Fortunately this exists for standard vertical monopoles.
>
> None of the above means anything in the context of this antenna and
> the claims made for the antenna.
>
> >At MW and lower frequencies it is virtually impossible to make
> >meaningful measurements of the elevation pattern of a vertical monopole.
> > The elevation pattern is particularly important in MW antenna design
> >because it determines the skywave performance of the antenna. Current
> >practice for conventional antennas is to calculate the elevation pattern
> >from the current distribution in the radiator. The current distribution
> >is either measured directly or determined theoretically using MOM
> >techniques or sinusoidal approximations. Because the CFA claims
> >radically different operation, it is not clear that the conventional
> >techniques for determining the elevation pattern are applicable.

>
> That isn't true. All you need do is a simple A-B groundwave test. It
> is a vertical, close to ground.
>
> >Tests at HF are particularly troublesome because antenna performance is
> >acutely sensitive to ground parameters at these frequencies, and god and
> >man have conspired to make almost everything on earth just the right
> >size to have an appreciable effect on the antenna and on propagation.
>
> It's easy as pie to prove the thing works. Since the theory is totally
> screwed up like a rubber watch, the reason there are no measurements
> is because they can't prove it works as claimed.
>
> >You are correct. As I said in a previous post, if the measurements of
> >the test antenna that are currently underway reveal that the CFA is not
> >anywhere near as efficient as a standard vertical monopole over a good
> >ground, then the next logical question is how it compares to a standard
> >short fat vertical monopole of similar dimension. While this may not be
> >of any interest to broadcasters, there quite well may be users out there
> >that could use a more efficient electrically short antenna - hams in
> >restricted locations, perhaps. If the CFA would offer them more options
> >for getting their signal out, then this is a good thing.
>
> Ten years later, after taking or trying to take people's money, they
> still haven't measured one. Anyone smell something foul in all of
> this???
>
> >I, too, await more data.
>
> I suggest you be patient. It will probably take at least ten more
> years to run through all the fools who swallow tall tales about
> converting induction fields directly into radiation fields, and having
> a type of radiation that does not induce currents in the earth below
> the antenna....let alone having a lossless loading system for a small
> antenna.
>
> The false claims are so obvious, I'm amazed people waste their time
> with this stuff.
>
> 73 Tom

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3924. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 11:09:36 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a34b5ef_1@news.cybertours.com>
Source record: 174873

"Mike" <w4mjr@home.com> wrote in message news:3A34218F.9C6E404@home.com...
> I came across one all tangled up. I am not interested in getting it back
> like it should be.My question is what ratio is the large balun on it and
> could this be of any use for making up another antenna. Also the large
> resistor in the center of the antenna can it be of use other than a
> dunny load.
>
Mike,
I beleive that the Resistor is about 390 ohms or close to it.. It might be
suitable for termination of a Beverage Rx antenna of some sort.

3925. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 12:27:32 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A34C834.851DDAAA@mwci.net>
Source record: 174874

William E. Sabin wrote:

> The pi and pi-L are basically single-tuned circuits, not coupled resonator
> circuits. The two capacitors do nothing more than transform resistance from
> plate resistance to a 50 ohm load resistance. The coupled resonator circuit
> requires two pairs of complex conjugate poles and the pi and pi-L do not
> normally have these.

I have taken a closer look at Reg's observation of the pi-L network, using Radio Designer and Matchcad.

In several examples I could see a minor "hump" far below the desired resonant frequency. The frequency response of this hump was about 3 dB down and the impedance at the second hump was about 1/4 the resonant impedance and was highly reactive. The minor hump is not due to two-resonator coupling, but due to the way that the various reactances vary and can partially offset each other over some frequency range. At the correct peak the return loss is more than 50 dB, but at the false hump it is only about 3 dB (not very good).

If you tried to tune and load the PA at the secondary hump you would quickly see that it was not the right tuneup.

Bill W0IYH

3926. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 12:30:51 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <912hek$lc7$1@slb1.atl.mindspring.net>
Source record: 174875

Danny:

[snip]
> >
> Then, I suggest, that you would be better to assign the problem to the
> radio rather than the antenna system.
>
> Danny
[snip]

You may assign the problem to the radio, but... unless you are the manufacturer of the radio, or into extensive modifications of its' auto shutdown SWR sensing circuitry, you simply cannot assign the solution to the radio, heh, heh. Gotta assign the solution to the problem to another device...

-Peter K1PO.

3927. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 12:41:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <912huuuff1@slb6.atl.mindspring.net>
Source record: 174876

Gray:

I applaud your open mind on CFA testing, but... a lot of folks may spend a lot of time and money for naught trying to prove that pigs can fly...

A similar circumstance is the everlasting perpetual motion machine.

I ask, should the US Patent office spend the hardworking taxpayers time and money, refuting, and proving incorrect by expensive experimental tests, the claims of each and every perpetual motion machine inventor, all in the spirit of keeping an open mind on experimental testing?

Or... is it valid to invoke Sadi Carnot's "Second Law of Thermodynamics", and throw those inventors and thier infeasible inventions back into the sea?

What?

-Peter K1PO

"Gray Frierson Haertig" <gfh@haertig.com> wrote in message news:3A349215.544C96C2@haertig.com...
>
>
> Tom,
>
> I find it interesting that by championing the independent tests that you
> clearly state should have been done ten years ago, I am characterized as
> being somehow duped by the inventor's of the CFA and completely
> unknowledgable. The clear implication, though please correct me if I am
> wrong, is that you think I am a fool for this.
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> It appears that you are unable to differentiate between my support of
> the tests and support of the antenna. As I have repeatedly stated, I
> will be very surprised if the CFA lives up to the claims of its
> inventors, but I fully support the tests that are currently under way.
> If the proponents of the CFA somehow stymie the investigators in their
> tests, that is what will be said in the report and no conclusions drawn.
> If the the investigators have full access (which they have been
> promised) then their report will reflect their results and conclusions.
> Isn't that how it is supposed to work?
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> As to making measurements at 450 MHz, I will bow to your superior
> knowledge about the workings of the CFA. Perhaps it wouldn't be the
> thing to do. Though, since I was in no way attacking you I would
> appreciate being told this in a civil manner and not being attacked.
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> As to whether measuring the elevation pattern is important or not, how
> do you determine skywave performance of a MW antenna without knowing the
> elevation pattern. And if you decide the elevation pattern IS
> important, how do you determine what it is - in any antenna, not just
> the CFA? How is it currently done? How can you determine the elevation
> pattern from the A-B test that you propose?
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> Bill Aycock takes me to task for speculating in advance of the tests
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> tests are known. As I've said, I find idle speculation amusing, so I
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> folks are trying to make some money off some broadcasters (which they
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> marching to war to protect electromagnetics as we know it today. I'm
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> use to my clients.
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> God willing and the ether don't rise, we will soon have sufficient grist
> to keep our mills safely away from the dangerous waters of premature
> speculation (to mix a metaphor or two). Besides which, don't they have
> drugs now for premature speculation? (c:
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> P.S. The name is Gray, not Gary. Gary's the one that doesn't belive
> that there is power in transmission lines. (c:
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> > That isn't true. All you need do is a simple A-B groundwave test. It
> > is a vertical, close to ground.
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> > >acutely sensitive to ground parameters at these frequencies, and god
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> > >man have conspired to make almost everything on earth just the right
> > >size to have an appreciable effect on the antenna and on propagation.
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> > It's easy as pie to prove the thing works. Since the theory is totally
> > screwed up like a rubber watch, the reason there are no measurements
> > is because they can't prove it works as claimed.
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> > >You are correct. As I said in a previous post, if the measurements of
> > >the test antenna that are currently underway reveal that the CFA is not

> > >anywhere near as efficient as a standard vertical monopole over a good
> > >ground, then the next logical question is how it compares to a standard
> > >short fat vertical monopole of similar dimension. While this may not
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> > >of any interest to broadcasters, there quite well may be users out
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> > >that could use a more efficient electrically short antenna - hams in
> > >restricted locations, perhaps. If the CFA would offer them more
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> > >for getting their signal out, then this is a good thing.
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> > still haven't measured one. Anyone smell something foul in all of
> > this???
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> > >I, too, await more data.
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> > I suggest you be patient. It will probably take at least ten more
> > years to run through all the fools who swallow tall tales about
> > converting induction fields directly into radiation fields, and having
> > a type of radiation that does not induce currents in the earth below
> > the antenna....let alone having a lossless loading system for a small
> > antenna.
> >
> > The false claims are so obvious, I'm amazed people waste their time
> > with this stuff.
> >
> > 73 Tom
>
> --
> Telecommunications Engineering
> Gray Frierson Haertig & Assoc.
> 820 North River Street, Suite 100
> Portland, Oregon 97227
> 503-282-2989
> 503-282-3181 FAX
> gfh@haertig.com

3928. Hy-Gain vertical 18AVT/WB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 13:14:46 UTC
From: Ole Dam <ole.dam@get2net.dk>
Message-ID: <Kp4Z5.88$8f.2844@news.get2net.dk>
Source record: 174877

Can anybody help me; I have an 18 AVT/WB which works perfect. Now I want to build an extra element for 18/24 Mc into this antenna - but how?? Shal I substitute some of the original elements or how? I have written an email to the Hy-Gain Company but get no answer.
Any help will be much appreciated.
73 de OZ2DM, Ole
e-mail: oz2dm@hotmail.com

3929. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 13:34:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A34D7FC.5E3FAFE6@IEEE.org>
Source record: 174878

"Peter O. Brackett" wrote:
> A similar circumstance is the everlasting perpetual motion machine.

I observed a perpetual motion machine in action last night. It
was the space station. And isn't it winter now because of
perpetual motion?
--
http://www.mindspring.com/~w6rca

3930. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 13:37:44 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A34D8A8.94AB9A84@IEEE.org>
Source record: 174879

kc5cqa wrote:
>
> I read in this news group a while back on the best height for a six
> meter antenna, if I recall right someone was saying that one
> wavelength above ground,,,,, I think,,,,,,I understand it will work
> better the higher it is,,,,,,,,,,,,,,,,,,,,,,, but what I wanted to
> know ,,,,, what was the least elevation above ground that would work
> really well. Appreciate your refreshing my memory. thanks. Chuck
> Lorentson "73"

Which are you most interested in, sky wave or ground wave?
--
http://www.mindspring.com/~w6rca

3931. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 14:14:57 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <912nql$1p7c$1@news.kabelfoon.nl>
Source record: 174880

Check this site:

http://www.hard-core-dx.com/nordicdx/antenna/ground/index.html

David <k4zzrNONSPAM@gate.net> schreef in berichtnieuws
910ivm$1260$1@news.gate.net...
> Ok guys, I need some advice (please)....regarding my station grounds.
>
> Here's my setup right now: The base of my tower is located directly
> outside my station (within three feet). I've got eight 8' ground rods
> extending out into the yard from the legs of the tower using #2 bare
copper
> wire. I have a large copper bulkhead attached to the side of the house
> (also just outside the shack) where each coax cable and rotor cable
attaches
> to I.C.E. lightning protection devices and then the cables run into the
> shack. The bulkhead (with big insulators on the wall) is about a foot
> above the ground. There's also a 2' piece of copper strap used to bond
the
> tower base with the "single point" bulkhead. And, there are three
> additional rods connected to the bulkhead spreading out 12' in each
> direction underneath it. All of this is for a bit of lightning
protection
> here in south Florida.
>
> From the back of my desk all of my station equipment is attached to a 1
1/2"
> copper strap running directly outside to the same bulkhead for my "RF
> ground" connection.
>
> Is this the correct way to attach my RF ground? Should I be running
> directly to that bulkhead or run it to a couple of independent ground
rods?
> If I should be running it to separate ground rods, they would have to be
> located within a foot or less of the existing "lightning" rods because of
> the proximity of the tower. So the question is, do I leave the RF
ground
> strap connected to the bulkhead or run it straight into the ground with a
> couple of rods not directly connected to the bulkhead? I want the best
RF
> ground connection I can get.
>
> Thanks,
> David, K4ZZR
>

>
>
>
>
>

3932. seach for "radiation patterns" programs freeware

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 14:37:55 UTC
From: Pascal <pascal.maitrallin@csa.fr>
Message-ID: <912omn$j34$1@reader1.imaginet.fr>
Source record: 174881

I look for a program file which calculate and print antenna's attenuation
every 10 degrees.

NB : frequency between 174 and 830 Mhz

thanks in advance for your reply.
pm

3933. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 14:39:05 UTC
From: k6mhe@arrl.net
Message-ID: <3a34e6ea.339419@news.mcn.org>
Source record: 174883

On Mon, 11 Dec 2000 07:30:51 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Danny:
>
>[snip]
>> >
>> Then, I suggest, that you would be better to assign the problem to the
>> radio rather than the antenna system.
>>
>> Danny
>[snip]
>
>You may assign the problem to the radio, but... unless you are the
>manufacturer of the radio, or into extensive modifications of its' auto
>shutdown SWR sensing circuitry, you simply cannot assign the solution to the
>radio, heh, heh. Gotta assign the solution to the problem to another
>device...
>
>-Peter K1PO.
>
Oh great! Just what we need a political solution.

Danny

3934. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:08:28 UTC
From: CessnaPilot <stinson108@my-deja.com>
Message-ID: <912ql6bmo1@nnrp1.deja.com>
Source record: 174882

It seems Tom has a tremendous zeal for discrediting your plight. (?) Could it be that he has a portion of your investment? At any rate, Tom can buy all the antennas he wants from Mosely and nobody is going to stop him. Most of us, however, are more careful with their money and prefer to do business with more reputable businesses, being less daring to lose $$. Thanks for letting us know before we learned the same way you did, i.e., "The School of Hard Knocks" Respectfully, Stinson

Sent via Deja.com http://www.deja.com/
Before you buy.

3935. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:25:56 UTC
From: richardharrison@webtv.net
Message-ID: <5329-3A34F204-1@storefull-116.iap.bryant.webtv.net>
Source record: 174886

Cecil asked the right question. You want sky wave or ground wave?

For sky wave you only need 1/2-wave antenna elevation for near optimum performance, if you are in the clear. That would be only about 10 feet.

For line of sight communications along the ground, the horizon is about 5 miles from an elevation of 10 feet. The horizon in miles is about the square root of twice the elevation of the antenna in feet.

So, for local communications, you need a lot of antenna height to communicate line of sight over long distances because the earth is curved and obstructions tend to interfere.

Best regards, Richard Harrison, KB5WZI

3936. HG18AVT/WB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:30:31 UTC
From: Pete <pete@etep.com>
Message-ID: <rq6Z5.11289$g6.275744@news1.rdc1.il.home.com>
Source record: 174884

Do any of you know where I can buy this vertical? I had one years ago when I lived in another city and loved it. I reached countries where even guys who had big beams couldn't reach. I would like very much to get another one. Thanks for your suggestions.

3937. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:34:50 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a34f0ba.2670196@news.azstarnet.com>
Source record: 174885

On Mon, 11 Dec 2000 06:27:32 -0600, "William E. Sabin" <sabinw@mwci.net> wrote:

>
>
>William E. Sabin wrote:
>
>> The pi and pi-L are basically single-tuned circuits, not coupled resonator
>> circuits. The two capacitors do nothing more than transform resistance from
>> plate resistance to a 50 ohm load resistance. The coupled resonator circuit
>> requires two pairs of complex conjugate poles and the pi and pi-L do not
>> normally have these.
>
>I have taken a closer look at Reg's observation of the pi-L network, using Radio
>Designer and Matchcad.
>
>In several examples I could see a minor "hump" far below the desired resonant
>frequency. The frequency response of this hump was about 3 dB down and the
>impedance at the second hump was about 1/4 the resonant impedance and was highly
>reactive. The minor hump is not due to two-resonator coupling, but due to the way
>that the various reactances vary and can partially offset each other over some
>frequency range. At the correct peak the return loss is more than 50 dB, but at the
>false hump it is only about 3 dB (not very good).
>
>If you tried to tune and load the PA at the secondary hump you would quickly see
>that it was not the right tuneup.
>
>Bill W0IYH

What has been overlooked in this thread is the fact that in a real (actual)
pi-net tank for a PA, there are more than three reactances in play. The tube
itself has some internal inductance and some output capacitance. Then there is
the inductance of the plate choke and the inductance of the connecting lead
(parasitic choke) to the plate tuning capacitor, the shunt capacitance of the
inductor to ground, et cetera........

True, at 160 meters the effect of these is minor but at 10 meters, they maybe be
significant.

Wes N7WS
>
>

3938. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:40:14 UTC
From: richardharrison@webtv.net
Message-ID: <5326-3A34F55E-4@storefull-116.iap.bryant.webtv.net>
Source record: 174891

Cecil, W6RCA wrote:
"And isn`t it winter now because of perpetual motion?"

Almost.

There is a pendulum counting out the hours by the path it traces on the floor of the Smithsonian Institution without any additional push. It has been doing this for more years than almost anyone cares to remember. It`s because the world keeps on turning as I know it always will (almost).

Best regards, Richard Harrison, KB5WZI

3939. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:46:27 UTC
From: 2w8ji@contesting.com
Message-ID: <3a34f137.187975522@news.akorn.net>
Source record: 174887

On Mon, 11 Dec 2000 00:36:36 -0800, Gray Frierson Haertig
<gfh@haertig.com> wrote:

>
>
>Tom,
>
>I find it interesting that by championing the independent tests that you
>clearly state should have been done ten years ago, I am characterized as
>being somehow duped by the inventor's of the CFA and completely
>unknowledgable. The clear implication, though please correct me if I am
>wrong, is that you think I am a fool for this.

I think anyone who spends time arguing about something that is
obviously so out-and-out silly is being foolish.

If a person doesn't understand the physics, he only has to have enough
street smarts to add two and two, and see if it comes out four.

Can you honestly imagine the Wright brothers having a "flying
airplane" for ten years without letting anyone else see it fly?

Here is an "invention" so special it fills all the desires of
"something for nothing", yet the inventors instead of being on the
cover of Broadcasting have now degenerated to selling copies of how to
build the thing to foolish Hams over the Internet.

The CFA reminds me of the 500 MPG carburetor that Exxon bought and hid
so they could sell more oil, or the 500 mile L-88 Corvette who's Viet
Nam era owner died in the war and their mother doesn't know what it is
worth and is now selling at a garage sale.

People need to use a little common sense.

73 Tom

3940. Re: "V" dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:52:27 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <r7t219.h6d.ln@mail.specsol.com>
Source record: 174888

rich a <rckchp@home.com> wrote:
> Greetings,

> Does anyone have any info or advice about placing a dipole in a "V"
> configuration, that is, with the ends higher than the center, the
> reverse of an inverted "V". How would the radiation pattern be affected
> compared to a "srraight" dipole? Better, worse or no real difference?
> Thanks in advance.

> Rich A.

Basically, the same as an inverted v. The lower the antenna (in terms of wavelengths) the more difference between the two.

Why don't you download the demo version of eznec and see EXACTLY what the differences are?

Jim Pennino

3941. MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 15:55:55 UTC
From: n1kk@netzero.net
Message-ID: <912te7$e97$1@nnrp1.deja.com>
Source record: 174890

I have recently installed a Diamond V2000A vertical for 6,2,and 440.
I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
and it made the antenna look like it was resonating out side the Ham
bands. After several attempts to adjust the 6 meter tunning adjustment
on the V2000A I finaly gave up and assumed the antenna or coax was
bad.

I gave Diamond a call and told them of my experience. They asked me
what I was using to measure the SWR and I told them. I was told
the MFJ analyzer will not measure the correct resonant freq of
Diamond antennas and he sugguested I try another meter.
I tried my bird 43 and sure enough he was right as the antenna resonated
right in the middle of the bands.

I would like to hear some techincal disscussion on how this could be.
My only thought so far is the MFJ does not represent a 50 ohm source
and has altered the resonance of the antenna.

Ken N1KK
n1kk@netzero.net

Sent via Deja.com http://www.deja.com/
Before you buy.

3942. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 16:07:58 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <46u93tc0p0so23c43je0fi1a7sk3ue58ij@4ax.com>
Source record: 174889

I think this needs to be put into proper perspective. Tom is pointing out that none of us have enough information to make a rational decision regarding this one dispute between a vendor and purchaser. Mosley has been in business longer than I have been a ham, and I have used their products since the mid-sixties. I had a minor problem with a Pro-57B, but it was my fault for mis-interpreting the instructions, and Mosley thankfully bailed me out through their tech support. It should also be noted that they are a military supplier, which means their quality assurance system has to be in accordance with DOD standards. Mosley has antenna ranges that most of us could never manage, and if they say the antenna in question meets specifications after testing it, then I would be willing to take that to the bank. Obviously, there is something going on here that is out of the ordinary, but there are always two sides to every story, and we have only heard one side. No company could remain in business for over a half a century if they treated their customers like it is claimed.

73, Dick - W6CCD

On Mon, 11 Dec 2000 15:08:28 GMT, CessnaPilot <stinson108@my-deja.com> wrote:

>It seems Tom has a tremendous zeal for discrediting your plight. (?) Could
>it be that he has a portion of your investment? At any rate, Tom can buy all
>the antennas he wants from Mosely and nobody is going to stop him. Most of
>us, however, are more careful with their money and prefer to do business with
>more reputable businesses, being less daring to lose $$. Thanks for letting
>us know before we learned the same way you did, i.e., "The School of Hard
>Knocks" Respectfully, Stinson
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

3943. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 16:56:54 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A350756.7D49E778@mwci.net>
Source record: 174892

Wes Stewart wrote:

> What has been overlooked in this thread is the fact that in a real (actual)
> pi-net tank for a PA, there are more than three reactances in play. The tube
> itself has some internal inductance and some output capacitance. Then there is
> the inductance of the plate choke and the inductance of the connecting lead
> (parasitic choke) to the plate tuning capacitor, the shunt capacitance of the
> inductor to ground, et cetera........

No facts have been overlooked. The thing that is being discussed at the moment is just the basic pi-L network itself as shown in its basic simulations. If all of the other contingencies that can be imagined are added it is no longer "just" a pi-L network. These other items conceal the thing that Reg is interested in at the moment.

Bill W0IYH

3944. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 17:10:32 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A350A87.777F75A9@dvol.com>
Source record: 174893

Dan Richardson wrote:

>
> Then, I suggest, that you would be better to assign the problem to the
> radio rather than the antenna system.

>
Current radios is what they is and their limitations are published, well known and they work fine within their limitations. The problem belongs to the hams who (a) believe and/or fail to understand antenna advertising and specs (b) don't have enough technical smarts to get a radio working into an antenna unless the antenna manufacturer hands them a PL-259 which provides a 2:1 SWR or less. Make that 1.3:1 or they get upset (c) show up for Field Day with new, untested antennas still in the box and without any antenna tuners or antenna instrumentation. They were not newbies and there was a bunch of 'em trying to muddle thru the problem. Which was them.
>

> Danny

>
w3rv

3945. Two VHF antennas on my truck?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 17:16:52 UTC
From: fahdasd@my-deja.com
Message-ID: <91325sigs1@nnrp1.deja.com>
Source record: 174894

What if I put two VHF antennas linked to one RG-6 cable and then to one connector to my Yaesu, would it help in improving Rx,ing and Tx,ing?
--

Fahd

Sent via Deja.com http://www.deja.com/
Before you buy.

3946. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 17:39:34 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a350f17.10443943@news.azstarnet.com>
Source record: 174895

On Mon, 11 Dec 2000 10:56:54 -0600, "William E. Sabin" <sabinw@mwci.net> wrote:

>
>
>Wes Stewart wrote:
>
>> What has been overlooked in this thread is the fact that in a real (actual)
>> pi-net tank for a PA, there are more than three reactances in play. The tube
>> itself has some internal inductance and some output capacitance. Then there is
>> the inductance of the plate choke and the inductance of the connecting lead
>> (parasitic choke) to the plate tuning capacitor, the shunt capacitance of the
>> inductor to ground, et cetera........
>
>No facts have been overlooked. The thing that is being discussed at the moment is just
>the basic pi-L network itself as shown in its basic simulations. If all of the other
>contingencies that can be imagined are added it is no longer "just" a pi-L network. These
>other items conceal the thing that Reg is interested in at the moment.
>
>Bill W0IYH

Except that in Reg's original post he asks:

>"Never having used such a circuit I wonder whether the double
>humps cause confusion or doubt when tuning up using the
>minimum-dip method. Or any other method.

>I should be interested to hear from any experienced users of
>the network how it behaves during tuning up. Is it just as
>straightforward as the ordinary tank or Pi network ?"

So how do you figure that the points that I raise "conceal the thing that Reg is
interested in at the moment?" Seems to me that (incomplete) Radio Designer
simulations, Norton Transforms, MIT profs, et cetera, "conceal the thing that
Reg is interested in at the moment."

So far the only one that answered the question was Mark, NM5K. Everybody else
(unfortunately including the undersigned) failed.

This thread is another victim of topic drift.

Wes N7WS

3947. 18AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 18:10:05 UTC
From: PETER KR&#65533;GER-LARSEN <scylar@get2net.dk>
Message-ID: <FM8Z5.189$8f.5713@news.get2net.dk>
Source record: 174898

Hi OM
Where can I find the tubelenghts between the traps.(I have lost my original manual)
Thanks in a advance.
Please reply to al7qt@hotmail.com
73 Peter

3948. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 18:34:19 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A351E2B.894573AD@dvol.com>
Source record: 174896

Cecil wrote:

> Fred Hambrecht wrote:
> > Be advised that your idea comes dangerously close to my "Thinking about,
> > maybe, applying for a patient".
>
> Your patent is obsolete. I have perfected a superconductive
> plasma stream that is lossless for any number of elements. All
> you have to do is dial in your frequency, direction, and desired
> beamwidth.

>
It's not lossless at all, you forgot to factor in the power absorbed by the unobtanium stream diffractor. You did ground the difractor, didn't you? Now go back and do the numbers right this time.
>

>
> --
> http://www.mindspring.com/~w6rca

>
w3rv

3949. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 18:43:55 UTC
From: Pie`` <picaruso@dontwriteme.com>
Message-ID: <Lf9Z5.80511$hk4.2999199@news.infostrada.it>
Source record: 174897

That's very strange!
I've never used my analyzer with that antenna, but it sounds strange. Maybe
your analizer is out of order. Try with a 50 Ohms dummy load and read the
meter: you shoud read 50 Ohms and SWR 1:1.

--
73 de IK2VTJ, Piero.

http://www.infinito.it/utenti/ardf.it
http://ardfitalia.supereva.it
http://www.qsl.net/ik2vtj

<n1kk@netzero.net> ha scritto nel messaggio
news:912te7$e97$1@nnrp1.deja.com...
> I have recently installed a Diamond V2000A vertical for 6,2,and 440.
> I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
> and it made the antenna look like it was resonating out side the Ham
> bands. After several attempts to adjust the 6 meter tunning adjustment
> on the V2000A I finaly gave up and assumed the antenna or coax was
> bad.
>
> I gave Diamond a call and told them of my experience. They asked me
> what I was using to measure the SWR and I told them. I was told
> the MFJ analyzer will not measure the correct resonant freq of
> Diamond antennas and he sugguested I try another meter.
> I tried my bird 43 and sure enough he was right as the antenna resonated
> right in the middle of the bands.
>
> I would like to hear some techincal disscussion on how this could be.
> My only thought so far is the MFJ does not represent a 50 ohm source
> and has altered the resonance of the antenna.
>
> Ken N1KK
> n1kk@netzero.net
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3950. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:05:32 UTC
From: rwclark@seanet.com
Message-ID: <3ab624e5.4054336187@news.seanet.com>
Source record: 174904

On Mon, 11 Dec 2000 14:52:13 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>>
>So I'm tired of buying batteries awready and the Xmas electric toys for the
>grandrats ain't even here yet.
>>
>>
>
>>It is
>
>> 100% RF efficient. It is 10^-37 percent energy efficient.
>
>>
>OK, that's actually not bad, 'bout as efficient as we are.
>>
>
>>
>> --
>> http://www.mindspring.com/~w6rca
>
>>
>w3rv
>

Hi All,

Consider buying not only batteries but memory too!

GrandDad, it needs 64 megs! It's sooo sloooow. :-(

73's
Richard Clark, KB7QHC

3951. Re: Two VHF antennas on my truck?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:16:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A352806.70613D90@IEEE.org>
Source record: 174900

fahdasd@my-deja.com wrote:
> What if I put two VHF antennas linked to one RG-6 cable and then to one
> connector to my Yaesu, would it help in improving Rx,ing and Tx,ing?

What kind of antennas? Mobile or fixed? Directional?
--
http://www.mindspring.com/~w6rca

3952. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:19:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3528CA.BA722B3D@IEEE.org>
Source record: 174901

Brian Kelly wrote:
>
> Cecil wrote:
> > Your patent is obsolete. I have perfected a superconductive
> > plasma stream that is lossless for any number of elements. All
> > you have to do is dial in your frequency, direction, and desired
> > beamwidth.
>
> It's not lossless at all, you forgot to factor in the power absorbed by the
> unobtanium stream diffractor. You did ground the difractor, didn't you? Now go
> back and do the numbers right this time.

You are obviously confusing energy efficiency and RF efficiency. It is
100% RF efficient. It is 10^-37 percent energy efficient.
--
http://www.mindspring.com/~w6rca

3953. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:27:01 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A352A85.E1D30C97@mwci.net>
Source record: 174899

Wes Stewart wrote:

> This thread is another victim of topic drift.

Baloney.

Bill W0IYH

3954. 60' VERSATOWER FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:35:46 UTC
From: cellfit <cellfit@ntlworld.com>
Message-ID: <Q_9Z5.6345$Vv1.117787@news6-win.server.ntlworld.com>
Source record: 174902

60' Strumech Versatover complete with base ready to take away £375 ono.
Coventry. G4MVL

3955. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 19:52:13 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A35306C.65CA7B45@dvol.com>
Source record: 174903

Cecil wrote:

>
> > It's not lossless at all, you forgot to factor in the power absorbed by the
> > unobtanium stream diffractor. You did ground the difractor, didn't you? Now go
> > back and do the numbers right this time.
>
> You are obviously confusing energy efficiency and RF efficiency.

>
So I'm tired of buying batteries awready and the Xmas electric toys for the
grandrats ain't even here yet.
>
>

>It is

> 100% RF efficient. It is 10^-37 percent energy efficient.

>
OK, that's actually not bad, 'bout as efficient as we are.
>

>
> --
> http://www.mindspring.com/~w6rca

>
w3rv

3956. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 20:19:09 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0DAA47.2AE15FB0@bellatlantic.net>
Source record: 174905

Mark Keith wrote:

> It's the last statement they make which really has me rolling.
> An antenna 1/50 wl with no radial system is gonna outdo a 1/4 wl with
> 120 radials on MW. "

Exactly.
The point that should be made is that an antenna 1/50 wl with no radial system is great - as compared to no antenna at all. Trouble is, proponents of these small antennas make outrageous claims. When you don't have the space for a full size antenna, you have to shrink the antenna to fit, by one means or another. To me, there are two categories of valid arguments against these antennas: 1) arguments against outrageous claims. Your post containing the statement above (laughing at those claims) is in that category. And of course, you are correct. 2) arguments that compare one form of "shrunken" antenna to another are also valid. By demonstrating a tremendous overall superiority of one "shrunken" antenna vs another, one lends validity to his point that "Antenna A is a joke". For example, I'd bet that an Isotron for 160 would beat a light bulb antenna, hands down, if for no other reason than the greater capture area it enjoys over the light bulb. But I would bet that a 70' tall 160 meter vertical would beat an Isotron installed at 70 '. In the first case (light bulb), a strong case can be made about the light bulb antenna being a joke. But in the second, the delta between antennas is not so readily apparent.

> I assume any self respecting BC would run 120
> radials with a 1/4 whip"... Okeee dokeee...Maybe I should start
> believing in the tooth fairy. MK

3957. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 20:28:27 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0DAC74.1B844F75@bellatlantic.net>
Source record: 174906

Tom W8JI wrote:

> The CFA reminds me of the 500 MPG carburetor that Exxon bought and hid
> so they could sell more oil, or the 500 mile L-88 Corvette who's Viet
> Nam era owner died in the war and their mother doesn't know what it is
> worth and is now selling at a garage sale.
>
> People need to use a little common sense.
>
> 73 Tom

Do you mean you think there might be a market on the internet
for the special antenna wire I invented? It gives your signal a
range of 500 miles per inch. But there's still a bug in it. I can't
get it to work with any nearby stations.

3958. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 20:32:04 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <4kd319.g6.ln@mail.specsol.com>
Source record: 174908

n1kk@netzero.net wrote:
> I have recently installed a Diamond V2000A vertical for 6,2,and 440.
> I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
> and it made the antenna look like it was resonating out side the Ham
> bands. After several attempts to adjust the 6 meter tunning adjustment
> on the V2000A I finaly gave up and assumed the antenna or coax was
> bad.

> I gave Diamond a call and told them of my experience. They asked me
> what I was using to measure the SWR and I told them. I was told
> the MFJ analyzer will not measure the correct resonant freq of
> Diamond antennas and he sugguested I try another meter.
> I tried my bird 43 and sure enough he was right as the antenna resonated
> right in the middle of the bands.

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> My only thought so far is the MFJ does not represent a 50 ohm source
> and has altered the resonance of the antenna.

> Ken N1KK
> n1kk@netzero.net

> Sent via Deja.com http://www.deja.com/
> Before you buy.

All an antenna analyzer is is a low power transmitter. There are few reasons why it wouldn't work with ANY antenna made:

A) The analyzer has a problem; check with some fixed resistors at various frequencies.

B) The antenna is receiving external RF that "confuses" the analyzer detection circuitry (it is low power, remember).

C) The antenna is non-linear with power (not too likely, but possible with corroded connections and the like).

Jim Pennino

3959. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 20:37:17 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A0DAE82.13C182FC@bellatlantic.net>
Source record: 174907

Would you care to explain what gave you the idea that Tom has a
"tremendous zeal" ...etc

CessnaPilot wrote:

> It seems Tom has a tremendous zeal for discrediting your plight.

3960. Joe Carr silent key verified.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 21:06:11 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <913fk5$2e$1@bob.news.rcn.net>
Source record: 174909

Had Harold Ort from Popular Communications verify his passing. Very sad news, and
at too young an age.

Regards

Peter

Hello all,

I've just received word that author Joe Carr passed away at his home on Saturday Nov 25. Joe was 57.

Joe had written many books and articles on antennas and
was our Antennas & Things columnist. He will be missed.
Regards and 73,

Harold Ort

3961. Re: Two VHF antennas on my truck?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 21:37:06 UTC
From: fahdasd@my-deja.com
Message-ID: <913he2$7a$1@nnrp1.deja.com>
Source record: 174911

Hi Cecil
they are two mobile dual band nr-7 gain of 3.db on vhf and 5.5 db on
uhf.
In article <3A352806.70613D90@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> fahdasd@my-deja.com wrote:
> > What if I put two VHF antennas linked to one RG-6 cable and then to
one
> > connector to my Yaesu, would it help in improving Rx,ing and Tx,ing?
>
> What kind of antennas? Mobile or fixed? Directional?
> --
> http://www.mindspring.com/~w6rca
>

--
Optimism is the first step towards happiness

Fahd

Sent via Deja.com http://www.deja.com/
Before you buy.

3962. LOOKING FOR THE MFJ209 Sch&#65533;matics (Antenna Analyser)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 21:41:47 UTC
From: jh-jardel <jh-jardel@wanadoo.fr>
Message-ID: <913tvaplb2@wanadoo.fr>
Source record: 174918

Hello,

I'm looking for the schematics of MFJ209.

Does someone can send me it ?

Many thanks by advance

73's JHJ

3963. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 22:01:06 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <BRpCeBAi6UN6Ew4M@pickmere.demon.co.uk>
Source record: 174912

snip

>Good morning all,
>
>It might be instructive to look at where these antennas are sited. Tanta,
>Egypt, is about equidistant between Cairo and Alexandria, the two major
>population centers, at a distance of some 50-60 miles. Flat delta terrain.
>San Remo, Italy, is a coastal location backed up against a major escarpment
>(very much like Monaco) with France at the top of the mountain. They broadcast
>in Italian. The Isle of Man is small, 277 square miles, or so with a major
>mountain in the center.
>
>None of these sites require much in the way of antennas to be effective,
>especially San Remo. I suspect that the reason these antennas work (more or
>less) has more to do with what they are expected to cover, rather than any
>intrinsic technical merit on the part of the antenna.

The IoM site is intended to cover the whole of the UK as well as some of
the Continent.

Mike
--
M.J.Powell

3964. Re: Two VHF antennas on my truck?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 23:08:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A355E8A.5FA3A56@IEEE.org>
Source record: 174913

fahdasd@my-deja.com wrote:
> they are two mobile dual band nr-7 gain of 3.db on vhf and 5.5 db on
> uhf.

Take a look at the phased quarter-wave vertical patterns
in the ARRL Antenna Handbook to see what is possible. This
is a pretty complicated topic. Do you want to beam up/down
the road or phase the antennas for selectively directional
operation?
--
http://www.mindspring.com/~w6rca

3965. Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 23:17:56 UTC
From: Bill <bill@hovac.com>
Message-ID: <913n8i$19ln$1@box6.cho.cstone.net>
Source record: 174914

Hi ,

I have an old Telex Tribander. A few trap covers are missing. I am thinking about using some large shrink tubing to cover the traps. I would like to know if this will change the properties of the traps. The old covers never actually touched the coils of the traps whereas the shring tubing will.

Any suggeston will be appreciated.

Thanks,
Bill
N4DXR

3966. R6000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 23:27:12 UTC
From: "Larry D. Wagner" <larry.d.wagner@intel.com>
Message-ID: <913nuf$bv3@news.or.intel.com>
Source record: 174915

I have a Cushcraft R-6000 up for over a year now but have yet to be able to tune the 6 meter band. Is this a common problem and has anyone had good results using a tuner. Everything else tunes just fine right in the band middles

Thanks
Larry Wagner

3967. 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-11 23:41:59 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <3a356651$1@news.microsoft.com>
Source record: 174916
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Am building a project out of a Sept 95 QST article (automatic remote antenna tuner) requiring extensive RF filtering of every input/output lead. Each PI section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF choke.

Can anyone recommend a part number/type and source for the inductors? What type of caps would be recommended?

-rob

3968. 12AVQ/14AVQ verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 00:48:37 UTC
From: Greg Zimmer <gzimmer@iserv.net>
Message-ID: <VxeZ5.1163$uH2.51426@news-east.usenetserver.com>
Source record: 174917

Does anyone either one of these for sale? Looking for an operational model,
not for parts. Thanks.
Reply to gzimmer@iserv.net

3969. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 00:51:57 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3A3576AD.97D32153@grove.iup.edu>
Source record: 174910

How did you measure the resonance of the antenna with your Bird Watt Meter?
Did Diamond tell you the antenna is resonate at 50 Ohms? Also, how would the
coax or the MFJ meter alter the resonance frequency of the antenna?

Scott McClements.

n1kk@netzero.net wrote:

> I have recently installed a Diamond V2000A vertical for 6,2,and 440.
> I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
> and it made the antenna look like it was resonating out side the Ham
> bands. After several attempts to adjust the 6 meter tunning adjustment
> on the V2000A I finaly gave up and assumed the antenna or coax was
> bad.
>
> I gave Diamond a call and told them of my experience. They asked me
> what I was using to measure the SWR and I told them. I was told
> the MFJ analyzer will not measure the correct resonant freq of
> Diamond antennas and he sugguested I try another meter.
> I tried my bird 43 and sure enough he was right as the antenna resonated
> right in the middle of the bands.
>
> I would like to hear some techincal disscussion on how this could be.
> My only thought so far is the MFJ does not represent a 50 ohm source
> and has altered the resonance of the antenna.
>
> Ken N1KK
> n1kk@netzero.net
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3970. Larsen or Diamond for 706 rig

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 01:03:50 UTC
From: Eddie Bryant N4UMJ <N4UMJ@carolina.rr.com>
Message-ID: <WPeZ5.34714$4K4.4972655@typhoon.southeast.rr.com>
Source record: 174769

I have an antenna dilemma on my car and the new
706 MKIIG I am about to order.

I am considering going with a single 2Meter/440
antenna on my vehicle to connect up to the new
706 MK IIG .

Currently I have two separate antennas.
A Larsen 5/8 wave 2 meter NMO-150 (3dbd) 49"
and
A Larsen 5/8 over 1/2 wave NMO-440 (4.5dbd)31"
antennas that I have been using on my Kenwood
Dual band TM-741radio.

As you probably know ,the 706 has a single antenna
connection for the VHF/UHF antenna.
This leaves me in the situation to use a Diamond MX-72D
(with a 0.15 db loss) duplexer to connect these two existing
antennas into one antenna port on my 706.

Or I have a choice to buy a single dual band antenna and
do away with the duplexer and an extra antenna.

I am looking at the
Larsen NMO-2/70 dual band 33.5"rated at 2.4/4.0 db gain
and also at the
Diamond NR770HBNMO 2M/70cm 38.2" dual band
3.0/5.0 db gain.

Is Diamond fluffing up their numbers or do they have a
better antenna ? Is the bigger (longer) antenna the better
choice here? Obviously db's should be the determining
factor here.

Curious to know what VHF/UHF antenna people out there
are happy with on their 706 rigs ?

Also had thoughts of just leaving my Kenwood TM-741
dual band radio in the car along with the newer 706 anyhow
but I like the idea of the 706 covering HF plus all the bands
my Kenwood 741 does now. That's another topic for sure.

Thanks for any input on this !
Eddie Bryant
N4UMJ

3971. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 02:47:18 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9143jmpcq8@bashir.peak.org>
Source record: 174772

:It seems Tom has a tremendous zeal for discrediting your plight. (?) Could
:it be that he has a portion of your investment? At any rate, Tom can buy all
:the antennas he wants from Mosely and nobody is going to stop him. Most of
:us, however, are more careful with their money and prefer to do business with
:more reputable businesses, being less daring to lose $$. Thanks for letting
:us know before we learned the same way you did, i.e., "The School of Hard
:Knocks" Respectfully, Stinson

I wouldn't be too quick to jump to conclusions. After all, you have only
one side of the story. It is also interesting to note that there have not
been a bunch of others following up with problems of their own. To me, this
says that it was an isolated incident - regardless of whether it was
reported accurately or not.

Mosely has been in business for half a century or more, and millions of Hams
have purchased their antennas over the years. I personally have used several,
and have always had good service when the rare problem occurred.

--
Bill Nelson (billn@peak.org)

3972. Re: Two VHF antennas on my truck?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 02:50:12 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9143p4pcq9@bashir.peak.org>
Source record: 174771

fahdasd@my-deja.com wrote:

: What if I put two VHF antennas linked to one RG-6 cable and then to one
: connector to my Yaesu, would it help in improving Rx,ing and Tx,ing?

The answer is not simple. It depends on spacing and phasing of the
antennas. It is also possible that you may need other than RG6 coax
when you "co-phase" the antennas, especially on the run from the rig
to the phasing harness.

I believe there is information in the Radio Amateur's Handbook. I know
that there is information in one of the ARRL Antenna Books.

--
Bill Nelson (billn@peak.org)

3973. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 02:57:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <914467pcq10@bashir.peak.org>
Source record: 174770

: I have recently installed a Diamond V2000A vertical for 6,2,and 440.
: I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
: and it made the antenna look like it was resonating out side the Ham
: bands. After several attempts to adjust the 6 meter tunning adjustment
: on the V2000A I finaly gave up and assumed the antenna or coax was
: bad.
:
: I gave Diamond a call and told them of my experience. They asked me
: what I was using to measure the SWR and I told them. I was told
: the MFJ analyzer will not measure the correct resonant freq of
: Diamond antennas and he sugguested I try another meter.
: I tried my bird 43 and sure enough he was right as the antenna resonated
: right in the middle of the bands.
:
: I would like to hear some techincal disscussion on how this could be.
: My only thought so far is the MFJ does not represent a 50 ohm source
: and has altered the resonance of the antenna.

Would you believe that both meters may have been correct?

I assume that, when you used the Bird meter, that you were tuning for minimum VSWR. If so, that probably is not at the resonant frequency of the antenna.

As an example, a 1/4 wave vertical may have an RF resistance of about 30 ohms, when mounted in a given location, at resonance. Now, the MFJ should show that 30 ohms and the resonant frequency. If you use the Bird meter, you need to get to a 50 ohm impedance before it will show a 1:1 VSWR (if it is even possible to get there). This will NOT be at resonance for this particular antenna setup.

--
Bill Nelson (billn@peak.org)

3974. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 03:56:20 UTC
From: 2w8ji@contesting.com
Message-ID: <3a35a115.18874802@news.akorn.net>
Source record: 174773

On Mon, 11 Dec 2000 22:01:06 +0000, "M.J.Powell"
<mike@pickmere.demon.co.uk> wrote:

>The IoM site is intended to cover the whole of the UK as well as some of
>the Continent.
>
>Mike
>--
>M.J.Powell

My 500 mpg carburetor is intended to drive me from Chicago to LA on a
tank of gas in my 4800 pound 1968 428 cu in Lincoln.

This proves the thing works.

73 Tom

3975. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 04:01:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a35a20e.19124277@news.akorn.net>
Source record: 174774

On Mon, 11 Dec 2000 15:55:55 GMT, n1kk@netzero.net wrote:

>I would like to hear some techincal disscussion on how this could be.
>My only thought so far is the MFJ does not represent a 50 ohm source
>and has altered the resonance of the antenna.
>
>Ken N1KK
>n1kk@netzero.net

Hi Ken,

How far was the MFJ analyzer from the antenna?

Did you use the same coax cable and how long was the cable?

Was the antenna when measured with the Bird in the same exact
location?

Some antennas have a lot of common mode current on the feedline, and
give conflicting results because of what is hung on the cable.

There is absolutely no reason, other than an antenna defect or a
defect in the analyzer, that the reading should not be similar or the
same.

73 Tom

3976. Re: Joe Carr silent key verified.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 04:01:58 UTC
From: 2w8ji@contesting.com
Message-ID: <3a35a2fe.19364477@news.akorn.net>
Source record: 174775

On Mon, 11 Dec 2000 16:06:11 -0500, "Peter Bertini"
<commquart@erols.com> wrote:

>Had Harold Ort from Popular Communications verify his passing. Very sad
>news, and
>at too young an age.
>
>Regards
>
>Peter
>
Peter, What was Joes call?
Tom

3977. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 05:15:05 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <tviZ5.312$5d.27746@newshog.newsread.com>
Source record: 174776

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mark Keith" <nm5k@wt.net> wrote in message news:3A347515.3583@wt.net...
> ehsjr@bellatlantic.net wrote:
>
> > So - your installation could possibly have superb lightning protection,
> > and NO protection against a short circuit that places 110 V ac
> > on your antenna lead in.

Much to my dismay and discomfort, I found that a good ground system at the tower/antenna does not protect from the household current getting tied to the tower, or antenna.

I figured that the coax shield would tie the two systems together. Actually a short in the rig (Yaesu FT 101) put 110V AC on the coax braid. (this was before ground fault connectors/detectors)

I discovered the short when I picked up one of the radials that had come loose the previous winter, under the vertical antenna and knelt down to stick the outer end back into the ground. I felt it should be safe as the thing was tied to a ground rod at the base of the antenna.

When my knees touched the ground, that sucker really grabbed.
Only when I rolled backward and my knees cleared the ground was I able to let go.

The system needed a good heavy gauge cable tied between the grounds.

BTW...This was back in the 70s.
The current system is a 90 foot tower with a tribander and TV antenna. The ground system is 8 to 10 ground rods (I've forgotten just how many as they've been in there for close to 12 years or so.) All the rods are tied together with #2 bare coper wire which is cad welded to the rods.

That tower has taken three direct hits over the years.
The rigs are rarely even turned off and I've only lost the front end out of a Kenwood 221 2 meter rig and about 130 feet of 7/8ths Heliax. OK, so the antenna (Diamond 144/440) was more than a bit frazzled on the end and it removed all the electrical tape and plating off the coax connectors up there. There was a repeater hooked to the other end of the Heliax which suffered no damage.

The new tower has been hit at least twice with no damage to anything yet. However those hits didn't shake the whole neighborhood like the ones to the old tower. There was no damage to either tower. The new tower didn't have any ham antennas on it yet.

Roger (K8RI)
>
> Sure, but not in my case. I have no wiring that could be crashed down on
> my coax. Also my power electrical ground is still at a close ground
> potential with the rest. It's a dead short with any ohm meter from the
> box to any point in my ground system. It'll blow the breaker if that
> happened in my case. But again that proves my point, there is no way
> anyone can really judge what the other person is dealing with unless
> they see it all. And nowhere have I suggested anyone should ignore NEC
> specs. I've only stated what I do, and my reasons behind it. It works
> here, but I'm not suggesting he should do the same. With his setup,
> quite the opposite. In my first posts I had no concerns about his rig, I
> just wanted to steer him away from burning his house down. And thats
> mainly the concern of the NEC, so obviously he would want to look into
> that. Where I think the NEC falls short is the protection of a radio
> that is left hooked up in such a case. But, I don't do this, so I don't
> have to worry about it. I don't feel comfortable in a room with a
> connection to lightning, gas tube protected or not. At this point I
> still don't even know if he plans to stay hooked up or not during
> storms. That would have a big bearing on what he needs to do. If he's
> considering arrestors, I'll assume he will be, and he would sure want
> all at the same potential in the shack. Every single wire leading in
> would need to be suppressed to a common bulkhead to be really safe. But
> again in my case, I don't have to worry about any of that. I'm totally
> unhooked from the outside world. The only way I could further improve my
> setup is to add power line protection to the breaker boxes, but I'm too
> cheap. Also I really don't think I need them. Or at least with the past
> track record, I'm willing to take the risk of a big power line hit. That
> would nail me ham shack or not. But it's never happened yet in many
> years. The worst hit I've had power line led was a hit to a streetlight
> pole across the street. I got a spike, but was only enough to blow the
> fuse in my drake r4. Turned it black. But replaced fuse, and was back at
> it. No damage at all. Thats only happened once and was over ten years
> ago. So seems unless the hit was ultra close, most of the nasty stuff is
> damped down by the time it gets here. The pole strike was pretty close.
> Myself, I find lightning fascinating stuff. And it scares the crap out
> of me, when it's popping left and right around here, so I sure don't
> want to make mistakes. When it actually hits you direct , it's really
> pretty quiet, and ultra quick. Sounds like a lightbulb being thrown on
> the ground, with the overhead boom a split second later. Also the
> connection of the strike leader to streamer is above the mast about 150
> ft or so I think. So the nasty bright stuff is overhead a bit assuming
> the mast is acting as a lightning rod. MK
> --
> http://web.wt.net/~nm5k

3978. Re: Larsen or Diamond for 706 rig

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 05:28:06 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A35B766.15CACB6C@oio.net>
Source record: 174777

Eddie,
Just looking at the numbers, I don't think there's
enough difference between the two to make any difference.
'Doc

3979. Wermager K0EOU sloper

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 05:42:25 UTC
From: dcoffey@mindspring.com
Message-ID: <3a35b773.460246459@news.mindspring.com>
Source record: 174778

I'd like to install a Wermager sloper for it's broadbandedness on 80M. The 15th edition of the ARRL Antenna handbook only shows it installed with a tower for the vertical leg. I don't have a tower, so I'd like to install it with a wire, or a group of wires as the vertical leg. I wonder what that will do to the antennas broadbandedness. Also, I wonder how this antenna behaves on other bands, when cut for 80M, but used on 160, as well as higher bands, with a tuner.
The Wermager sloper is essentially a horizontal vee, legs about 54 ft each with 8-10 ft separation between the ends of each leg and a height of 8 ft (very close angle). The apex of this vee is connected to the center conductor of 50 ohm coax at a height of 15 ft. Then there is typically a tower, 35-50ft, with a sloping wire of about 78 ft coming from the top, to within 10 ft of the ground on the low end. This leg is electrically connected to the top of the tower. The braid of the feedline is connected to a tower leg at a height of 15ft. It is said to give 1.4:1 or less across the entire 80M band.
I'd appreciate any info, experiences with the ant, etc.
Thanks,
WA4YYQ Dennis

3980. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 06:56:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A35CC21.E74665EC@dvol.com>
Source record: 174779

Bill wrote:

> Hi ,
>
> I have an old Telex Tribander. A few trap covers are missing. I am thinking
> about using some large shrink tubing to cover the traps. I would like to
> know if this will change the properties of the traps. The old covers never
> actually touched the coils of the traps whereas the shring tubing will.
>
> Any suggeston will be appreciated.

>
I'd be a bit leery about how well conventional shrink tubing would hold up out
in the weather. Maybe one of the flavors of Teflon shrink tubing would be OK
both electrically and mechanically. DuPont has a really good tech support
system, takes some patience as you get tossed from one guru to another but when
you get the right guru on the phone you'll get the right answer. Hit the Web
and get their 800 number.
>

> Thanks,
> Bill
> N4DXR

>
w3rv

3981. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 07:52:48 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A35D950.F5A1A2D1@dvol.com>
Source record: 174780

Richard Clark wrote:

>
> Hi All,
>
> Consider buying not only batteries but memory too!
>
> GrandDad, it needs 64 megs! It's sooo sloooow. :-(

>

As soon as I fix my own "memory problem" maybe I'll pay attention to their lack of memory. Heh.

>
>
> 73's
> Richard Clark, KB7QHC

>
w3rv

3982. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 13:09:03 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <p3$XgCAvNiN6Ew$7@pickmere.demon.co.uk>
Source record: 174792

In article <3a35a115.18874802@news.akorn.net>, Tom W8JI
<2w8ji@contesting.com> writes
>On Mon, 11 Dec 2000 22:01:06 +0000, "M.J.Powell"
><mike@pickmere.demon.co.uk> wrote:
>
>>The IoM site is intended to cover the whole of the UK as well as some of
>>the Continent.
>>
>>Mike
>>--
>>M.J.Powell
>
>My 500 mpg carburetor is intended to drive me from Chicago to LA on a
>tank of gas in my 4800 pound 1968 428 cu in Lincoln.

Doesn't mean anything to me, we use cc's over here!

Mike
--
M.J.Powell

3983. Re: Joe Carr silent key verified.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 13:30:44 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A362884.B46E341D@dvol.com>
Source record: 174781

Tom W8JI wrote:

> Peter, What was Joes call?

>
k4ipv
>

> Tom

3984. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 14:54:00 UTC
From: G0DJA <nospam@thanks.com>
Message-ID: <3a363e03$1_2@news2.vip.uk.com>
Source record: 174782

Dino wrote in message ...
>Just when you thought Dave couldn't make himself out to be more of an ass,
>he says....

And the point of just repeating my message was?

Dave (G0DJA)

3985. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 14:58:59 UTC
From: G0DJA <nospam@thanks.com>
Message-ID: <3a363e04$1_2@news2.vip.uk.com>
Source record: 174783

Dino wrote in message ...
>Dave, your an ass. Do you fly?

To borrow a quote that was made once in the UK House of Commons, It's like being savaged by a dead sheep this.

I wonder why Dino keeps repeating the whole of my message in his posts? I think he's posted one of my messages twice with two different replies.

Which goes to prove the point about why it's no good relying on Usenet Newsgroups for anything that might be needed to be relied upon.

I *do* seem to have upset Dino though.......

Dave (G0DJA)

3986. Re: Joe Carr silent key verified.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 15:19:53 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A364219.61657736@dvol.com>
Source record: 174784

>
From the Universal Radio website:
>
"Joe Carr has been one of the most widely read electronics and
communications writers in the world. He is the author of over 85 books
and 650 articles on such topics as integrated circuits, radio frequency
circuit design, biomedical electronics and radio repair and
restoration."

3987. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 17:24:14 UTC
From: BILL WILSON <w5ikb@satx.rr.net>
Message-ID: <3A365F4A.68BBA24C@satx.rr.net>
Source record: 174785

Hi Bill,

Don't know about Telex, but some beams use the aluminum trap cover as the capacitor to resonate the trap. Better check it out.

73, Bill

Change .net to .com for address

Brian Kelly wrote:

> Bill wrote:
>
> > Hi ,
> >
> > I have an old Telex Tribander. A few trap covers are missing. I am thinking
> > about using some large shrink tubing to cover the traps. I would like to
> > know if this will change the properties of the traps. The old covers never
> > actually touched the coils of the traps whereas the shring tubing will.
> >
> > Any suggeston will be appreciated.
>
> >
> I'd be a bit leery about how well conventional shrink tubing would hold up out
> in the weather. Maybe one of the flavors of Teflon shrink tubing would be OK
> both electrically and mechanically. DuPont has a really good tech support
> system, takes some patience as you get tossed from one guru to another but when
> you get the right guru on the phone you'll get the right answer. Hit the Web
> and get their 800 number.
> >
>
> > Thanks,
> > Bill
> > N4DXR
>
> >
> w3rv

3988. Re: Larsen or Diamond for 706 rig

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 17:47:34 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805F963D8@www.premiersi.com>
Source record: 174786

I went with a Diamond UHV-8 (think that part # is right). I'm happy with
it, knowing up front that I'm compromising no matter what for mobile HF.
The first time I keyed up on 10 meters, I got a call back from Peru - and I
was parked in my garage at the time and had not even fine-tuned the whip!/.

Does very well on 2M, too.

But it is tall - about 4' over the roofline, mounted high on the hatchback
lip of my Explorer.

don

"Eddie Bryant N4UMJ" <N4UMJ@carolina.rr.com> wrote in message
news:WPeZ5.34714$4K4.4972655@typhoon.southeast.rr.com...
> I have an antenna dilemma on my car and the new
> 706 MKIIG I am about to order.
>
> I am considering going with a single 2Meter/440
> antenna on my vehicle to connect up to the new
> 706 MK IIG .
>
> Currently I have two separate antennas.
> A Larsen 5/8 wave 2 meter NMO-150 (3dbd) 49"
> and
> A Larsen 5/8 over 1/2 wave NMO-440 (4.5dbd)31"
> antennas that I have been using on my Kenwood
> Dual band TM-741radio.
>
> As you probably know ,the 706 has a single antenna
> connection for the VHF/UHF antenna.
> This leaves me in the situation to use a Diamond MX-72D
> (with a 0.15 db loss) duplexer to connect these two existing
> antennas into one antenna port on my 706.
>
> Or I have a choice to buy a single dual band antenna and
> do away with the duplexer and an extra antenna.
>
> I am looking at the
> Larsen NMO-2/70 dual band 33.5"rated at 2.4/4.0 db gain
> and also at the
> Diamond NR770HBNMO 2M/70cm 38.2" dual band
> 3.0/5.0 db gain.
>
> Is Diamond fluffing up their numbers or do they have a
> better antenna ? Is the bigger (longer) antenna the better

> choice here? Obviously db's should be the determining
> factor here.
>
> Curious to know what VHF/UHF antenna people out there
> are happy with on their 706 rigs ?
>
> Also had thoughts of just leaving my Kenwood TM-741
> dual band radio in the car along with the newer 706 anyhow
> but I like the idea of the 706 covering HF plus all the bands
> my Kenwood 741 does now. That's another topic for sure.
>
> Thanks for any input on this !
> Eddie Bryant
> N4UMJ
>

3989. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 17:55:52 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805F9696D@www.premiersi.com>
Source record: 174788

Leave 'em right where they are ;-)

The whole question of resonance is a big unknown and may kill any attempts I make. I didn't plan on lugging a big 'ol tuner along, just maybe a length of ladder line to fool around with.

don

"Dick Carroll" <dixie@townsqr.com> wrote in message news:90tst0$2cf$0@208.207.71.163...

> What do you plan to do with the huge steel suspension cables?
>
> Dick

3990. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 17:57:37 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805F96A37@www.premiersi.com>
Source record: 174787

Ooh, I know - string a dipole between 'em. Either way, betcha need some
REALLY GOOD static suppressors.

don

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:90ul46$9bk$1@slb7.atl.mindspring.net...
> Golden Gate Bridge...
>
> What about skyscrapers?
>
> The twin Petronas towers in Malayasia are the world's tallest buildings.
>
> I thought that if one could place transmission lines in the right places,
> one could probably make a close spaced [W8JK style] superdirective 160m
> vertical beam out of those towers.
>
> Might be worth a trip out to Malayasia for the next 160m contest.
>
> -Peter K1PO
>

3991. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 18:26:55 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A366DEF.49967615@dvol.com>
Source record: 174789

BILL WILSON wrote:

> Hi Bill,
>
> Don't know about Telex, but some beams use the aluminum trap cover as the capacitor
> to resonate the trap. Better check it out.

>
Ewww . . that's fact. I assumed that the traps were originally plastic-covered.

>
>
> 73, Bill

>
w3rv

3992. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 18:47:02 UTC
From: stabnoise@yahoo.com
Message-ID: <915rr3rmc1@nnrp1.deja.com>
Source record: 174790

The trap covers are non-metalic material. Thanks for the input.
>

Sent via Deja.com
http://www.deja.com/

3993. Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 19:42:07 UTC
From: jflanders2@home.com
Message-ID: <3a367e48.1741038408@news>
Source record: 174791

I have downloaded a batch of EZNEC antenna description files from web page: "The unofficial Numerical Electromagnetic Code (NEC) Archives"

They are in a binary format of some kind. How can I convert these to a readable ASCII file? I didn't see any kind of utility on the archive page.

Jerry W4UK

3994. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 20:44:15 UTC
From: john_morrow <john_morrow@ntlworld.com>
Message-ID: <e7wZ5.8210$ma1.170171@news2-win.server.ntlworld.com>
Source record: 174793

<paul@p.mooney2.ntlworld.com> wrote in message
news:3a342345.3489217@news.ntlworld.com...
> Do you think there's any chance of heavier than air flight one day, I

It's for the birds!

John Morrow

3995. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 20:46:57 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <9162rv$25m$1@nnrp1.deja.com>
Source record: 174794

I live here in the bay area, and as much as I personally like the idea, the local constables sure won't. The bridge may have a lot of metal, but it's grounded, so you'll have a nice ground plane and that's about it.
You would be better off bringing a dipole up to Mt Tam in Marin (across the GG Bridge from SF).

In article <A8hY5.119$qk3.89987@news1.iquest.net>, kg9qm@nomail.net (don) wrote:
> This is going to sound pretty wierd, but I'm quite serious...
>
> My annual pilgrimage to San Francisco comes up the week of Jan 14th. While
> standing on the Golden Gate last year, I saw the bridge differently - as an
> array of "potential" vertical antennas, just waiting for a transmitter to come
> along.
>
> Well, this year I have a 706MKIIG and am contemplating taking it along.
> Assuming I don't get locked up on some sort of vandalizm charge, what might all
> of you think about the chances of this working?
>
> Figuring out what would be good connection points for ground and the "driven
> element" will require some careful surveying on-site. I assume no one has
> actually tried this, but I'd like to hear if it has. I noticed several
> unpainted galvanized bolts where repairs had been done, which I hope are still
> there.
>
> Thoughts and suggestions are welcome. (Especially if you know where the "blind
> spots" are - regarding the cameras that watch for "jumpers").
>
> One idea was to drop a vertical downward and essentially create a vertical
> dipole, but that seems a bit tricky (harder to conceal) and potentially a
> problem as to the regs on "tossing" anything off the bridge.

>
> don
>
>

Sent via Deja.com
http://www.deja.com/

3996. Re: Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:03:44 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3692B0.77ED2215@IEEE.org>
Source record: 174795

Jerry Flanders wrote:
>
> I have downloaded a batch of EZNEC antenna description files from web
> page: "The unofficial Numerical Electromagnetic Code (NEC) Archives"
>
> They are in a binary format of some kind. How can I convert these to
> a readable ASCII file? I didn't see any kind of utility on the archive
> page.

The EZNEC files are written in a BASIC data format so you have to know
the order and data type of each entry. Please contact Roy, W7EL, for
information.
--
http://www.mindspring.com/~w6rca

3997. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:07:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3693A1.70C21A71@IEEE.org>
Source record: 174797

"Mr. Mister" wrote:
> The bridge may have a lot of metal, but it's grounded,
> so you'll have a nice ground plane and that's about it.

Lots of ham towers are also grounded but that doesn't keep
those hams from gamma feeding their towers and using them
for vertical antennas. I can almost guarantee that between
ground and the top of the supports, there is a 50+jX feedpoint.
--
http://www.mindspring.com/~w6rca

3998. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:14:58 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <9164i3$k08$1@iac5.navix.net>
Source record: 174796

Thank you for the info, I have been using a 2 meter array for years that is all grounded and now I find out it can't work. Please don't tell the antenna, as it thinks it does and I wouldn't want it to find out differently.

"Mr. Mister" <kld68@my-deja.com> wrote in message news:9162rv$25m$1@nnrp1.deja.com...
> I live here in the bay area, and as much as I personally like the idea,
> the local constables sure won't. The bridge may have a lot of metal,
> but it's grounded, so you'll have a nice ground plane and that's about
> it.
> You would be better off bringing a dipole up to Mt Tam in Marin (across
> the GG Bridge from SF).
>

3999. Re: Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:15:38 UTC
From: rwclark@seanet.com
Message-ID: <3ab8950e.4148585029@news.seanet.com>
Source record: 174801

On Tue, 12 Dec 2000 15:03:44 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Jerry Flanders wrote:
>>
>> I have downloaded a batch of EZNEC antenna description files from web
>> page: "The unofficial Numerical Electromagnetic Code (NEC) Archives"
>>
>> They are in a binary format of some kind. How can I convert these to
>> a readable ASCII file? I didn't see any kind of utility on the archive
>> page.
>
>The EZNEC files are written in a BASIC data format so you have to know
>the order and data type of each entry. Please contact Roy, W7EL, for
>information.

Hi Jerry, Cecil,

It would probably be simpler to read the files into the demo version
of EZNEC and observe the details there. The built in limitations for
the free version may impose some problem however - maybe not.

73's
Richard Clark, KB7QHC

4000. ATU Wanted !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:32:30 UTC
From: Eldred <egdv@mjvn.co.za>
Message-ID: <9166rf$g6j$1@ctb-nnrp2.saix.net>
Source record: 174798

Hello everyone.
I'm requiring an ATU ... MFJ-969 or MFJ-941 (must be manually operated), or equivalent components to make one. Any suggestions where I can obtain same would be most appreciated. Please email info to: egdv@mjvn.co.za
Thanks in advance. 73's Eldred ZS1DJ Cape Town / South Africa.

4001. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 21:56:09 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A369F15.EC9C6F92@bellatlantic.net>
Source record: 174799

Roger,

What you describe is precisely why the NEC rules were put in place.
Repeat that experience to other hams, *often*. I can't tell you how
many hams put up antennas without paying attention to (or perhaps
without knowing about) the NEC. I'm glad you weren't badly hurt.

The NEC could care less what happens to your equipment. Protecting
your *equipment* is not its purpose. The purpose of the NEC is the
practical safeguarding of people and property (not equipment) from
hazards that might arise from using electricity. The exact wording is
found in NEC 90-1. The NEC provides for safety ground - as opposed
to RF ground or lightning ground for towers.

It sounds like your lightning grounding has worked well for you!

Roger Halstead wrote:

> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Mark Keith" <nm5k@wt.net> wrote in message news:3A347515.3583@wt.net...
> > ehsjr@bellatlantic.net wrote:
> >
> > > So - your installation could possibly have superb lightning protection,
> > > and NO protection against a short circuit that places 110 V ac
> > > on your antenna lead in.
>
> Much to my dismay and discomfort, I found that a good ground system at the
> tower/antenna does not protect from the household current getting tied to
> the tower, or antenna.
>
> I figured that the coax shield would tie the two systems together. Actually
> a short in the rig (Yaesu FT 101) put 110V AC on the coax braid. (this was
> before ground fault connectors/detectors)
>
> I discovered the short when I picked up one of the radials that had come
> loose the previous winter, under the vertical antenna and knelt down to
> stick the outer end back into the ground. I felt it should be safe as the
> thing was tied to a ground rod at the base of the antenna.
>
> When my knees touched the ground, that sucker really grabbed.
> Only when I rolled backward and my knees cleared the ground was I able to
> let go.
>
> The system needed a good heavy gauge cable tied between the grounds.

4002. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:11:41 UTC
From: dinod@deltanet.com
Message-ID: <xoxZ5.19493$x6.10805599@news2.rdc2.tx.home.com>
Source record: 174800

Nope...I'm not upset...just disappointed in fellow members of the
Amateur Community.

Also, I edit the contents of my replies and speak about them directly.
I do not just copy what you have to say.

73 Dave

Dino

>I *do* seem to have upset Dino though.......
>
>Dave (G0DJA)
>

4003. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:18:03 UTC
From: dinod@deltanet.com
Message-ID: <vuxZ5.19497$x6.10813638@news2.rdc2.tx.home.com>
Source record: 174802

Sorry to hear the problems! I sent two e-mails to Force 12 and got a reply within 6 hours! I would suspect that your problems are the exception and not the rule.

I would endevor to contact them once more for parts! If then you still have problems, then I would say there is a problem.

They have been GREAT to me thus far!

Dino

>Hope you have better luck with Force 12 customer support than I have.
>I bought a Force 12 C-4 in 1996. It's a good antenna, and I like it.
>But I have NEVER been able to get ANY support from Force 12. When I
>got the antenna a couple of the elements appeared to be the wrong
>length. While it was pretty obvious that they needed to be cut, I
>wanted to double check with Force 12 before cutting them. I called,
>and was told by the secretary or receptionist that they were "really
>busy" and I should call back later. Later calls went unreturned. I
>sent a FAX. It went unanswered. I finally cut the tubing to the
>correct length and the antenna went together and worked fine. As I
>said, it's a good antenna.
>
>About a year later I was up the tower doing some work on another
>antenna when I noticed that the U-bolts holding the 10 and 15m
>elements on the Force 12 were rusted. The other U-bolts were fine, so
>I called Force 12 to ask about it. Nobody returned my call. I emailed
>them. No reply. Finally (after a Usenet post asking if anyone else had
>experienced any problems) I got a reply from their east coast rep, and
>he promised to get an answer for me. I never heard anything else.
>According to the rep, Force 12 was going to send some replacement
>U-bolts. I never got them, and never heard anything. One more email
>went unanswered.
>
>They may produce good antennas, but for me, customer support has not
>just been poor, it has been non-existant. And I was always cordial in
>my emails and FAX correspondence with them, never demanding or rude.
>
>I know it can be a difficult market - I spent a number of years
>designing and producing amateur radio products. Margins are typically
>low, customers won't read the manual, stuff gets hooked up
>incorrectly, etc. But there is no excuse when a company ignores a
>customer's phone calls, emails, and FAXes.
>
>Doug Hall, KF4KL

>

4004. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:28:30 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A36A6A1.6D043D0B@bellatlantic.net>
Source record: 174803

Aside from the issue of RF ground or Lightning ground, you must
also bond those electrodes to the house grounding electrode
system, per 1999 National Electrical Code article 250 - 50, with
the proper sized bonding wire as specified in 250-66. There's
also code requirements for how to install and connect it.

David wrote:

> Ok guys, I need some advice (please)....regarding my station grounds.
>
> Here's my setup right now: The base of my tower is located directly
> outside my station (within three feet). I've got eight 8' ground rods
> extending out into the yard from the legs of the tower using #2 bare copper
> wire. I have a large copper bulkhead attached to the side of the house
> (also just outside the shack) where each coax cable and rotor cable attaches
> to I.C.E. lightning protection devices and then the cables run into the
> shack. The bulkhead (with big insulators on the wall) is about a foot
> above the ground. There's also a 2' piece of copper strap used to bond the
> tower base with the "single point" bulkhead. And, there are three
> additional rods connected to the bulkhead spreading out 12' in each
> direction underneath it. All of this is for a bit of lightning protection
> here in south Florida.
>
> From the back of my desk all of my station equipment is attached to a 1 1/2"
> copper strap running directly outside to the same bulkhead for my "RF
> ground" connection.
>
> Is this the correct way to attach my RF ground? Should I be running
> directly to that bulkhead or run it to a couple of independent ground rods?
> If I should be running it to separate ground rods, they would have to be
> located within a foot or less of the existing "lightning" rods because of
> the proximity of the tower. So the question is, do I leave the RF ground
> strap connected to the bulkhead or run it straight into the ground with a
> couple of rods not directly connected to the bulkhead? I want the best RF
> ground connection I can get.
>
> Thanks,
> David, K4ZZR

4005. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:31:52 UTC
From: dinod@deltanet.com
Message-ID: <sHxZ5.19500$x6.10833625@news2.rdc2.tx.home.com>
Source record: 174804

Hey Peter...check this out...

http://www.rohnnet.com/Tall%20Structure.htm

Dino

>Golden Gate Bridge...
>
>What about skyscrapers?
>
>The twin Petronas towers in Malayasia are the world's tallest buildings.
>
>I thought that if one could place transmission lines in the right places,
>one could probably make a close spaced [W8JK style] superdirective 160m
>vertical beam out of those towers.
>
>Might be worth a trip out to Malayasia for the next 160m contest.
>
>-Peter K1PO

4006. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:38:26 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A36A8F5.6078DE20@bellatlantic.net>
Source record: 174805

Excuse me: do you have countersigned, notarized written permission
to use the term "transgronafacator", such usage being that which I may
at some future time decide to license? Expect a visit from council,
on or about the 25th.

Until then, I hope this helps.

Fred Hambrecht wrote:

> Great Cecil! I will be looking forward to the data from your web site. I
> have had a surplus transgronafacator laying around for several years now,
> just waiting for someone to come up with the plasma interface.
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A3419B1.B32E2878@IEEE.org...
> > Fred Hambrecht wrote:
> > > > Be advised that your idea comes dangerously close to my "Thinking about,
> > > > maybe, applying for a patient".
> > >
> > > Your patent is obsolete. I have perfected a superconductive
> > > plasma stream that is lossless for any number of elements. All
> > > you have to do is dial in your frequency, direction, and desired
> > > beamwidth.
> > > --
> > > http://www.mindspring.com/~w6rca

4007. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 22:39:05 UTC
From: dinod@deltanet.com
Message-ID: <dOxZ5.19506$x6.10842146@news2.rdc2.tx.home.com>
Source record: 174806

This is OLD NEWS! As a matter of fact, there is a guy with a VE call
who has actually MODLED this antenna and uploaded it to a third party
web site for all to see! You can't stop the flow of information! It
is now in the public domain! Merry Christmas! :-)

Dino

>hello all:
> I just came up with a new antenna. The CT Flyer(patent pending).
>I was reading some posts the other day and saw one about a bowtie antenna
>for 10 meters to work the contest over the weekend. At the same time I just
>happened to glance over at the Christmas tree in the family room and darn if
>it didn't look a lot like half of a bowtie antenna. I figured if I could
>find a way to get it to load up and use the HO train tracks around the tree
>for a counterpoise I might just have something. Well, I can't divulge all
>the particulars but I got it to work on 10 meters and WOW what a signal it
>puts out. This is proprietary information so I can't spill it all on this
>forum but I did get into the contest with it and boy did I work a lot of
>stations. I can't quite figure out why the were all around the north pole
>and in that general direction. I'll have to do a little more research as it
>seems to be somewhat directional.
> I just wanted to pass this on as I see it as a new breakthrough in antenna
>technology.
> 73's and Happy Holidays
>Larry N0SA
>
>PS: For some unknown reason the signal quality goes up if you have a red
>nosed reindeer close by.
>
>

4008. Grounding Mag Mount - PART TWO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 23:04:44 UTC
From: Paul Bailey <paulb@america.net>
Message-ID: <3A36AF0C.7D2355EB@america.net>
Source record: 174807

OK, Now that I have my mag mount for my HF antenna grounded to my van.
When I use my HF radio it now causes interference on my two meter rig.
This has NEVER been a problem before adding the ground wire from the mag
mount on the HF antenna to the luggage rack.

Any ideas as to why?

How to resolve the problem?

Thanks for the response to my original question.

--
Thank you.

Paul Bailey

****
Your knowledge of the Bible. Is it based on tradition or the Bible?
Here are some questions, their answers might surprise you!
http://www.america.net/~paulb/biblestudy/q1.html
****

4009. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 23:19:49 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <916bs4$n5k$1@iac5.navix.net>
Source record: 174808

As a matter of fact I have a signed transfer of title from Mr. Larson E. Rapp. This is the same secret piece omitted from his original RASER article. It was not released at that time because it was classified by the military. They had plans (and I could be eliminated for telling you this) to enact mind control over the American people. The paperwork I have says that the needs of the military were more closely met by a device called TV. Many of us are still trying to fathom the meaning of these dastardly initials. Got to go I hear the black choppers com.....

<ehsjr@bellatlantic.net> wrote in message
news:3A36A8F5.6078DE20@bellatlantic.net...
> Excuse me: do you have countersigned, notarized written permission
> to use the term "transgronafacator", such usage being that which I may
> at some future time decide to license? Expect a visit from council,
> on or about the 25th.
>
> Until then, I hope this helps.
>
>

4010. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 23:36:29 UTC
From: G0DJA <nospam@thanks.com>
Message-ID: <3a36ba3a_3@news2.vip.uk.com>
Source record: 174810

Dino wrote in message ...
>Nope...I'm not upset...just disappointed in fellow members of the
>Amateur Community.

Dino,

I think you may be mixing me up with someone who gives a damn about what you think of me.

You wouldn't happen to have a brother called Nathan, would you?

Dave (G0DJA)

4011. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-12 23:40:06 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <916d0m$j8b$3@mark.ucdavis.edu>
Source record: 174809
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

You probably can still buy the 100uH choke at Radio Shaft (shack). You
might have to order a quanity larger than the 2 they often keep in stock.

cheers
skipp

: In rec.radio.amateur.antenna Robert Fanfant <fanfant@ix.netcom.com>
: wrote:
: Am building a project out of a Sept 95 QST article (automatic remote antenna
: tuner) requiring extensive RF filtering of every input/output lead. Each PI
: section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF
: choke.

: Can anyone recommend a part number/type and source for the inductors? What
: type of caps would be recommended?

: -rob

4012. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 00:19:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A36C081.C2646EC3@IEEE.org>
Source record: 174812

Fred Hambrecht wrote:
> As a matter of fact I have a signed transfer of title from Mr. Larson E.
> Rapp.

Did he ever get his back-to-back limiters working so he could
use amplitude discrimination instead of frequency discrimination?
--
http://www.mindspring.com/~w6rca

4013. Re: Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 00:24:35 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fnzZ5.162$d5.1221933@news.ntplx.net>
Source record: 174811

Richard Clark <rwclark@seanet.com> wrote:

> >> They are in a binary format of some kind. How can I convert these to
> >> a readable ASCII file? I didn't see any kind of utility on the archive
> >> page.

> It would probably be simpler to read the files into the demo version
> of EZNEC and observe the details there. The built in limitations for
> the free version may impose some problem however - maybe not.

For that matter, I suggest buying a copy of EZNEC. The demo version will let him look at the files, but its limitations really don't let him do much with them. EZNEC is a reasonably priced program and worth every cent, IMHO.

Oh, I would be willing to convert them to NEC for him with my PRO version of EZNEC.

73,
Ed, W1RFI

4014. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 00:34:32 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A36C489.D04BE123@bellatlantic.net>
Source record: 174813
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Mouser, AllElectronics
http://www.mouser.com/
http://www.allelectronics.com/

Robert Fanfant wrote:

> Am building a project out of a Sept 95 QST article (automatic remote antenna
> tuner) requiring extensive RF filtering of every input/output lead. Each PI
> section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF
> choke.
>
> Can anyone recommend a part number/type and source for the inductors? What
> type of caps would be recommended?
>
> -rob

4015. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 01:01:30 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <916hpa$2l2$0@216.39.171.5>
Source record: 174814

On Tue, 12 Dec 2000 18:19:13 -0600, Cecil wrote:
>Fred Hambrecht wrote:
>> As a matter of fact I have a signed transfer of title from Mr. Larson E.
>> Rapp.
>
>Did he ever get his back-to-back limiters working so he could
>use amplitude discrimination instead of frequency discrimination?

It would nice to see him in print again. I also miss the musings of
Hashifisti Scratchi.

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen

4016. Re: Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 01:07:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A36CBC3.8FD6CCC6@eznec.com>
Source record: 174815

Yes, the best method would be to download the EZNEC 3.0 demo from
http://eznec.com. With the demo version, open the file, and you'll be
able to see all the details, as well as a graphical depiction of the
antenna. If you want to save the dimensions and other information in
ASCII format, open the Outputs menu at the top of the Control Center
(main window), then select Show Description. The ASCII display shown
there can be copied, saved, or printed.

You should be able to view any EZNEC file with the demo version. It'll
just refuse to do any calculations if there are more than 20 segments.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Tue, 12 Dec 2000 15:03:44 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Jerry Flanders wrote:
> >>
> >> I have downloaded a batch of EZNEC antenna description files from web
> >> page: "The unofficial Numerical Electromagnetic Code (NEC) Archives"
> >>
> >> They are in a binary format of some kind. How can I convert these to
> >> a readable ASCII file? I didn't see any kind of utility on the archive
> >> page.
> >
> >The EZNEC files are written in a BASIC data format so you have to know
> >the order and data type of each entry. Please contact Roy, W7EL, for
> >information.
>
> Hi Jerry, Cecil,
>
> It would probably be simpler to read the files into the demo version
> of EZNEC and observe the details there. The built in limitations for
> the free version may impose some problem however - maybe not.
>
> 73's
> Richard Clark, KB7QHC

4017. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 02:43:41 UTC
From: k1bqt@aol.com
Message-ID: <20001212214341.20858.00005141@ng-fc1.aol.com>
Source record: 174816

There are patents existing on very short-range induction-based communication links precisely because they DON'T radiate EMR and thus explicitly exclude communication over distance. That might be food for thought when considering the validity (or invalidity) of CFA technology.

Rick K1BQT

4018. QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 03:10:15 UTC
From: jason_hsu@my-deja.com
Message-ID: <916pak$l2k$1@nnrp1.deja.com>
Source record: 174817
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

How small can a ground plane or radial system be and still be modestly effective in providing the "missing" half of a vertical monopole antenna? Has anyone here had experience with this? I am considering buying a Texas Bugcatcher or MFJ-1621, and I cannot bite the bullet until I can resolve this sticking point.

My questions:
1. How can a Texas Bugcatcher antenna be effective at 80m as a MOBILE antenna when 1/4 of a wavelength is 65 feet? Only semis are this LONG. Even the giant station wagons and land yachts of the early 1970s are barely 20 feet long (7.6% of 80m). NO vehicle is even close to being this wide.
2. How can a mobile antenna be effective if it is not mounted in the middle of the roof or trunk? Doesn't this mean that the antenna has less of a ground plane to work with?
3. Can I provide a ground plane with a few sheets of metal or wire screens? Has anyone tried this with a vertical antenna?
4. If inductive/capacitive loading, special coils, or helicity can allow vertical antennas to retain their efficiency at shorter heights (albeit at the expense of bandwidth), can these same techniques apply for radials as well?
5. How can people work 160m when even 1/4 of a wavelength is 130 feet? I know better than to think I can work 160m, but this would give me clues on how to work 10m-40m.
6. How can a tripod work as a radial system or ground plane for an Outbacker antenna? Isn't the tripod much too short?

Some signs of hope:
1. I read in the ARRL books _Vertical Antenna Classics_ (page 104-107) and _The ARRL Antenna Book_ that respectable performance can be achieved with radials as short as 1/16 of a wavelength. On the 40m band, this is barely 8 feet.
2. I read in _The ARRL Antenna Book_ (page 6-26) that some hams have reported good results when using helical radials. This would make HF operating possible for indoor antennas.

NOTE 1: My ability to operate HF from a crummy QTH (ground floor apartment with NO bushes or trees available to hide anything) is at stake.

NOTE 2: The future of ham radio is also at stake. If I can operate 10m, 12m, 15m, 17m, 20m, 30m, and 40m in the face of my bad QTH, I can easily recruit and even elmer new hams.

NOTE 3: No, I don't expect to win contests, bust pile-ups, or earn my
WAS with lightning speed.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

4019. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 03:36:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A36EEDA.D92894@IEEE.org>
Source record: 174719
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:
> 1. How can a Texas Bugcatcher antenna be effective at 80m as a MOBILE
> antenna when 1/4 of a wavelength is 65 feet?

The vehicle and the antenna become an antenna system. The antenna coil
makes the antenna appear longer than it really is. The vehicle is a
fat element. The antenna system is somewhat off-center fed.

> 2. How can a mobile antenna be effective if it is not mounted in the
> middle of the roof or trunk?

Consider a dipole with one leg parallel to the ground. The leg parallel
to the ground is the vehicle. On the higher bands considerable gain
can be had in one direction with a bumper mounted mobile antenna. A
normal vehicle is about 1/4WL on 17m. A rear bumper mounted 17m mobile
antenna exhibits some gain toward the front of the vehicle.

> 3. Can I provide a ground plane with a few sheets of metal or wire
> screens? Has anyone tried this with a vertical antenna?

Bury an old vehicle? Seriously, whatever ground plane you come up
with will be improved by at least one resonant counterpoise. When
camping, I sometimes attach a resonant counterpoise to my pickup.

> 4. If inductive/capacitive loading, special coils, or helicity can
> allow vertical antennas to retain their efficiency at shorter heights
> (albeit at the expense of bandwidth), can these same techniques apply
> for radials as well?

The answer is yes but loading does NOT retain efficiency. Shortened
antennas are simply less efficient than full size antennas.

> 5. How can people work 160m when even 1/4 of a wavelength is 130 feet?

The longer the wavelength the less the efficiency of a mobile antenna.
A 160m mobile antenna may be less than 1% efficient while a 10m mobile
antenna may be 75% efficient.

> 6. How can a tripod work as a radial system or ground plane for an
> Outbacker antenna? Isn't the tripod much too short?

Yes it is and it doesn't work worth a darn especially on the lower bands.

> 1. I read in the ARRL books _Vertical Antenna Classics_ (page 104-107)
> and _The ARRL Antenna Book_ that respectable performance can be
> achieved with radials as short as 1/16 of a wavelength. On the 40m
> band, this is barely 8 feet.

This is especially true of buried radials.

> NOTE 1: My ability to operate HF from a crummy QTH (ground floor
> apartment with NO bushes or trees available to hide anything) is at
> stake.

Bury the radials at night?
--
http://www.mindspring.com/~w6rca

4020. KLM 2M-14C Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 03:42:13 UTC
From: johnl84238@aol.com
Message-ID: <20001212224213.21312.00004371@ng-fd1.aol.com>
Source record: 174818

I have a KLM 2m 14C circular polarized yagi I am trying to refurbish to get
going
for AO40 operations....HOWEVER, all the 3/16" solid elements have been damaged
beyond repair......the boom , and driven elements are intact. I also
think KLM has gone out of business. Does anyone know where I can get
replacement elements for the KLM 2m 14C yagi?????? Any help will be
appreciated.
Thanks,
John / WA5DGH

4021. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 03:47:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A36F16A.F73@wt.net>
Source record: 174720

Rick Littlefield wrote:
>
> >One antenna NOT mentioned is an Eggbeater ot Texas Potatoe Masher.
> Now I know these antennas have a horizontal pattern at the horizon...but a
> circular patter overhead (30+ degrees?). Would this be an option?<
>
> Why install an antenna with cross-polarization losses that could run as high as
> 20 dB over the path to the aircraft's vertical radiator? According to at least
> one author, a lightbulb might work as well!
>
> Rick K1BQT

There's nothing to stop a person from feeding the eggbeater vertically
though. Easily done. Just feed from the side instead of the bottom. It
should work fine for fm stuff. Also to the orignal poster: I'd just
stick up a 1/4 wl GP as a start. It will do ok for average use. Easier
to set up than the eggbearer. The eggbeater will need twin crossed loops
and a phasing line. The eggbeater does have a real omnidirectional
pattern, but so does the GP for normal uses. You can make a GP with a
so-239 and 5 pieces of stiff wire. Cheap and easy. MK
--
http://web.wt.net/~nm5k

4022. Help - Identify the model of Hy-Gain HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 04:14:04 UTC
From: Raj Narayan <raj_narayan@satellite.bigpond.com>
Message-ID: <KzCZ5.157697$e5.113517@newsfeeds.bigpond.com>
Source record: 174721

Hi,
Can someone please help me identify the model of a Hy-Gain Multiband HF Vertical Antenna. I have just narrowed it down to Model 18V or DX88. The vertical is a 80-10M and have the following markings on the black cans (Traps, I guess):

- 80 40 M ASSY
878532 HY-GAIN 1991

- 10 12 15 M ASSY
878204 HY-GAIN 1991

- 30 M ASSY
878536 HY-GAIN 1991

- 17 20 M ASSY
878202 HY-GAIN 1991

Any help identifying the model (and, if possible, an electronic copy of the manual for reassembling) will be greatly appreciated.

73's Raj

4023. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 04:17:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A36F849.4CD5@wt.net>
Source record: 174722

ARDUJENSKI wrote:
>
> Dino,
> LB CEBIK on his website has two articles on the T2FD design and basically
> confirms your experience(s) (http://www.cebik.com/radio.html). Although there
> is a power loss say of 75% or more on 160m do you think that the problem on
> 160m could be it is a cloud burner at that height and good for mostly local
> contacts (300-500 miles). And unless the conditions are right for a vertical
> bounce on 160m there may not be much performance? Reason I bring that up is I
> have run a 66 ft endfed wire at 10 ft and worked out 800+ miles SSB on 1-2
> watts using a QRP+ rig but only when conditions are right. I am sure the
> Effective Radiated Power is very very low for this arrangement. If you check
> out http://www.spacew.com/www/fof2.html it will give you Near-Real-Time
> F2-Layer Critical Frequency Map for checking this out. I am not saying that the
> BWD is an efficient antenna on 160m but can be effective when used within its
> constraints. If you look at most 160m antennas recommended they typically are
> capacity hat type verticals anyways not horizontal dipoles. These shortended
> 160m verticals generally fall in teh 25% or less for efficiency from my
> readings. (Just my $00.02--smile)
> Alan KB7MBI in Woodinville, WA

It can make a difference. I have a Z dipole at 42 ft I've been using for
a couple of years. It's good close in out to maybe 500 miles, but pretty
lousy far off. I also recently put up a inv L to try to get a little
more vertical operation. I can tell a fairly good difference on most far
off stations. Sometimes up to 2 s units.
"no particular db difference implied". Also listening to most BC
stations I see the same. I may convert the L to a T later to try to cut
a little more of the horizontal radiation. But I do find the dipole is
good close in , say around the state. About the same type thing as 75m,
except my 160 ant half the height in wl so even more of a burner. More
ground loss too unfortunatly...You are doing pretty good to get out with
2 watts. 160 can be quirky. Sometimes I hit people 20 over 9, and the
next guy can't hardly hear me at all, even though I may hear him fine.
You never know. Depends on what they are listening with too. I only run
100w on 160 so not much juice, but far easier than 2 watts. And both my
antennas full size. So you couldn't be doing too bad. If I were to run a
B/W on 160, I'd short the thing together and run as a vertical most
likely. MK
--
http://web.wt.net/~nm5k

4024. Re: Converting EZNEC files to ASCII files?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 04:27:24 UTC
From: jflanders2@home.com
Message-ID: <3a36f9bd.1772648088@news>
Source record: 174723

Thanks, Roy. That works.

Jerry W4UK

On Tue, 12 Dec 2000 17:07:15 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Yes, the best method would be to download the EZNEC 3.0 demo from
>http://eznec.com. With the demo version, open the file, and you'll be
>able to see all the details, as well as a graphical depiction of the
>antenna. If you want to save the dimensions and other information in
>ASCII format, open the Outputs menu at the top of the Control Center
>(main window), then select Show Description. The ASCII display shown
>there can be copied, saved, or printed.SNIP

4025. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 04:34:12 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A36FC44.22B06B21@oio.net>
Source record: 174724

"M.J.Powell"
AU = Australia. Check out the web page for the CFA's,
I don't have the URL.
'Doc

4026. Re: Isopole 144 problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 05:04:41 UTC
From: Tom DeWitt <tom@dewitt.com>
Message-ID: <3A370369.5B782365@dewitt.com>
Source record: 174725

Yea!! I have this situation and I can't believe that AEA will not sell a replacement
top section!!

Won't ever buy any of their stuff again!!

Tom - W5TD

thompson@mindspring.com wrote:

> I have an old AEA ISOPOLE 144 antenna on top of my tower. Last summer I
> noticed a piece of aluminum with part of a ceramic
> cap was laying in the yard. I looked at my KT34XA and 2 el Cushcraft 40 but
> did not see anything amiss. Today I noticed that the top
> piece of the Isopole was what was missing. As I understand it the ISOPOLE
> is co-linear dipoles fed at the middle and the cones are
> decoupling/matching devices. I pulled out my trusty MFJ 259B and looked
> at the antenna (146.5 mhz was 1:1 with 50 ohms) so guess I lost the top
> dipole (its at 96' so won't get fixed until I crank down the tower next
> spring. All I will miss is the omni gain (If a co-linear its only 2 dbd
> anyway).
>
> Anyone else have this situation.
>
> 73 Dave K4JRB
> thompson@mindspring.com or k4jrb@juno.com

4027. Re: Grounding Mag Mount - PART TWO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 05:37:12 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <5n2e3tgvvpnkan4eub8j3ojm8mt1hf388h@4ax.com>
Source record: 174730

On Tue, 12 Dec 2000 18:04:44 -0500, Paul Bailey <paulb@america.net> wrote:

>How to resolve the problem?

What have you tried so far? Ferrites on the 2m power and coax?

w7ti

4028. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 05:43:55 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <4t2e3tsq5rfts7c0ac3u6uj572dkms1au2@4ax.com>
Source record: 174731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

On Wed, 13 Dec 2000 03:10:15 GMT, jason_hsu@my-deja.com wrote:

>1. How can a Texas Bugcatcher antenna be effective at 80m as a MOBILE
>antenna when 1/4 of a wavelength is 65 feet? Only semis are this
>LONG. Even the giant station wagons and land yachts of the early 1970s
>are barely 20 feet long (7.6% of 80m). NO vehicle is even close to
>being this wide.

Your car body has a significant capacitance to ground, which becomes part of the antenna system. Trust me, it works great. Your problems if any, will be with the whip part, not the ground part. Just put up a well built, resonant, impedance matched whip and you'll get out amazingly well. Even lousy, lossy antennas work out hundreds and thousands of miles. Try it, you'll like it!

w7ti

4029. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 05:51:38 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A370E5F.4DC4F0E1@att.net>
Source record: 174726
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

The relatively enormous capacity between a vehicle frame and body
couples the ground return of a mobile antenna to actual earth ground,
and there is where the antenna return current is collected. At lower HF
frequencies, the vehicle (even a large motor home) provides little of
the radial structure ("ground plane"). At 10 meters a large vehicle can
be effective as a ground plane by itself, although there is still the
large vehicle/earth capacitiance in place with even lower reactance than
at lower frequencies.

I feel that this frequently overlooked aspect of mobile antenna
operation answers a lot of questions.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

jason_hsu@my-deja.com wrote:
>
> How small can a ground plane or radial system be and still be modestly
> effective in providing the "missing" half of a vertical monopole
> antenna? Has anyone here had experience with this? I am considering
> buying a Texas Bugcatcher or MFJ-1621, and I cannot bite the bullet
> until I can resolve this sticking point.
>
> My questions:
> 1. How can a Texas Bugcatcher antenna be effective at 80m as a MOBILE
> antenna when 1/4 of a wavelength is 65 feet? Only semis are this
> LONG. Even the giant station wagons and land yachts of the early 1970s
> are barely 20 feet long (7.6% of 80m). NO vehicle is even close to
> being this wide.
> 2. How can a mobile antenna be effective if it is not mounted in the
> middle of the roof or trunk? Doesn't this mean that the antenna has
> less of a ground plane to work with?
> 3. Can I provide a ground plane with a few sheets of metal or wire
> screens? Has anyone tried this with a vertical antenna?
> 4. If inductive/capacitive loading, special coils, or helicity can
> allow vertical antennas to retain their efficiency at shorter heights
> (albeit at the expense of bandwidth), can these same techniques apply
> for radials as well?
> 5. How can people work 160m when even 1/4 of a wavelength is 130 feet?
> I know better than to think I can work 160m, but this would give me
> clues on how to work 10m-40m.
> 6. How can a tripod work as a radial system or ground plane for an

> Outbacker antenna? Isn't the tripod much too short?
>
> Some signs of hope:
> 1. I read in the ARRL books _Vertical Antenna Classics_ (page 104-107)
> and _The ARRL Antenna Book_ that respectable performance can be
> achieved with radials as short as 1/16 of a wavelength. On the 40m
> band, this is barely 8 feet.
> 2. I read in _The ARRL Antenna Book_ (page 6-26) that some hams have
> reported good results when using helical radials. This would make HF
> operating possible for indoor antennas.
>
> NOTE 1: My ability to operate HF from a crummy QTH (ground floor
> apartment with NO bushes or trees available to hide anything) is at
> stake.
>
> NOTE 2: The future of ham radio is also at stake. If I can operate
> 10m, 12m, 15m, 17m, 20m, 30m, and 40m in the face of my bad QTH, I can
> easily recruit and even elmer new hams.
>
> NOTE 3: No, I don't expect to win contests, bust pile-ups, or earn my
> WAS with lightning speed.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/

4030. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 05:52:45 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <9172r8$6ve$1@bob.news.rcn.net>
Source record: 174727

What is this all about???

An antenna evaluation done a year ago now is
dredged up by you at this time to get some attention?

I suspect this is another TROLL by you.....to
get some attention....well...you will.

You are obviously mentally sick and are in severe
need of some professional help!!

You accuse me of lying. Please provide any proof.
If not, I WILL sue you unless you IMMEDIATELY provide
a retraction. Don't FUCK with me...I MEAN it.

The fractal quad was NOT better than my short yagi...

Why do you reduce scientific endevors to a personal level if
the results don't agree with your desires???

You even called me on the phone after I published my results here.
Remember that? I saved the recording on my answering machine
when you called me.!!! So....fracky...do you want to try and
dispute it? I will post is as .wav file if you do. Also, it WILL be part
of my
evidence in the suit. Get your lawyers ready....What is your net worth?

This effort of your's will be forwarded to the appropriate individuals.

hope this helps...
with all best regards,
Chuck K1KW

4031. Fractenna - AKA Nathan Cohen is a LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 06:13:48 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <91742m$d2v$1@bob.news.rcn.net>
Source record: 174728

The below was written by NATHAN COHEN in a thread
you will find below in this newsgroup:

>Mr. O'Neal is caught in a lie.

>Readers of this NG will recall as a matter of FACT that O'Neal stated that
the
>fractal quad he built was superior. This -3dB to that Yagi of the same size
>would require a very small 2 element Yagi with 6 dB gain!

>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>publish them in a magazine or journal. You will not ever manage to undo
this
>lie of yours.

>Nathan Cohen, Ph.D.

Chuck O'Neal, K1KW (me) responds as follows, (most confused by this sudden
attack!!)

What is this all about???

Mr Nathan Cohen:
An antenna evaluation done a year ago now is
dredged up by you at this time to get some attention?

You accuse me of lying. Please provide any proof.
If not, I WILL sue you unless you IMMEDIATELY provide
a retraction. Don't FUCK with me...I MEAN it.

The fractal quad was NOT better than my short yagi...

Why do you reduce scientific endevors to a personal level if
the results don't agree with your desires???

You called me on the phone after I published my results here.
Remember that? I saved the recording on my answering machine
when you called!!! I have just listened to that recording.
I clearly stated that the results of my test were close,
and that the fractal 2 E array that I compared to my same sized
loaded yagi array was equal AT best! In some cases the yagi
was up to 3 dB better!!

So....fracky...do you want to try and dispute it? I will post it
as .wav file if you do. Also, it WILL be part of my evidence
in the suit. Get your lawyers ready....What is your net worth?

This effort of your's will be forwarded to the appropriate individuals.

hope this helps...
with all best regards,
Chuck K1KW

4032. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 06:32:05 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <917555gio6@bashir.peak.org>
Source record: 174729

David <k4zzrNONSPAM@gate.net> schreef in berichtnieuws
:>
:> From the back of my desk all of my station equipment is attached to a 1
: 1/2"
:> copper strap running directly outside to the same bulkhead for my "RF
:> ground" connection.
:>
:> Is this the correct way to attach my RF ground? Should I be running
:> directly to that bulkhead or run it to a couple of independent ground
: rods?

It should be running to the bulkhead. It appears that you are using it
for your common tie point.

Separate ground rods would mean there is some resistance between your
equipment grounds and the tower/bulkhead ground - not desireable.

--
Bill Nelson (billn@peak.org)

4033. Re: Transmit Base Antenna for Aircraft?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 08:25:35 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <thce3tgij32t7qdg9h0thoacjb94r2579v@4ax.com>
Source record: 174732

"G0DJA" <nospam@thanks.com>
shared these priceless pearls of wisdom:

->
->Dino wrote in message ...
->>Nope...I'm not upset...just disappointed in fellow members of the
->>Amateur Community.
-
->I think you may be mixing me up with someone who gives a damn about what you
->think of me.

Jesus Christ, let it drop. Let it frigging drop. Either post something about airplane antennas or go away.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4034. Re: Fractenna - AKA Nathan Cohen is a LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 12:55:58 UTC
From: fractenna@aol.com
Message-ID: <20001213075558.22169.00005017@ng-da1.aol.com>
Source record: 174733

>Subject: Fractenna - AKA Nathan Cohen is a LIAR!!
>From: "Chuck O'Neal" coneal@ultranet.com
>Date: 12/13/00 1:13 AM Eastern Standard Time
>Message-id: <91742m$d2v$1@bob.news.rcn.net>
>
>The below was written by NATHAN COHEN in a thread
>you will find below in this newsgroup:
>
>>Mr. O'Neal is caught in a lie.
>
>>Readers of this NG will recall as a matter of FACT that O'Neal stated that
>the
>>fractal quad he built was superior. This -3dB to that Yagi of the same size
>>would require a very small 2 element Yagi with 6 dB gain!
>
>>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>>publish them in a magazine or journal. You will not ever manage to undo
>this
>>lie of yours.
>
>>Nathan Cohen, Ph.D.
>
>
>Chuck O'Neal, K1KW (me) responds as follows, (most confused by this sudden
>attack!!)
>
>
>What is this all about???
>
>Mr Nathan Cohen:
>An antenna evaluation done a year ago now is
>dredged up by you at this time to get some attention?
>
>You accuse me of lying. Please provide any proof.
>If not, I WILL sue you unless you IMMEDIATELY provide
>a retraction. Don't FUCK with me...I MEAN it.
>
>The fractal quad was NOT better than my short yagi...
>
>Why do you reduce scientific endevors to a personal level if
>the results don't agree with your desires???
>
>You called me on the phone after I published my results here.
>Remember that? I saved the recording on my answering machine

>when you called!!! I have just listened to that recording.
>I clearly stated that the results of my test were close,
>and that the fractal 2 E array that I compared to my same sized
>loaded yagi array was equal AT best! In some cases the yagi
>was up to 3 dB better!!
>
>So....fracky...do you want to try and dispute it? I will post it
>as .wav file if you do. Also, it WILL be part of my evidence
>in the suit. Get your lawyers ready....What is your net worth?
>
>This effort of your's will be forwarded to the appropriate individuals.
>
>hope this helps...
>with all best regards,
>Chuck K1KW
>

Actually Chuck, it does help.

Please proceed with consulting your attorney and your suit. I will continue to keep the readers informed.

Your statement is mendacious. To clarify, it is in direct contradiction to your statement of two years ago.

Under no circumstance will I apologize for being truthful.

Here is my address for your attorney. All mail must be sent registered.:

2 Ledgewood Place
Belmont MA 02478.

I hope that this will end the last vestiges of personal attack and jealousy that you and others have expresed here on this NG. Getting an attorney and reviewing your PUBLIC statements is a very positive move in keeping this NG sane--as we have seen in recent weeks (for a change).

I hope that your irrational response--quoted above--- also provides the public with a sufficient calibration for your other statements.

Nathan Cohen, Ph.D.

4035. Re: Grounding Mag Mount - PART TWO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 13:03:28 UTC
From: Paul Bailey <paulb@america.net>
Message-ID: <3A3773A0.BFD67C77@america.net>
Source record: 174735

I have tried NOTHING, This has been a problem for only a few days since grounding my HF mag mount.

Should I try to figure out if it is comming from the antenna or power wires?

--
Thank you.

Paul Bailey

****
Your knowledge of the Bible. Is it based on tradition or the Bible?
Here are some questions, their answers might surprise you!
http://www.america.net/~paulb/biblestudy/q1.html
****

4036. 10M Contest and Fractal Quad Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 13:07:08 UTC
From: fractenna@aol.com
Message-ID: <20001213080708.22169.00005021@ng-da1.aol.com>
Source record: 174734

I had a wonderful time with the 10M fractal quad yagi this past weekend! I am using hand logs so there is a bit more work in duping and checking. But my tentative score is over 1500 QSO's and about 125 multipliers. That puts me at approximately 375,000 points for SO SSB LP.

There is a very good chance I 'made the box', based on reported claimed scores on the 3830 list.

Unfortunately K1KW and Yuri didn't take on my constructive challenge. I stated that I would have no problem beating them. I think my point is made though : at this time there is a good chance I came in second in the country in this category(after N4OX).

I am disappointed that K1KW now is pursuing a lawsuit and acting publicly in an embarassing fashion. All I can say is that I tried to get him to focus on something constructive by challenging him in the contest.

The fractal quad yagi can be found on the ham page of:

http://www.fractenna.com

In coming weeks, this and other hams stuff will be moved to a new URL, which I will apprise of shortly.

Best to all,

73
Chip N1IR

4037. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 13:36:43 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <a4LZ5.1621$0k3.6160@news.siol.net>
Source record: 174736

Hello Tom,

My statement about Cushcraft non acceptance of RF Bridges, aka MFJ Autek, AEA for SWR measurements, could be checked on their site in technical support branch-manuals. Manual for R6000 states this but not the manuals of R7000, R7 and R8.
Best regards,

Nermin S58DX

4038. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 13:41:40 UTC
From: jason_hsu@my-deja.com
Message-ID: <917uaj$gr4$1@nnrp1.deja.com>
Source record: 174737
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

In article <3A36EEDA.D92894@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> jason_hsu@my-deja.com wrote:
> > 1. How can a Texas Bugcatcher antenna be effective at 80m as a
MOBILE
> > antenna when 1/4 of a wavelength is 65 feet?
>
> The vehicle and the antenna become an antenna system. The antenna coil
> makes the antenna appear longer than it really is. The vehicle is a
> fat element. The antenna system is somewhat off-center fed.
>
But isn't the ground plane too small?
>
> The answer is yes but loading does NOT retain efficiency. Shortened
> antennas are simply less efficient than full size antennas.
>
> > NOTE 1: My ability to operate HF from a crummy QTH (ground floor
> > apartment with NO bushes or trees available to hide anything) is at
> > stake.
>
> Bury the radials at night?

Do you seriously think apartment dwellers can try this? Do you know
anyone who tried this at an apartment?
--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

4039. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 14:24:25 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <9180sdfrg1@iac5.navix.net>
Source record: 174738

Not politically correct by far!

"Bob Nielsen" <nielsen@WashingtonStateResident.oz.net> wrote in message
news:916hpa$2l2$0@216.39.171.5...
> On Tue, 12 Dec 2000 18:19:13 -0600, Cecil wrote:
> >Fred Hambrecht wrote:
> >> As a matter of fact I have a signed transfer of title from Mr. Larson
E.
> >> Rapp.
> >
> >Did he ever get his back-to-back limiters working so he could
> >use amplitude discrimination instead of frequency discrimination?
>
> It would nice to see him in print again. I also miss the musings of
> Hashifisti Scratchi.
>
> --
> Bob Nielsen, N7XY nielsen@oz.net
> Bainbridge Island, WA http://www.oz.net/~nielsen
>

4040. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 14:50:32 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <Id$A9EA4y4N6Ew51@pickmere.demon.co.uk>
Source record: 174765

In article <3A36FC44.22B06B21@oio.net>, 'Doc <w5lz@oio.net> writes
>
>
>"M.J.Powell"
> AU = Australia. Check out the web page for the CFA's,
>I don't have the URL.
> 'Doc

Thank you!

Mike
--
M.J.Powell

4041. Re: Fractenna - AKA Nathan Cohen is a LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 15:15:45 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <rkMZ5.10804$pH1.497745@nntp1.onemain.com>
Source record: 174739

Ah shit, here we go again!!!! Filters ON!!!!!!

--
RttyMan

"Fractenna" <fractenna@aol.com> wrote in message
news:20001213075558.22169.00005017@ng-da1.aol.com...
> >Subject: Fractenna - AKA Nathan Cohen is a LIAR!!
> >From: "Chuck O'Neal" coneal@ultranet.com
> >Date: 12/13/00 1:13 AM Eastern Standard Time
> >Message-id: <91742m$d2v$1@bob.news.rcn.net>
> >
> >The below was written by NATHAN COHEN in a thread
> >you will find below in this newsgroup:
> >
> >>Mr. O'Neal is caught in a lie.
> >
> >>Readers of this NG will recall as a matter of FACT that O'Neal stated
that
> >the
> >>fractal quad he built was superior. This -3dB to that Yagi of the same
size
> >>would require a very small 2 element Yagi with 6 dB gain!
> >
> >>mR o'nEAL: If you have data that shows my measurements to be wrong, then
> >>publish them in a magazine or journal. You will not ever manage to undo
> >this
> >>lie of yours.
> >
> >>Nathan Cohen, Ph.D.
> >
> >
> >Chuck O'Neal, K1KW (me) responds as follows, (most confused by this
sudden
> >attack!!)
> >
> >
> >What is this all about???
> >
> >Mr Nathan Cohen:
> >An antenna evaluation done a year ago now is
> >dredged up by you at this time to get some attention?
> >
> >You accuse me of lying. Please provide any proof.
> >If not, I WILL sue you unless you IMMEDIATELY provide

> >a retraction. Don't FUCK with me...I MEAN it.
> >
> >The fractal quad was NOT better than my short yagi...
> >
> >Why do you reduce scientific endevors to a personal level if
> >the results don't agree with your desires???
> >
> >You called me on the phone after I published my results here.
> >Remember that? I saved the recording on my answering machine
> >when you called!!! I have just listened to that recording.
> >I clearly stated that the results of my test were close,
> >and that the fractal 2 E array that I compared to my same sized
> >loaded yagi array was equal AT best! In some cases the yagi
> >was up to 3 dB better!!
> >
> >So....fracky...do you want to try and dispute it? I will post it
> >as .wav file if you do. Also, it WILL be part of my evidence
> >in the suit. Get your lawyers ready....What is your net worth?
> >
> >This effort of your's will be forwarded to the appropriate individuals.
> >
> >hope this helps...
> >with all best regards,
> >Chuck K1KW
> >
>
>
> Actually Chuck, it does help.
>
> Please proceed with consulting your attorney and your suit. I will
continue to
> keep the readers informed.
>
> Your statement is mendacious. To clarify, it is in direct contradiction to
your
> statement of two years ago.
>
> Under no circumstance will I apologize for being truthful.
>
> Here is my address for your attorney. All mail must be sent registered.:
>
> 2 Ledgewood Place
> Belmont MA 02478.
>
> I hope that this will end the last vestiges of personal attack and
jealousy
> that you and others have expresed here on this NG. Getting an attorney and
> reviewing your PUBLIC statements is a very positive move in keeping this
NG
> sane--as we have seen in recent weeks (for a change).

>
> I hope that your irrational response--quoted above--- also provides the
public
> with a sufficient calibration for your other statements.
>
> Nathan Cohen, Ph.D.
>
>

4042. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 15:40:45 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A37987D.6703@wt.net>
Source record: 174740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:

> 4. If inductive/capacitive loading, special coils, or helicity can
> allow vertical antennas to retain their efficiency at shorter heights
> (albeit at the expense of bandwidth), can these same techniques apply
> for radials as well?

yes, if elevated. If buried, there is no need to do this. One trick I've
been trying lately on 160 is to use radials that don't touch the earth
but are supported off the ground a couple of feet. I have two full size
160 radials layed out in this manner in addition to my other
grounding.Also a few shorter radials. Seems to do ok for the small
amount I have out. I'm also tied into everything else grounded around
here. Even a chain link fence on the side of the yard. I'm using two
antennas on 160 now, a Z dipole, and an inverted L. I was on last night,
and as is usual close in my dipole almost always wins. But if a far off
guy comes in this can change fast. A guy in Wichita KS came on last
night while I was talking to a guy about 80 miles east of here. Of
course to him, the dipole better, as is straight up and back down, but
the guy in KS gave my inv L about a 6-8 db advantage. He was far enough
that the increased lower angles that you get from the L come into play.
The dipole is horrible at low angles. So even though in theory the
dipole is more efficient than my L, it doesn't always matter. It matters
more what angle you need and what the antenna does at that certain
angle. This is why many times a mobile can do real well on the low
bands, even if low efficiency. What it does do is where you want it. Or
at night anyway. This same factor is why a mobile is so lousy at high
angle stuff in the early evenings. It's not radiating at the angle you
want for that time of day.
> 5. How can people work 160m when even 1/4 of a wavelength is 130 feet?
> I know better than to think I can work 160m, but this would give me
> clues on how to work 10m-40m.

You would be surprised. I work quite a few 160 mobiles from time to
time. I worked one the other night that was driving thru KY, TN etc. I
think he was running about 300 watts if I remember right. He was doing
quite well. Actually, better than some home stations with crummy
antennas. Sure the efficiency is ultra low, but it will still work quite
well. The angle of radiation from those antennas is just about what you
want for 160m, so they work ok. MK

--
http://web.wt.net/~nm5k

4043. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 16:02:12 UTC
From: ZsylvanDB+noZs_0100@Zhotmail.Zcom.invalid
Message-ID: <slrn93e5ts.1a.ZsylvanDB+noZs_0100@p100.dbutler.org>
Source record: 174741

On Mon, 11 Dec 2000 03:12:44 GMT, ehsjr@bellatlantic.net <ehsjr@bellatlantic.net> wrote:
>In the first case - the quoted material from the ARRL text -
>it is a checkpoint, similar to those found in many electronic kits.

Yes.

>It tells you what you should be capable of by a particular point
>in the course, if you did the exercises. Many self-study courses

Yes.

>tell you what you should have learned by doing the exercises.
>(They should also tell you what you will learn by doing the exercises
>at the beginning of the section.)

Sure. Those are all fine and good. But _how_ it is done is just as
important.

I have NEVER seen a real textbook contain phrasing such as the
condescending phrasing found in the ARRL book:

>> >> >[If you worked all of these problems along with the text, you should have no
>> >> >trouble with the phase-angle questions on the Advanced class exam. Just

A non-condescending version would read:

Everything you need to know to solve the phase-angle questions on the
Advanced class exam has been covered by the problems in this text.

Or:

The problems along with the text illustrate all you need to know to
answer the phase-angle questions on the Advanced class exam.

(both are a simple statement of fact)

Or even:

If you understand how to work all of these problems along with the text,
you should have no trouble with the phase-angle questions on the
Advanced class exam.

(that is an opportunity for self-assessment)

But:

If you had worked all the problems ...

Or:

If you had read what I've written ...

Are both equally condescending.

>condescending, as you have stated. Context makes a big difference!

Not as big a difference as phrasing. My context was as an example.
The ARRL context was to introduce a "checkpoint." Both are equally
condescending.

sdb

--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvandb1 and host is at bigfoot.com
Do NOT send me unsolicited commercial e-mail (UCE)!

4044. Re: Fractenna - AKA Nathan Cohen is a NOTa LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 16:31:19 UTC
From: fractenna@aol.com
Message-ID: <20001213113119.24666.00004638@ng-fl1.aol.com>
Source record: 174742

0

4045. Re: Fractenna - AKA Nathan Cohen is a LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 16:33:48 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <cd8819.ifa.ln@mail.specsol.com>
Source record: 174745

Fractenna <fractenna@aol.com> wrote:

<snip>

> Here is my address for your attorney. All mail must be sent registered.:

> 2 Ledgewood Place
> Belmont MA 02478.

<rest snipped>

Hmmm, doesn't registered mail require an adressee?

Here we go again....

Jim Pennino

4046. Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 16:39:46 UTC
From: fractenna@aol.com
Message-ID: <20001213113946.24666.00004639@ng-fl1.aol.com>
Source record: 174743

>
>>Subject: Fractenna - AKA Nathan Cohen is a LIAR!!
>>From: "Chuck O'Neal" coneal@ultranet.com
>>Date: 12/13/00 1:13 AM Eastern Standard Time
>>Message-id: <91742m$d2v$1@bob.news.rcn.net>
>>
>>The below was written by NATHAN COHEN in a thread
>>you will find below in this newsgroup:
>>
>>>Mr. O'Neal is caught in a lie.
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>>>Readers of this NG will recall as a matter of FACT that O'Neal stated that
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>>>fractal quad he built was superior. This -3dB to that Yagi of the same size
>>>would require a very small 2 element Yagi with 6 dB gain!
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>>>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>>>publish them in a magazine or journal. You will not ever manage to undo
>>this
>>>lie of yours.
>>
>>>Nathan Cohen, Ph.D.
>>
>>
>>Chuck O'Neal, K1KW (me) responds as follows, (most confused by this sudden
>>attack!!)
>>
>>
>>What is this all about???
>>
>>Mr Nathan Cohen:
>>An antenna evaluation done a year ago now is
>>dredged up by you at this time to get some attention?
>>
>>You accuse me of lying. Please provide any proof.
>>If not, I WILL sue you unless you IMMEDIATELY provide
>>a retraction. Don't FUCK with me...I MEAN it.
>>
>>The fractal quad was NOT better than my short yagi...
>>
>>Why do you reduce scientific endevors to a personal level if
>>the results don't agree with your desires???
>>
>>You called me on the phone after I published my results here.

>>Remember that? I saved the recording on my answering machine
>>when you called!!! I have just listened to that recording.
>>I clearly stated that the results of my test were close,
>>and that the fractal 2 E array that I compared to my same sized
>>loaded yagi array was equal AT best! In some cases the yagi
>>was up to 3 dB better!!
>>
>>So....fracky...do you want to try and dispute it? I will post it
>>as .wav file if you do. Also, it WILL be part of my evidence
>>in the suit. Get your lawyers ready....What is your net worth?
>>
>>This effort of your's will be forwarded to the appropriate individuals.
>>
>>hope this helps...
>>with all best regards,
>>Chuck K1KW
>>
>
>
>Actually Chuck, it does help.
>
>Please proceed with consulting your attorney and your suit. I will continue
>to
>keep the readers informed.
>
>Your statement is mendacious. To clarify, it is in direct contradiction to
>your
>statement of two years ago.
>
>Under no circumstance will I apologize for being truthful.
>
>Here is my address for your attorney. All mail must be sent registered.:
>
>2 Ledgewood Place
>Belmont MA 02478.
>
>I hope that this will end the last vestiges of personal attack and jealousy
>that you and others have expresed here on this NG. Getting an attorney and
>reviewing your PUBLIC statements is a very positive move in keeping this NG
>sane--as we have seen in recent weeks (for a change).
>
>I hope that your irrational response--quoted above--- also provides the
>public
>with a sufficient calibration for your other statements.
>
>Nathan Cohen, Ph.D.

Mr. O'Neal:

My attorney has advised me that your statement regarding our private phone
conversation being-- taped-- is in violation of federal and Massachusetts laws

and statutes. At no time did I in any way agree to such a recording. In addition, at no time was I aware that our conversation was being recorded.Your offer to make this private conversation public is in violation of state and federal law. You have also broken privacy laws and federal and state wiretapping laws if such recordings were made.

I will persecute to the fullest should you actually have in your possession this illegal record.

Nathan Cohen, Ph.D.

4047. Re: Must I ground my Discone Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 16:51:44 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9189f0$sg6$0@208.207.71.161>
Source record: 174744

Thanks for the clear NEC explanation. It seems clear that NEC doesn't
necesarily adress lightning protection as a first priority.

Dick

ehsjr@bellatlantic.net wrote:
>
> Mark Keith wrote:
>
> > Also to my way of thinking the NEC is not totally flawless. Take for
> > instance this one:
> >
> > > Per 820-20 (a) Exception - you are not required to use an antenna discharge
> > > unit if you use coax and if it is properly (per NEC) grounded at the receiver.
> >
> > I think that ones kinda risky.
>
> Two points. First - Yes it is risky to your receiver if you do not disconnect the
> lead in. But that does not support the idea that the NEC is flawed. The
> NEC is a minimum. The fact is that it does not require you to disconnect.
> That would be an unenforceable provision, and would itself violate the
> purpose of the NEC (90-1 (a), which is practical safeguarding of people and
> property - NOT equipment - from possible dangers of using electricity.
> The requirement to disconnect, if it were in the NEC, would not be
> practical, as a matter of law. It is impossible for an electrical inspector
> to verify that all equipment is disconnected when a thunderstorm
> occurs. It would also violate 90-1 (b) which says that the code will contain
> provisionsconsidered necessary for safety. Disconnecting the coax from the
> receiver in the example you assume from what I wrote (ie the receiver is
> grounded and the coax is connected to it, thereby getting its ground)
> would violate 820 and 90-1 (b). (The flaw here is assuming that
> "at the receiver" means *via* the receiver.) Finally, it would violate
> 90-1 (c) which states that the code is not a design specification or an
> instruction manual for untrained people. It cannot instruct people to
> disconnect their coax when not in use without violating 90-1 (c)
>
> Second - The NEC has the force of law, once it is adopted by the town, county,
> municipality - whichever governmental agency has jurisdiction. The exception
> goes to legality - it is not illegal to install coaxial lead in from your antenna
> without using a discharge unit. It also goes to the technical side: the coax
> will be at least as effective as the minimum size wire that the NEC specifies in
> conducting current to ground.
>
> The key to this discussion is to treat the NEC as what it is: MINIMUM
> requirements for safety. If you do less than the minimum, you are exposed

> to possible danger - and you violate the law. If you do the minimum, you
> are less exposed to possible danger, and comply with the law. To
> illustrate, lets take your installation. A catastrophic short circuit occurs
> when a tree limb crashes through your wall and smashes your wiring
> so that a 110 volt cable contacts your "grounded" coax. Your coax
> will conduct current to "ground" via the bulkhead and thence to your
> antenna ground rod. How much potential difference will exist between
> the coax and the house ground? Will the circuit breaker trip? The
> answer is, you don't know. However, if the antenna ground rod is
> bonded to the house grounding electrode system via a #6 bonding
> jumper, the breaker will trip - whether the 110 volts got onto the shield
> via the catastrophic tree limb caused failure or via a short circuit
> within the equipment. And, by the way, there have been plenty of
> cases where coax was "hot" with 60 Hz ac with respect to house
> ground in television installations. If the receiver was properly grounded,
> that could not happen. But if the receiver was not properly grounded as
> mentiopned in 820, all the antenna discharge units in the world would do
> nothing to provide the operator with safety. Those units will ignore 110 V ac.
> So - your installation could possibly have superb lightning protection,
> and NO protection against a short circuit that places 110 V ac
> on your antenna lead in.

4048. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:08:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A37AD0A.8BC1EC6F@dvol.com>
Source record: 174746
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:

>
> > Bury the radials at night?
>
> Do you seriously think apartment dwellers can try this? Do you know
> anyone who tried this at an apartment?
> --

>
Yeah, ME. Pizza cake. I can't bury anything because the macadam driveway goes right to the brick wall outside my window. So I drilled 1/4 inch holes in the mortar between the bricks and ran a 100ft counterpoise six inches above the macadam via little plastic anchors and screws. I also wander around the parking lot with a very lethal 65 Lb. pull compound bow shooting wire into trees at will. Got a Larson 2m gain vertical bolted to an upper level balcony. There are two "tricks": (1) All conductors, hardware and cables are small and rendered flat black (2) Understanding that people, particularly apartment dwellers don't have a clue about wires or compound bows plus they could care less about what goes on outside. Which leads to the bottom line: Balls makes things happen, paranoia does not.
>
w3rv

4049. Re: Skip LP versus regular LP ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:11:58 UTC
From: dinod@deltanet.com
Message-ID: <y5OZ5.21092$x6.12113786@news2.rdc2.tx.home.com>
Source record: 174747

M2's Log is from 10-30MHZ. It also has 7MHZ but "SKIPS" 8MHz and 9MHz.

The Tennadyne are continuous from 13MHz to 30MHz; not 10-30 like the M2.
And you don't get 7MHz.

While Tennadyne may make an excellent product, I can't speak about them
as I have no experience with them.

M2 is designed by Mike Stahl who also was part of the KLM team that
designed KLM's Log (which has a great reputation). The M2 version
is an improvement!

You can't go wrong with an M2 antenna. I'm sure that Tennadyne is
excellent too.

Why do you want a LOG? Just curious. if you are staying inside the
Amateur Bands, I would SERIOUSLY look at Force 12!

Dino

>Ok guys, can someone please explain the difference to me between a M2 'skip
>log' and a Tennadyne LP or are they more or less the same and just
>advertising hoopla? Trying to make up my mind here which to purchase..
>
>Comments welcomed and appreciated...
>
>Thanks, Jerry -w7wpx-
>jlockett@onemain.com

4050. Re: Question abt ladder line es dipoles??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:12:33 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <918am1$168$0@208.207.71.161>
Source record: 174748

"Peter O. Brackett" wrote:
>
> Danny:
>
> [snip]
> > >
> > Then, I suggest, that you would be better to assign the problem to the
> > radio rather than the antenna system.
> >
> > Danny
> [snip]
>
> You may assign the problem to the radio, but... unless you are the
> manufacturer of the radio, or into extensive modifications of its' auto
> shutdown SWR sensing circuitry, you simply cannot assign the solution to the
> radio, heh, heh. Gotta assign the solution to the problem to another
> device...

Most of us assign it to an antenna tuner :-0

4051. Re: KLM 2M-14C Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:16:15 UTC
From: dinod@deltanet.com
Message-ID: <z9OZ5.21096$x6.12120004@news2.rdc2.tx.home.com>
Source record: 174749

Yep!

http://www.m2inc.com/

Mike Staal was an original engineer for KLM. He can help you!

Dino

>I have a KLM 2m 14C circular polarized yagi I am trying to refurbish to get
>going
>for AO40 operations....HOWEVER, all the 3/16" solid elements have been
damaged
>beyond repair......the boom , and driven elements are intact. I also
>think KLM has gone out of business. Does anyone know where I can get
>replacement elements for the KLM 2m 14C yagi?????? Any help will be
>appreciated.
>Thanks,
>John / WA5DGH

4052. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:33:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <918bsd$5bl$0@208.207.71.161>
Source record: 174750

Dino wrote:
>
> Hey Peter...check this out...
>
> http://www.rohnnet.com/Tall%20Structure.htm
>
> Dino
>

So,they're gonna add another 2000 footer here? There's a ridge about
15 miles east of Springfield, MO where there are *four* 2000 footers
lined up, with a 1000 foot shrimp nestled between.
One TV station just built another 2000 footer near its original,
evidently for its new HDTV system (maybe that's the one mentioned in the
posted URL).
Dunno what they will do with the original. I can't imagine them taking
it down.

Dick

4053. Re: Fractenna - AKA Nathan Cohen is a NOTa LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:38:28 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC805FF3DF7@www.premiersi.com>
Source record: 174752

Crap! It was a nice couple of weeks without any of this rediculous,
pointless name-calling.

But now, back to our regularly scheduled pissing contest....

"Fractenna" <fractenna@aol.com> wrote in message
news:20001213113119.24666.00004638@ng-fl1.aol.com...
> 0

4054. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:39:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <918c8r$6lj$0@208.207.71.161>
Source record: 174751

Cecil wrote:
>
> "Mr. Mister" wrote:
> > The bridge may have a lot of metal, but it's grounded,
> > so you'll have a nice ground plane and that's about it.
>
> Lots of ham towers are also grounded but that doesn't keep
> those hams from gamma feeding their towers and using them
> for vertical antennas. I can almost guarantee that between
> ground and the top of the supports, there is a 50+jX feedpoint.
>

Seems like the bridge would work better as a toploaded short vertical at VLF. With the suspenson cables as capacitive loading. Like an aviation NDB transmitter.

I like the idea of carrying the rig and a dipole up into the Marin Heights. You even have a shelter, in the form of some of the old WW2 gun emplacements still there which were built early in the war when an invasion from the Far East seemed likely.

Dick

4055. Re: Wermager K0EOU sloper

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:48:24 UTC
From: 2w8ji@contesting.com
Message-ID: <3a37b4a7.92037070@news.akorn.net>
Source record: 174753

On Tue, 12 Dec 2000 05:42:25 GMT, dcoffey@mindspring.com (Dennis Coffey) wrote:

> I'd appreciate any info, experiences with the ant, etc.
> Thanks,
> WA4YYQ Dennis

Hi Dennis,

Remember is any slopper worked against a tower, the tower IS the other half of the antenna. Bandwidth, SWR and overall performance depend heavily on the tower providing a very low impedance for the coax shield.

At times the tower's common mode impedance is fairly low, because the owner often has a big yagi on the tower and maybe even a bunch of uninsulated guy lines or other things that act like a counterpoise.

On the other had, an empty mast or tower, grounded at the bottom and 60 feet or so tall, won't work at all with an 80 meter slopper because the top would be an extremely high impedance.

Sloppers are very unpredictable antennas, since the "other half" of the slopper is the tower or mast itself.

Keep that in mind when planning your system.

73 Tom

4056. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 17:57:07 UTC
From: 2w8ji@contesting.com
Message-ID: <3a37b709.92646420@news.akorn.net>
Source record: 174754
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

On Wed, 13 Dec 2000 05:51:38 GMT, "George, W5YR" <w5yr@att.net> wrote:

>The relatively enormous capacity between a vehicle frame and body
>couples the ground return of a mobile antenna to actual earth ground,
>and there is where the antenna return current is collected. At lower HF
>frequencies, the vehicle (even a large motor home) provides little of
>the radial structure ("ground plane"). At 10 meters a large vehicle can
>be effective as a ground plane by itself, although there is still the
>large vehicle/earth capacitiance in place with even lower reactance than
>at lower frequencies.
>
>I feel that this frequently overlooked aspect of mobile antenna
>operation answers a lot of questions.

That's right. The vehicle itself doesn't "like" to radiate except as
it contributes a bit to height of the antenna.

It really isn't much like a bent dipole at all, since most of the
current flow down towards the earth.

Small counterpoises (ever cars and trucks) never really make an
efficient ground system (except where the vehicle is large compared to
the wavelength), but as was pointed out you can work amazing distances
with very poor efficiency.

If you have a small counterpoise, the system is ALWAYS more efficient
mounted up away from earth as far as possible. The closer to earth
with a small counterpoise, the more loss the system will have.

Larger systems are non-critical to height, They can be buried,
elevated, or whatever you like and efficiency will remain high.

Not so with electricall small counterpoises, they need to be up and
away from earth and other lossy media.

73 Tom

4057. Re: 10M Contest and Fractal Quad Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 18:05:08 UTC
From: 2w8ji@contesting.com
Message-ID: <3a37b8ff.93149265@news.akorn.net>
Source record: 174756

On 13 Dec 2000 13:07:08 GMT, fractenna@aol.com (Fractenna) wrote:

>I had a wonderful time with the 10M fractal quad yagi this past weekend! I am
>using hand logs so there is a bit more work in duping and checking. But my
>tentative score is over 1500 QSO's and about 125 multipliers. That puts me at
>approximately 375,000 points for SO SSB LP.

W8JI, SO HP, did 400k points on 160 meters with only a 3/8 wl vertical antenna.

Hope you do better next year on ten meters, where working DX is like shooting ducks in a swimming pool!

BTW, the blower or fan on your LP rig is evident in your audio Chip. You need a gated processor, or to move the SB-220 away from your microphone a bit more.

73 Tom

4058. Re: R8&MFJ 259?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 18:06:49 UTC
From: 2w8ji@contesting.com
Message-ID: <3a37ba49.93478550@news.akorn.net>
Source record: 174757

On Wed, 13 Dec 2000 14:36:43 +0100, "Nermin Bajramovi&#65533;"
<fortra@siol.net> wrote:

>Hello Tom,
>
>My statement about Cushcraft non acceptance of RF Bridges, aka MFJ Autek,
>AEA for SWR measurements, could be checked on their site in technical
>support branch-manuals. Manual for R6000 states this but not the manuals of
>R7000, R7 and R8.
> Best regards,
>
>Nermin S58DX

Hi Nermin,

I'm quite suprised they say something so silly in the manual for the
R6000! AT least they didnt put it in the other manuals.

4059. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 18:24:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A37BEFB.143B30E7@IEEE.org>
Source record: 174758

Dick Carroll wrote:
> I like the idea of carrying the rig and a dipole up into the Marin
> Heights. You even have a shelter, in the form of some of the old WW2 gun
> emplacements still there which were built early in the war when an
> invasion from the Far East seemed likely.

Yep, and with any luck you can find a hippy lady to keep you warm.
--
http://www.mindspring.com/~w6rca

4060. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 18:29:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A37C015.5744AB97@IEEE.org>
Source record: 174759
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:
> But isn't the ground plane too small?

Yep, and so is one of my appendages. Nothing's perfect.

> > Bury the radials at night?
>
> Do you seriously think apartment dwellers can try this? Do you know
> anyone who tried this at an apartment?

I didn't do it in an apartment but I did it in a college dorm.
I used #26 wire and it was virtually invisible a half inch
below the surface.
--
http://www.mindspring.com/~w6rca

4061. Re: New antenna CT Flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 18:59:22 UTC
From: n2ey@aol.com
Message-ID: <918gu5$244$1@nnrp1.deja.com>
Source record: 174763

In article <3A351E2B.894573AD@dvol.com>,
Brian Kelly <kelly@dvol.com> wrote:
>
>
> Cecil wrote:
>
> > Fred Hambrecht wrote:
> > > Be advised that your idea comes dangerously close to my "Thinking
about,
> > > maybe, applying for a patient".
> >
> > Your patent is obsolete. I have perfected a superconductive
> > plasma stream that is lossless for any number of elements. All
> > you have to do is dial in your frequency, direction, and desired
> > beamwidth.
>
> >
> It's not lossless at all, you forgot to factor in the power absorbed
by the
> unobtanium stream diffractor. You did ground the difractor, didn't
you? Now go
> back and do the numbers right this time.

You're all way behind the curve. All you need is an Aludium Q36 Space
Modulator. Circa 1957.

--

By the way, the actual identity of Larson E. Rapp is known. He is still
around, last I heard.

--

73 de Jim, N2EY
--
FISTS #4360
BIT #0001
#5,358,202

Sent via Deja.com
http://www.deja.com/

4062. Re: 10M Contest and Fractal Quad Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 19:01:55 UTC
From: fractenna@aol.com
Message-ID: <20001213140155.18054.00009345@ng-fi1.aol.com>
Source record: 174760

>et>
>
>On 13 Dec 2000 13:07:08 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>I had a wonderful time with the 10M fractal quad yagi this past weekend! I
>am
>>using hand logs so there is a bit more work in duping and checking. But my
>>tentative score is over 1500 QSO's and about 125 multipliers. That puts me
>at
>>approximately 375,000 points for SO SSB LP.
>
>W8JI, SO HP, did 400k points on 160 meters with only a 3/8 wl vertical
>antenna.
>
>Hope you do better next year on ten meters, where working DX is like
>shooting ducks in a swimming pool!
>
>BTW, the blower or fan on your LP rig is evident in your audio Chip.
>You need a gated processor, or to move the SB-220 away from your
>microphone a bit more.
>
>73 Tom
>

Great suggestion!

The SB220 is about, oh, 60 feet away with with no connection to anything. In fact, its in the basement next to my dad's briefcase and other stored stuff.

How much farther away should it be?

And does entertaining your speculation mean that I have to freeze my tootsies because you think a heater fan is an amplifier fan??

Also, you can't argue with results, can you Tom?:-) Right now I am #2 on the 'rumored score' list:-) So its not a matter of shootin' ducks, or everyone would have the same number of ducks:-)

73
Chip N1IR

4063. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 19:03:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A37C7FA.69E48DA3@dvol.com>
Source record: 174761

Fractenna wrote:

> My attorney has advised me that your statement regarding our private phone
> conversation being-- taped-- is in violation of federal and Massachusetts laws
> and statutes. At no time did I in any way agree to such a recording. In
> addition, at no time was I aware that our conversation was being recorded.Your
> offer to make this private conversation public is in violation of state and
> federal law. You have also broken privacy laws and federal and state
> wiretapping laws if such recordings were made.
>
> I will persecute to the fullest should you actually have in your possession
> this illegal record.

>
Yo, Fracky: If, as you claim, the allegedly illicit recording of that conversation supported your contentions why would you object to the dissemination thereof?
>

>
>
> Nathan Cohen, Ph.D.

>
w3rv

4064. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 19:07:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <918hcr$j90$0@208.207.71.161>
Source record: 174762
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:
>
> > Bury the radials at night?
>
> Do you seriously think apartment dwellers can try this? Do you know
> anyone who tried this at an apartment?
>

Jason, when you live in serverely antenna-limited circumstances you
gotta think outside the box. You might find that a "portable" or
"temporary" antenna system
will work best for you-one that you take out and set up before you use
it, and take down for storage when your operating session is done. This
means coming up with something simple, easy to assemble and disassemble.
Ther are a lot of people in your circumstances and therefore there is
a lot of work that has already been done in this area. You don't need to
try to reinvent the wheel, and don't expect to be able to install an
optimal antenna system. Expect to use a compromise simply because that
will be what is demanded of the situation. Searching among the
literature will procduce a workable antenna that will do reasonably well
and give you much operating satisfaction.
Ths StLouis Vertical is a multiband antenna that has gained in
popularity among hams for limited antenna quarters as well as portable
use. It's easy and quick to set up and take down, and you can use short
wires laid temporarily on the ground for the counterpoise. There is no
requirement to use 1/4 length radials, at all, for very effective
operation if not most optimam efficiency.
Wben travelling or camping, for stationary use, I use a 60 ft length
of wire, tuned with an autotuner designed for that use, attached
temporarily to whatever support I can find, never more than 10 feet off
the ground, and the counterpoise I usually use is a 40 ft length of
copper magnet wire about 22 guage, just laid on the ground. It works
well enough on 40 meters and up that I haven't looked for any better
solution. And I have used it effectivly on 75 meters.
Don't be misled into thinking that you have to follow strict antenna
engineering principles just to be able to get an effective HF station on
the air. Agan, you've got to think outside the box and use what works
for you in your situation.
You will find that consumer device RFI will almost certainly be a
problem with any antenna located inside or very near a residence, if
you're running any power level above 20-30 wttrs or so depending on your
exact circumstances. And liviing in a multiunit residential apartment,
you'll have to tolerate the TV horizontal scan frequency harmonics that

appear every 15,750 across every one of the lower frequency bands. ANy antenna system near a residence gets that. I moved ll my antennas to a tower 150 feet from the house and I now have NO RFI and NO TV QRM.

Dick W0EX

4065. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 19:11:50 UTC
From: fractenna@aol.com
Message-ID: <20001213141150.08221.00003986@ng-mi1.aol.com>
Source record: 174764

>Fractenna wrote:
>
>> My attorney has advised me that your statement regarding our private phone
>> conversation being-- taped-- is in violation of federal and Massachusetts
>laws
>> and statutes. At no time did I in any way agree to such a recording. In
>> addition, at no time was I aware that our conversation was being
>recorded.Your
>> offer to make this private conversation public is in violation of state and
>> federal law. You have also broken privacy laws and federal and state
>> wiretapping laws if such recordings were made.
>>
>> I will persecute to the fullest should you actually have in your possession
>> this illegal record.
>
>>
>Yo, Fracky: If, as you claim, the allegedly illicit recording of that
>conversation
>supported your contentions why would you object to the dissemination thereof?
>>
>
>>
>>
>> Nathan Cohen, Ph.D.
>
>>
>w3rv
>

The summary of the conversation was publicly given on this NG. I stand by that summary. In a court of law, I will swear to the same.

The issue of illegal wire tapping is not an issue of content. It is an issue of privacy.

I am prepared for Mr. O'Neal's lawsuit. I will apprise and reproduce the relevant correspondence from Mr. O'Neal's attorney when it arrives.

Nathan Cohen, Ph.D.

4066. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 20:14:20 UTC
From: richardharrison@webtv.net
Message-ID: <11514-3A37D89C-22@storefull-117.iap.bryant.webtv.net>
Source record: 174766

Carl Westerman wrote:
"I have a radiating AM tower and I need to install some celluar panel antennas on standoffs at the top of it."

Over 50 years ago I worked at a 5KW, 790 KHz station that had an FM affiliate in town, almost 25 miles from the AM transmitter. The FM call sign was appropriately KOPY, as it duplicated the AM program.

KOPY was our reserve studio-transmitter program line. Our FM receive antenna was atop one of the AM transmit towers. It provided an interference-free signal to feed audio to the AM transmitter on those occasions when the program wire-line was impaired.

The AM transmitter should be almost harmonic-free by FCC edict. Your UHF receiver needs enough selectivity to prevent front-end overload. This can be provded ahead of a well-shielded receiver even when the receiver itself is inadequate.

Another of my experiences with such interference comes from several years after the KOPY experience. I was working at the world`s largest HF broadcast plant, at the time. We were using 450 MHz relay for multiple simultaneous programs. The receivers were right inside a screened room of the broadcast plant. The antennas were mounted on a tower erected for the purpose right alongside the transmitter building. It worked just fine.

Someone else thought we could improve program fidelity by using FM broadcast transmitters and monitor receivers for program relay. They had the clout, so we did it. The government involved licensed it as they had no FM broadcating a the time.

Harmonics and their mixing products were disasterous. We just had too many high-powered SW broadcast transmitters operating on too many frequencies around the clock. The FM broadcast band was too close to the SW broadcasts and the receivers accepted a wide band slice of frequencies which appeared.

We were able to find a sweet corner of our nearly 500 acres to site the BC FM receivers where interference was no problem. So a house was built, power was run to it, conduit for the underground audio cables was installed between receiver site and transmitter building, a tower was erected for the FM yagis, and it all worked fine.

Sometimes, if it ain`t broken, you shouldn`t fix it!

You should be able to make the cell phone antennas work well on an AM broadcast tower. The coax will have no appreciable effect on the AM

broadcast tower. You can just wraplock the coax to the tower. A leg may be convenient for cable routing. You may want to mount your cell phone antennas slightly below the top so that they are protected from lightning to some extent. Solid connection to the tower at top and bottom will help avoid problems. You need to make a coax cable coil at the tower base to isolate the AM broadcast r-f, much as r-f is isolated from the a-c by tower lighting chokes.

Best regards, Richard Harrison, KB5WZI

4067. Re: B&W Broadband Folded Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 21:03:39 UTC
From: Cboone@Earthlink.net
Message-ID: <3A37E3E5.F8F0C9C0@Earthlink.net>
Source record: 174767

Dont bother!!! its 10db below a dipole below 10 Mhz...
and above, it still loses some in the resistor...yes it is
wideband...but its not efficient....check out the 9band Windom
on the ARRL web page from the August 1990 issue of QST
(go to ARRL.org and search for Windom; you'll find the link)
Much better antenna and a true dipole/efficient radiator!
All you need is a 6:1 balun which you can buy or make yourself
(but I would buy instead)

Chris
WB5ITT

Bill Hiscox K7WRH wrote:
>
> Does anyone have experience to share with the B&W braodband folded dipole?
> Positive or negative? I am considering one for use primarily on 160/80m
> (but would use it on other bands as well.) I run only 100W with a IC737
> (internal tuner).
>
> Comments?
>
> de K7WRH/AE

4068. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 21:11:49 UTC
From: Cboone@Earthlink.net
Message-ID: <3A37E5CC.1ADEF803@Earthlink.net>
Source record: 174768

The balun is 16:1 according to the RF bridge KE5O and I used to
measure mine with...the resistor is 800 Ohms NON inductive/100watt

Chris
WB5ITT

Mike wrote:
>
> I came across one all tangled up. I am not interested in getting it back
> like it should be.My question is what ratio is the large balun on it and
> could this be of any use for making up another antenna. Also the large
> resistor in the center of the antenna can it be of use other than a
> dunny load.

4069. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 21:56:17 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <918r9u$bu6$1@nnrp1.deja.com>
Source record: 174670

In article <20001213113946.24666.00004639@ng-fl1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> Mr. O'Neal:
>
> My attorney has advised me that your statement regarding our private
phone
> conversation being-- taped-- is in violation of federal and
Massachusetts laws
> and statutes. At no time did I in any way agree to such a recording.
In
> addition, at no time was I aware that our conversation was being
recorded.Your
> offer to make this private conversation public is in violation of
state and
> federal law. You have also broken privacy laws and federal and state
> wiretapping laws if such recordings were made.
>
> I will persecute to the fullest should you actually have in your
possession
> this illegal record.
>
> Nathan Cohen, Ph.D.
>

He says it was on an answering maching tape. If indeed you left a
message on an answering machine, you knew you were being taped.
--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

4070. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 21:58:43 UTC
From: Windom <blackhole44@hotmail.removethis.com>
Message-ID: <r3sf3tkmbs8a12jmh8urkat4gjhevtpl8k@4ax.com>
Source record: 174669

Hello Carl;

This is not an uncommon situation. I've worked for several AM
stations whose tower doubled as a support for FM, VHF, or UHF
antennas. Assuming the AM antenna is series fed, the device
that you need is an isocoupler. These are essentially traps tuned
to the AM transmitter frequency which are mounted at the base of
the tower, and generally provide enough isolation for both systems
to operate without mutual interaction. They are available from
broadcast supply houses and some manufacturers of VHF/UHF
antennas. You should be able to work with the station's engineer
or your PCS company's engineering department to procure one.

If the isolation is not sufficient, you will end up with receiver
desensitization and transmitter intermodulation products which
could both severely degrade your system's performance and
potentially open you up to interference complaints from operators
of adjacent PCS, SMR, and microwave services.

A single tower omnidirectional AM transmitter facility is a fairly
easy case to deal with. However, If the AM facility uses a
multi-tower phased array, isolation becomes increasingly important
for the radio station since tower current phases and ratios must be
tightly controlled. The last time I checked, addition of any such PCS
antennas to a directional array required the broadcaster to submit
an FCC filing for antenna modification.

Good luck!

W.

On Wed, 13 Dec 2000 17:59:54 -0700, "carl westerman"
<carl@westcomgroup.co.uk> wrote:

>
>Question?
>
>AM is kicking out somewhere between 600khz and 1700khz.. I don't know what
>the power is but may be a kilo watt or less.
>My cellular system will be at 1850mhz .. on maybe less than 100 watts...
>
>I remembered I once used a 2m antenna very close to a CB antenna that when I
>transmitted on 20 watts it blatted out my cb signal... right across the
>spectrum on the analyser... even though the frequencies were apart by about
>120megs...
>

>How do you think the cellular tx / rx signal will be affected by this due to
>the sheer power and proximity???????
>
>Also any other facts that I may have not realised would be appreciated.
>
>

4071. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:21:09 UTC
From: fractenna@aol.com
Message-ID: <20001213172109.24639.00004816@ng-cd1.aol.com>
Source record: 174671

>In article <20001213113946.24666.00004639@ng-fl1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> Mr. O'Neal:
>>
>> My attorney has advised me that your statement regarding our private
>phone
>> conversation being-- taped-- is in violation of federal and
>Massachusetts laws
>> and statutes. At no time did I in any way agree to such a recording.
>In
>> addition, at no time was I aware that our conversation was being
>recorded.Your
>> offer to make this private conversation public is in violation of
>state and
>> federal law. You have also broken privacy laws and federal and state
>> wiretapping laws if such recordings were made.
>>
>> I will persecute to the fullest should you actually have in your
>possession
>> this illegal record.
>>
>> Nathan Cohen, Ph.D.
>>
>
>He says it was on an answering maching tape. If indeed you left a
>message on an answering machine, you knew you were being taped.
>--
>Randy A. Hefner
>http://talk.to/frs
>http://go.to/qx3
>
>
>
>Sent via Deja.com
>http://www.deja.com/
>

Mr.Hafner--

Kindly explain how it is possible to have a conversation with an answering machine.

Thanks.

Nathan Cohen, Ph.D.

4072. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:29:33 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <918t89gic1@bob.news.rcn.net>
Source record: 174672

Wrong again, fool! You clearly knew that you were
being recorded. It IS stated in the recording!, including the
recorder beep midway through with an explanation of
the answering machine having recorded us to that point.
The machine has a time out so the entire conversation wasn't
recorded. What a poor memory you have!

4073. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:40:02 UTC
From: Kelly Bersch <kbersch@not-sofast.net>
Message-ID: <cWSZ5.396$4y4.12041@e420r-atl1.usenetserver.com>
Source record: 174673
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Do you actually need two different values of chokes (1-mH and 100-uH) or did you mean 1-mH or 1000-uH?

73 de AC7EW
Kelly

"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message news:3a356651$1@news.microsoft.com...
Am building a project out of a Sept 95 QST article (automatic remote antenna tuner) requiring extensive RF filtering of every input/output lead. Each PI section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF choke.

Can anyone recommend a part number/type and source for the inductors? What type of caps would be recommended?

-rob

4074. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:41:16 UTC
From: fractenna@aol.com
Message-ID: <20001213174116.07611.00005212@ng-fy1.aol.com>
Source record: 174674

>Wrong again, fool! You clearly knew that you were
>being recorded. It IS stated in the recording!, including the
>recorder beep midway through with an explanation of
>the answering machine having recorded us to that point.
>The machine has a time out so the entire conversation wasn't
>recorded. What a poor memory you have!
>

Mr. O'Neal--

Is there no end to your mendacity and libel? Which even now you continue?

PLEASE get an attorney and SEEK OUT his or her advice. I can guarantee they will ask you to stop your libel against me.

I do not wish to be your personal target: I cannot and will not add meaning or focus to your life. You need to move on to something constructive.

I tried to channel your obsession towards something useful--like competing in the 10M contest-- but you not only turned down that option but now obsess in other ways.

It appears a sad and spiralling situation for you.. Again, PLEASE see your attorney about this. I just can't help you Chuck, but I will defend that which is truthful and which I have worked for these many years: my reputation.

Nathan Cohen, Ph.D.

4075. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:57:11 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <918us3$f0d$1@nnrp1.deja.com>
Source record: 174680

In article <20001213172109.24639.00004816@ng-cd1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
>
> Mr.Hafner--
>
> Kindly explain how it is possible to have a conversation with an
answering
> machine.
>
> Thanks.
>
> Nathan Cohen, Ph.D.
>
>

It's not that difficult...I do it all the time!

They didn't nail Linda Tripp for it, what makes you think you will have
any better success?

Anyway, are you afraid of what that conversation may reveal?
--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

4076. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:58:50 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <918uv6$f19$1@nnrp1.deja.com>
Source record: 174679

In article <918t89gic1@bob.news.rcn.net>,
"Chuck O'Neal" <coneal@ultranet.com> wrote:
> Wrong again, fool! You clearly knew that you were
> being recorded. It IS stated in the recording!, including the
> recorder beep midway through with an explanation of
> the answering machine having recorded us to that point.
> The machine has a time out so the entire conversation wasn't
> recorded. What a poor memory you have!
>
>

Looks like Chuck has his DUCKS in a row!

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

4077. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 22:59:08 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <918uvn$pb3$1@bob.news.rcn.net>
Source record: 174675

Fracky, it is really simple. Retract your statement calling me a liar.
Do it now and save yourself a lot of grief. I have the recorded proof
as you now know. I have been advised to provide you with this
opportunity correct your libelous assertions before further action
is taken.

Nathan Cohen wrote:

>Mr. O'Neal is caught in a lie.

>Readers of this NG will recall as a matter of FACT that O'Neal stated that
the
>fractal quad he built was superior. This -3dB to that Yagi of the same size
>would require a very small 2 element Yagi with 6 dB gain!

>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>publish them in a magazine or journal. You will not ever manage to undo
this
>lie of yours.

4078. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:02:02 UTC
From: Mike Mayer <mwmayer@tds.net>
Message-ID: <87u288s8uf.fsf@auberon.circuitfarm.com>
Source record: 174676

>>>>> "Rick" == Rick Littlefield <k1bqt@aol.com> writes:

> There are patents existing on very short-range induction-based
> communication links precisely because they DON'T radiate EMR and
> thus explicitly exclude communication over distance. That might
> be food for thought when considering the validity (or invalidity)
> of CFA technology.

> Rick K1BQT

I could understand a situation where far-field radiation was poor, but
if the magnetic field is changing, you've got EM waves.

--
==========
Mike Mayer

4079. K1KW's Small Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:02:45 UTC
From: fractenna@aol.com
Message-ID: <20001213180245.10961.00001671@ng-cu1.aol.com>
Source record: 174677

Chuck--

I am sure that I am not the only person here who wants to know more about your 6 dBd small beam which fits in a 1/8 by 1/8 wave form factor.

Specifically, could you provide some info on how you managed 6 dBd? It is possible to supergain on this form factor to get 6dBd. However, in doing so the impedance would change so rapidly as to make it useless at all but a very small passband--say 50 KHz on 10M. Also, the F/B is especially sensitive in such cases and is also highly monochromatic.

Is there a publication, or URL, you might refer us to so that we can learn more?

73
Chip N1IR

4080. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:04:48 UTC
From: fractenna@aol.com
Message-ID: <20001213180448.10961.00001672@ng-cu1.aol.com>
Source record: 174678

>
>Fracky, it is really simple. Retract your statement calling me a liar.
>Do it now and save yourself a lot of grief. I have the recorded proof
>as you now know. I have been advised to provide you with this
>opportunity correct your libelous assertions before further action
>is taken.
>
>
>
>Nathan Cohen wrote:
>
>>Mr. O'Neal is caught in a lie.
>
>>Readers of this NG will recall as a matter of FACT that O'Neal stated that
>the
>>fractal quad he built was superior. This -3dB to that Yagi of the same size
>>would require a very small 2 element Yagi with 6 dB gain!
>
>>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>>publish them in a magazine or journal. You will not ever manage to undo
>this
>>lie of yours.
>

I am requesting that you proceed with your legal actions as you stated you
would.

My address is:

2 Ledgewood Place
Belmont MA 02478

Please indicate that you have received this.

Nathan Cohen, Ph.D.

4081. Re: K1KW's Small Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:14:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3802EF.DF0B41A3@oio.net>
Source record: 174681

Fractenna,
Nope, your wrong. Your the only one who cares at
all, and that's because your pulling a 'Gore' to get
out of paying off on your bet. Whine somewhere else.
'Doc

4082. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:17:40 UTC
From: fractenna@aol.com
Message-ID: <20001213181740.10982.00001715@ng-cu1.aol.com>
Source record: 174682

>That might
> > be food for thought when considering the validity (or invalidity)
> > of CFA technology.
>
> > Rick K1BQT

Rick--

I don't see how.

The CFA claims NEW PHYSICS to explain its alleged superior performance. I see nothing in the general area of invention you allude to which requires new physics.

The CFA does occasionally work better than a 1/4 wave . When? When issues of diffraction, refraction, ointerference, and vignetting come into play--all well known physics which is usually producing second order propagation effects. But no one HAS EVER demonstrated that the CFA has a higher gain than a 1/4 wave when propagation effects are excluded.

An isotron antenna takes advantage of the same propagation effects, and as a near point-source radiator can be useful--if you could CONTROL the propagation characteristics. Multipath isn''t always a bad thing.

Funny, but I don't think anyone here believes that an isotron antenna requires new physics.

So why should we BELIEVE that the CFA should?

73
Chip N1IR

4083. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:32:31 UTC
From: fractenna@aol.com
Message-ID: <20001213183231.10982.00001717@ng-cu1.aol.com>
Source record: 174683

>In article <918t89gic1@bob.news.rcn.net>,
> "Chuck O'Neal" <coneal@ultranet.com> wrote:
>> Wrong again, fool! You clearly knew that you were
>> being recorded. It IS stated in the recording!, including the
>> recorder beep midway through with an explanation of
>> the answering machine having recorded us to that point.
>> The machine has a time out so the entire conversation wasn't
>> recorded. What a poor memory you have!
>>
>>
>
>Looks like Chuck has his DUCKS in a row!
>
>--
>Randy A. Hefner

"Don't F*CK with me..."--Chuck O'Neal

No Randy;

Chuck is obsessed, or at the very least, focused--with me as a target.. Over the last two years he has stated he will: ruin me financially; am on the verge of 'slipping up' and one more time and he's gonna get me; that I am a homosexual; and so on. On and on.

Now I see I am a 'fool', among other things.

What I expect will happen is that this and other recent post of his will actually take him to a place where he DOES get the advice of an attorney. After all, this is not the first time he has threatened me with suit. He did so sometime back. Nothing happened.

What his attorney will tell him to do is be quiet. Why? because he has made it clear==AND PUBLICLY== that I am a focus for him, and that his incentive to seek suit is not to make amend for any so-called (bogus) damage, but rather to destroy me financially. That is what he said: destroy me financially.

He also has a clear public record of libel against me. Which, unfortunately, he continues.

I have mixed feelings on this:Chuck was a bit of a role model for me as a young man, some 35 years ago. My memories are fond. That is the only thing that has stopped me from pursuing a suit against Mr. O'Neal (I am, after all, a good person).

I had hoped that he would, like the others on this NG, just drop his obsession and move onto other things.

Maybe that can happen, but it's not up to me.

In any case, I do hope he sees an attorney this time. I,myself, would like to stick with the fond memories rather than the bitter rantings of Chuck O'Neal.

73
Chip N1IR

4084. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:34:00 UTC
From: fractenna@aol.com
Message-ID: <20001213183400.10982.00001719@ng-cu1.aol.com>
Source record: 174684

>
>Anyway, are you afraid of what that conversation may reveal?
>--
>Randy A. Hefner

Nope.

In case you didn't notice, I am concerned about issues relating to an individual's rights, that includes, but is not limited to, issues of privacy; intellectual property; and so on.

73
Chip N1IR

4085. Re: 10M Contest and Fractal Quad Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-13 23:53:07 UTC
From: k1bqt@aol.com
Message-ID: <20001213185307.15101.00002338@ng-mj1.aol.com>
Source record: 174685

In this festive holiday season, it sure is swell to see two old friends get back together and converse with one another as in days past--almost as if no time had slipped by at all. That is the mark of a true and lasting bond.

Rick K1BQT

4086. Re: 10M Contest and Fractal Quad Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:01:28 UTC
From: fractenna@aol.com
Message-ID: <20001213190128.28490.00004589@ng-cr1.aol.com>
Source record: 174686

>
>In this festive holiday season, it sure is swell to see two old friends get
>back together and converse with one another as in days past--almost as if no
>time had slipped by at all. That is the mark of a true and lasting bond.
>
>Rick K1BQT
>

And a merry Christmas to you to OM:-)

73
Chip N1IR

4087. Re: Fractenna - AKA Nathan Cohen is indeed a LIAR!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:11:08 UTC
From: kk5yy@my-deja.com
Message-ID: <91936mitr1@nnrp1.deja.com>
Source record: 174688

In article <20001213113119.24666.00004638@ng-fl1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> 0
>

fractenna@aol.com 3894 total posts 3799 to rec.radio.amateur.antenna

Please Nathan no more. We all know that you are either an idiot or
mentally ill please go back to 10M where even a wet noodle or fractal
antenna will radiate. BTW what did hate do?

Sent via Deja.com
http://www.deja.com/

4088. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:13:53 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A380DD8.4906302C@bellatlantic.net>
Source record: 174687
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Effective means that the thing does what it is intended to do -
it doesn't indicate how well it does that thing. So when you
ask "how can a ... be effective", you're asking, essentially,
how can you make contacts with a small antenna. You are
not asking about efficiency. Lets say, for the sake of argument,
that a 100% efficient antenna radiates 100% of the power
your transmitter provides - no losses. Let's further say that your
shortened antenna is so bad that it radiates only 1 percent of
the power the transmitter provides - 99 percent is lost.
Well, if your transmitter provides 100 watts, 1 watt is radiated.
QRP stations regularly have plenty of QSOs at less than a
watt. So that's how your antenna can be effective: in spite
of however crummy it is, it radiates *some* signal.

Now, in terms of electronics, how can your antenna be
effective. In order for it to do what it is intended to do,
it must be able to accept power from the transmitter
so that it can radiate it. To do that (accept power) it
must be a conductor (plastic and rubber do NOT make
good antennas!) All of the rest of it goes to the efficiency -
and that's the really interesting part. The other replies
have gone into that a bit where they mention capacitance,
for example. Essentially, your antenna is a tuned circuit.
Lets keep it simple: assume a 50 ohm transmitter and 50 ohm
coax. You want the maximum amount of power to transfer
from your transmitter to your antenna - that occurs when
impedances match. So - to get impedances to match you
design the antenna to have purely resistive 50 ohms impedance.
You do that by, among other things, introducing sufficient
capacitance to cancel out the inductance (or vice-versa)
at the design frequency. And that brings about discussions
of capacitance and inductance. Remember, this stuff goes
to the efficiency (how well it works) not the effectiveness
(whether it works at all) of the antenna. Any old hunk
of conductor will radiate if you feed it a signal. How well
it radiates is a function of its efficiency. I believe that
your question really implies efficiency.
By the way - all of the above applies in the reverse - to receiving
as well as to transmitting.

You'e gotten some good answers (as usual) from the
gurus, and there is a lot more they can tell you. With
antennas, it can be very important to closely define what
it is you are interested in - there are many interdependant

variables. I think their answers went to what you wanted
to know - they understood what your question implied.
Just be aware that when you discuss antennas it is quite
possible to get an answer that goes to precisely what
you asked rather than to what you really wanted to
know - or vice versa!

jason_hsu@my-deja.com wrote:

> How small can a ground plane or radial system be and still be modestly
> effective in providing the "missing" half of a vertical monopole
> antenna? Has anyone here had experience with this? I am considering
> buying a Texas Bugcatcher or MFJ-1621, and I cannot bite the bullet
> until I can resolve this sticking point.
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> My questions:
> 1. How can a Texas Bugcatcher antenna be effective at 80m as a MOBILE
> antenna when 1/4 of a wavelength is 65 feet? Only semis are this
> LONG. Even the giant station wagons and land yachts of the early 1970s
> are barely 20 feet long (7.6% of 80m). NO vehicle is even close to
> being this wide.
> 2. How can a mobile antenna be effective if it is not mounted in the
> middle of the roof or trunk? Doesn't this mean that the antenna has
> less of a ground plane to work with?
> 3. Can I provide a ground plane with a few sheets of metal or wire
> screens? Has anyone tried this with a vertical antenna?
> 4. If inductive/capacitive loading, special coils, or helicity can
> allow vertical antennas to retain their efficiency at shorter heights
> (albeit at the expense of bandwidth), can these same techniques apply
> for radials as well?
> 5. How can people work 160m when even 1/4 of a wavelength is 130 feet?
> I know better than to think I can work 160m, but this would give me
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> Some signs of hope:
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> and _The ARRL Antenna Book_ that respectable performance can be
> achieved with radials as short as 1/16 of a wavelength. On the 40m
> band, this is barely 8 feet.
> 2. I read in _The ARRL Antenna Book_ (page 6-26) that some hams have
> reported good results when using helical radials. This would make HF
> operating possible for indoor antennas.
>
> NOTE 1: My ability to operate HF from a crummy QTH (ground floor
> apartment with NO bushes or trees available to hide anything) is at
> stake.
>
> NOTE 2: The future of ham radio is also at stake. If I can operate
> 10m, 12m, 15m, 17m, 20m, 30m, and 40m in the face of my bad QTH, I can

> easily recruit and even elmer new hams.
>
> NOTE 3: No, I don't expect to win contests, bust pile-ups, or earn my
> WAS with lightning speed.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com
> http://www.deja.com/

4089. Re: KLM 2M-14C Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:22:08 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A380FBF.F51914AC@bellatlantic.net>
Source record: 174689

I'm not familiar with your antenna, but Home Depot sells
3' lengths of aluminum rod so if it's a typical yagi I would
think you could use it for the directors - if you have the
original dimensions. If not, drag out the books and figure
your own dimensions. Of course. that said, it'll turn out
you need 37", or Home Depot doesn't have 3/16" or
a host of other annoying details. But it's worth a try.

JOHNL84238 wrote:

> I have a KLM 2m 14C circular polarized yagi I am trying to refurbish to get
> going
> for AO40 operations....HOWEVER, all the 3/16" solid elements have been damaged
> beyond repair......the boom , and driven elements are intact. I also
> think KLM has gone out of business. Does anyone know where I can get
> replacement elements for the KLM 2m 14C yagi?????? Any help will be
> appreciated.
> Thanks,
> John / WA5DGH

4090. In need of 6.1 Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:24:26 UTC
From: Mike <w4mjr@home.com>
Message-ID: <3A381332.B8095EB2@home.com>
Source record: 174690

who sales a 6.1 balun or where can a person get one ? The one on my Fritzel FD4 multiband antenna must have went bad. When I took the Fritzel balun apart I noticed it must have shorted or took a hit because it was smoked .

4091. WTB: 1.2Ghz vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:30:12 UTC
From: Ed Mellnik <ema@teleport.com>
Message-ID: <%vUZ5.92$S62.40016@nntp1.onemain.com>
Source record: 174691

Our ATV club needs a 1.2 ghz colineaer or heavy duty commercial antenna with at least 9db gain.
Ed

4092. am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 00:59:54 UTC
From: carl westerman <carl@westcomgroup.co.uk>
Message-ID: <LMOZ5.8640$sK5.598407@news-east.usenetserver.com>
Source record: 174755

Here you go..

I have a radiating AM Tower and I need to install some cellular panel antennas on standoffs at the top of it.
Now I know that my copper coaxial cable will interfere with the radiation pattern of the AM tower and that I will have to get it working in sympathy of the am tower buy grounding the coax along the length.

Question?

AM is kicking out somewhere between 600khz and 1700khz.. I don't know what the power is but may be a kilo watt or less.
My cellular system will be at 1850mhz .. on maybe less than 100 watts...

I remembered I once used a 2m antenna very close to a CB antenna that when I transmitted on 20 watts it blatted out my cb signal... right across the spectrum on the analyser... even though the frequencies were apart by about 120megs...

How do you think the cellular tx / rx signal will be affected by this due to the sheer power and proximity???????

Also any other facts that I may have not realised would be appreciated.

4093. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:11:24 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A381E3C.24CF56CB@dvol.com>
Source record: 174692

Fractenna wrote:

>
> I have worked for these many years: my reputation.

>
Uhhhhh . . I'd find another strategy if I were you . .

>
>
> Nathan Cohen, Ph.D.

>
w3rv

4094. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:25:50 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A38219D.86DC1BD9@dvol.com>
Source record: 174693

Fractenna wrote:

> I am prepared for Mr. O'Neal's lawsuit. I will apprise and reproduce the
> relevant correspondence from Mr. O'Neal's attorney when it arrives.
>
> Nathan Cohen, Ph.D.

>
I guess everybody has to have a hobby, lawsuits must be one of yours, it's about all you talk about. Enjoy.
>
w3rv

4095. looking for Floyd Sense

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:39:03 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <9198c0$bg8$1@bob.news.rcn.net>
Source record: 174694

anyone have Floyd's email address? found some info he was looking for, and need to pass it on.

4096. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:43:29 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3825C1.116B92BC@dvol.com>
Source record: 174695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Dick Carroll wrote:

> Ths StLouis Vertical is a multiband antenna that has gained in
> popularity among hams for limited antenna quarters as well as portable
> use. It's easy and quick to set up and take down, and you can use short
> wires laid temporarily on the ground for the counterpoise.

>
One of the biggest bangs for the buck in ham radio. Two minutes up, two
minutes down and stash it alonside the door.
>

>
> Don't be misled into thinking that you have to follow strict antenna
> engineering principles just to be able to get an effective HF station on
> the air. Agan, you've got to think outside the box and use what works
> for you in your situation.

>
Absolutely. Over the years I've become absolutely convinced that there is a
very rapidly diminishing return on investement associated with big "fully
engineered" antennas. I'm constantly amazed at what can be accomplished with
a bit of wire. My days of big towers and beams are long behind me, another
s-unit just ain't worth the work and aggravation.
>

>
> Dick W0EX

>
w3rv

4097. Re: WTB: 1.2Ghz vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:51:11 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <f29919.v7i.ln@mail.specsol.com>
Source record: 174698

Ed Mellnik <ema@teleport.com> wrote:
> Our ATV club needs a 1.2 ghz colineaer or heavy duty commercial antenna with
> at least 9db gain.
> Ed

This post sounds familiar...

At http://reality.sgi.com/192.82.208.21/byee_engr/slot_ant.html you will
find instructions on how to build a slot antenna out of waveguide.

From the page: "With a 16-slot total, the antenna can have 10-12 dbi gain."

Jim Pennino

4098. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:51:43 UTC
From: fractenna@aol.com
Message-ID: <20001213205143.21113.00004608@ng-fc1.aol.com>
Source record: 174696

>Uhhhhh . . I'd find another strategy if I were you . .
>

If I saw value in this opinion Brian, that would mean a lot. I regret that you have said nothing that I feel has value to me. So please keep such thoughts to yourself--at least if they are intended for me.

Thank you.

NC

4099. Re: K1KW's Small Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 01:59:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A38296E.28CE5B97@oio.net>
Source record: 174697

Phil,
Why send a reply 'direct', instead of here on the NG? I
can make a guess 'why', but come on, stand on those 'hind-legs'
and answer me here. While your at it, would you straighten
me out on who is who? Chip/Phil/Frac/Fric/???
'Doc

4100. Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 02:40:24 UTC
From: Wolfgang Schliess <schliess@gmx.de>
Message-ID: <t3gbvj4397qnba@corp.supernews.com>
Source record: 174699

```
HI
have anybody experience to (home) build a 160m isotron antenna ? Please let
me know.
------------------
!
!
!
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lllllll
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!
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!
------------------

cu
Wolf
W5/DL6RCN
```

4101. C3S and C3SS?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 02:54:43 UTC
From: Jim <aa5f@hiwaay.net>
Message-ID: <3A383673.A79D788B@hiwaay.net>
Source record: 174700

Anyone know the difference between the Force 12 C3S and C3SS? Thanks!

Jim N4AL

4102. Re: SWL Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 03:16:38 UTC
From: dcoffey@mindspring.com
Message-ID: <3a383902.624510346@news.mindspring.com>
Source record: 174701

Cap'n Mike, I guess I've done all kinds of crazy antenna things in the past. SWLing opens up more opportunities for creative thinking than does transmitting. Sure, to operate at peak, any antenna should be resonant on it's frequency of use at the moment, but it's not nearly as critical when SWLing (as opposed to transmitting). All that said, for SWLing, you may or may not have some of these options available to you but......
You can attach a lead-in wire to a rain gutter,

If you have metal frame windows, you can try clamping a lead-in wire to one window frame and run small dia. wire around the apartment to connect that frame to as many others as you can practically do. The wire serves as an antenna, with the added benefit of the metal frames with outdoor exposure. If you have screens, make sure you connect the screens electrically to the window frames.

If you're in something other than ground level, perhaps you can drop a vertical wire from a window, or better yet, maybe you can sneak a wire around a portion of the building, hidden under siding laps, etc.

If you have a balcony with a metal railing, connect a wire to that.

If you have more than one option available to you, use them all simultaneously. It's ok to have a wire out the window and be connected to a rain gutter.

Good luck and good listening!
Dennis

"Capt'n Mike" <mmurdock@fishinglife.com> wrote:

>I have a mint Icom R71A receiver set up in my small apartment and am
>currently using (embarrassed) a CB antenna outside the window. I used to
>have a very nice long wire antenna but don't have the space for it here
>(neighbors wouldn't be too happy).
>
>Can anyone suggest either a good compact antenna for .3 - 30 mhz SWL.
>Commercial or web site with plans would be fine... I need some ideas before
>I go into serious SWL withdrawal
>
>Mike
>
>

>

4103. Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 03:27:08 UTC
From: fractenna@aol.com
Message-ID: <20001213222708.21724.00002865@ng-fl1.aol.com>
Source record: 174702

>"So don't f*ck with me..."--Chuck O'Neal

>So....fracky...do you want to try and dispute it? I will post it
>as .wav file if you do.

There is no wav file to post. That is why you have not posted it. Just like you didn't post, or e-mail, the summary of our conversation. (Remember; I asked you, politely, for this doc and you threatened to sue me?) And even if there is some 'file' --which cannot be what you say it is because what you are saying is false-- your attorney would be ill-advised to have his client initiate a suit when his client has broken federal law. If, as you say, you recorded our conversation.

I never, ever, ever, gave permission for you to record our conversation. I never, ever was aware that our conversation was being recorded. If I was aware of that, I would have asked you to turn off the machine.Furthermore, I am prepared to demonstrate that your experience in broadcast radio makes you more than aware of the wiretap laws and requirements of taping notification; that your broadcast radio background makes you aware of the techniques which can be used to fabricate a tape which sounds like the other person was co-recorded with said 'beeps' , and so on.

Also, it WILL be part of my evidence
>in the suit. Get your lawyers ready....What is your net worth?

This is the clincher. It is clear that your intent is not some 'correctional' desire (not that there is something to correct) but a mere nuisance suit -- where you have publicly stated your objective is to diminish my life savings, all that I have worked for as a working person. Ask your attorney whether the law sympathizes with suits in order to drain the resources of an individual.

Also, ask your attorney how such a public admission makes you liable and in a weak position for a countersuit.

>
>This effort of your's will be forwarded to the appropriate individuals.

The only 'appropriate individual(s)' is your attorney.I strongly urge you to bring this to his or her attention.

>
>hope this helps...
>with all best regards,
>Chuck K1KW

It does Chuck. Again, that is my opinion.. ANYTHING you do that gets you to take responsibility for your actions AND STOP HARRASSING ME is very

constructive. Even if it wastes $300 of your money having your lawyer write me a letter (which I will reproduce here).

That is why I will pledge to make daily effort to exhort you in this, as long as you continue to send harrassing and libelous replies.

So please: SEEK COUNSEL. That is the ONLY way you will stop this obsessive game.Believe me; I'm not interested in playing.

Thanks!

Nathan Cohen, Ph.D.

4104. Impedance of 2 dipoles-1 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 03:52:23 UTC
From: k5fni@my-deja.com
Message-ID: <919g5l$t52$1@nnrp1.deja.com>
Source record: 174704

I'm in a quandary. I got EZNEC and thought it would help me solve my problem. It did not. My situation is two dipoles off one feedline. The longer dipole must work on its quarter-wave frequency and the third harmonic of that. The shorter dipole (not related to the other two frequencies) is along for the ride on the same coax feedline.

Using EZNEC showed me that the ICOM gear feeding these antennas will cut the power back on all frequencies but the shorter dipole's, since with 50 ohms, the SWR will be above 2:1. Am I missing something here? I thought I'd known of folks doing this same trick in earlier days. Maybe they got by with it due to having either a tube transmitter with good matching network or a solid-state transmitter with an antenna tuner. I am constrained from doing any tuning with this antenna. [This is a back-up antenna for an emergency installation. The "long-wire" antenna will have an electronic tuner on it to tune to the necessary frequencies. My design will be the fall-back, assuming lightning or mechanical failure will remove the "long-wire" antenna from service. Another assumption is that the operator cannot operate a normal HF tuner.]

For my calculations, I've assumed the ends of the longer dipole are up 30' and the center is 25' high.

TNX for any ideas you feed back. Replies can be sent to K5FNI at the ARRL dot NET address.

Richard
Austin TX

Sent via Deja.com
http://www.deja.com/

4105. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 03:53:27 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A384437.CC110AF0@netscape.net>
Source record: 174703

Cecil wrote:
>
> Dick Carroll wrote:
> > I like the idea of carrying the rig and a dipole up into the Marin
> > Heights. You even have a shelter, in the form of some of the old WW2 gun
> > emplacements still there which were built early in the war when an
> > invasion from the Far East seemed likely.
>
> Yep, and with any luck you can find a hippy lady to keep you warm.
> --
> http://www.mindspring.com/~w6rca

You trigger fond memories of my year and something in 30th MPs at the
Presidio in 1969 and early 1970.

--
Jim Fuller

4106. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 04:02:54 UTC
From: mdemeo@frontiernet.net
Message-ID: <3a3c45c7.12313921@news.frontiernet.net>
Source record: 174705
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

OK Now a question..
If my vertical, in this case a Hustler 6BTV, mounted on the side of the house, work if the radials are buried a short distance away from the antenna?

How would I connect them to the antenna!
Should I just forget about it?

What is Pizza Cake?

On Thu, 14 Dec 2000 00:13:53 GMT, ehsjr@bellatlantic.net wrote:

>Effective means that the thing does what it is intended to do -
>it doesn't indicate how well it does that thing. So when you
>ask "how can a ... be effective", you're asking, essentially,
>how can you make contacts with a small antenna. You are
>not asking about efficiency. Lets say, for the sake of argument,
>that a 100% efficient antenna radiates 100% of the power
>your transmitter provides - no losses. Let's further say that your
>shortened antenna is so bad that it radiates only 1 percent of
>the power the transmitter provides - 99 percent is lost.
>Well, if your transmitter provides 100 watts, 1 watt is radiated.
>QRP stations regularly have plenty of QSOs at less than a
>watt. So that's how your antenna can be effective: in spite
>of however crummy it is, it radiates *some* signal.
>
>Now, in terms of electronics, how can your antenna be
>effective. In order for it to do what it is intended to do,
>it must be able to accept power from the transmitter
>so that it can radiate it. To do that (accept power) it
>must be a conductor (plastic and rubber do NOT make
>good antennas!) All of the rest of it goes to the efficiency -
>and that's the really interesting part. The other replies
>have gone into that a bit where they mention capacitance,
>for example. Essentially, your antenna is a tuned circuit.
>Lets keep it simple: assume a 50 ohm transmitter and 50 ohm
>coax. You want the maximum amount of power to transfer
>from your transmitter to your antenna - that occurs when
>impedances match. So - to get impedances to match you
>design the antenna to have purely resistive 50 ohms impedance.
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>(whether it works at all) of the antenna. Any old hunk
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>By the way - all of the above applies in the reverse - to receiving
>as well as to transmitting.
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>You'e gotten some good answers (as usual) from the
>gurus, and there is a lot more they can tell you. With
>antennas, it can be very important to closely define what
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>variables. I think their answers went to what you wanted
>to know - they understood what your question implied.
>Just be aware that when you discuss antennas it is quite
>possible to get an answer that goes to precisely what
>you asked rather than to what you really wanted to
>know - or vice versa!
>
>
>jason_hsu@my-deja.com wrote:
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>> effective in providing the "missing" half of a vertical monopole
>> antenna? Has anyone here had experience with this? I am considering
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>> until I can resolve this sticking point.
>>
>> My questions:
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>> antenna when 1/4 of a wavelength is 65 feet? Only semis are this
>> LONG. Even the giant station wagons and land yachts of the early 1970s
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>> 2. How can a mobile antenna be effective if it is not mounted in the
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>> 1. I read in the ARRL books _Vertical Antenna Classics_ (page 104-107)

>> and _The ARRL Antenna Book_ that respectable performance can be
>> achieved with radials as short as 1/16 of a wavelength. On the 40m
>> band, this is barely 8 feet.
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>> NOTE 2: The future of ham radio is also at stake. If I can operate
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>> easily recruit and even elmer new hams.
>>
>> NOTE 3: No, I don't expect to win contests, bust pile-ups, or earn my
>> WAS with lightning speed.
>>
>> --
>> Jason Hsu, AG4DG
>> jason_hsu@@@@@@@@@@planetmail.com
>> http://www.bigfoot.com/~jason_hsu/
>>
>> Sent via Deja.com
>> http://www.deja.com/

Mike
Standard Broadcast
W2MDM

If you like old Telechron Clocks
Check Out
www.frontiernet.net/~mdemeo

4107. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 04:02:56 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A384670.D6CEA697@netscape.net>
Source record: 174706

Fractenna wrote:
>
....
> My attorney has advised me that your statement regarding our private phone
> conversation being-- taped-- is in violation of federal and Massachusetts laws
> and statutes. At no time did I in any way agree to such a recording. In
> addition, at no time was I aware that our conversation was being recorded.

If the other person, who taped the conversation, is also in
Massachusetts, then Massachusetts law will apply. If he was in
another state, then that state's laws apply.

If you call me and I decide to tape the conversation, then there is
no need for me to tell you about it. The law in my state says that
if one party to the conversation agrees to its being taped, then
there is no need to notify the other party, and it is legal. If I
tape the conversation, then the presumption is that I agreed to it.

The Federal law simply establishes that basic requirement,-- that one
party agree, and leaves the states free to enact stricter laws.

As to privacy, if you called him, then it is you who have violated
his privacy.

> I will persecute to the fullest should you actually have in your possession
> this illegal record.

You do seem to be perversely and neurotically focussed on persecuting
people.

--
Jim Fuller

4108. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 04:18:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A384A10.4E9ED053@IEEE.org>
Source record: 174707

Wolfgang Schliess wrote:
> have anybody experience to (home) build a 160m isotron antenna ? Please let
> me know.

I have a similar antenna called a Termaline made by Bird. :-)
--
http://www.mindspring.com/~w6rca

4109. Re: Impedance of 2 dipoles-1 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 04:23:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A384B5D.3D359752@IEEE.org>
Source record: 174708

k5fni@my-deja.com wrote:
> The longer dipole must work on its quarter-wave frequency ...

Sorry, Mother Nature disagrees. A good rule of thumb is that a dipole should be at least 3/8WL on its lowest frequency of operation. Even then, it needs a resonating series section transformer.
--
http://www.mindspring.com/~w6rca

4110. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 04:26:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A384BF5.5603362B@IEEE.org>
Source record: 174709

Jim Fuller wrote:
>
> Cecil wrote:
> > Yep, and with any luck you can find a hippy lady to keep you warm.
>
> You trigger fond memories of my year and something in 30th MPs at the
> Presidio in 1969 and early 1970.

I moved to California in 1971. Man, those were the days.
--
http://www.mindspring.com/~w6rca

4111. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 05:20:43 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <919lmg$ql4$1@slb1.atl.mindspring.net>
Source record: 174710

"Fractenna" <fractenna@aol.com> wrote in message
news:20001213222708.21724.00002865@ng-fl1.aol.com...
> >"So don't f*ck with me..."--Chuck O'Neal
>
> >So....fracky...do you want to try and dispute it? I will post it
> >as .wav file if you do.
>
> There is no wav file to post. That is why you have not posted it. Just
like
> you didn't post, or e-mail, the summary of our conversation. (Remember; I
> asked you, politely, for this doc and you threatened to sue me?) And even
if
> there is some 'file' --which cannot be what you say it is because what you
are
> saying is false-- your attorney would be ill-advised to have his client
> initiate a suit when his client has broken federal law. If, as you say,
you
> recorded our conversation.

Several states have one party consent laws.

>
> I never, ever, ever, gave permission for you to record our conversation. I
> never, ever was aware that our conversation was being recorded.

In a one party consent state you wouldn't have to.

If I was aware
> of that, I would have asked you to turn off the machine.Furthermore, I am
> prepared to demonstrate that your experience in broadcast radio makes you
more
> than aware of the wiretap laws and requirements of taping notification;
that
> your broadcast radio background makes you aware of the techniques which
can be
> used to fabricate a tape which sounds like the other person was
co-recorded
> with said 'beeps' , and so on.
>
> Also, it WILL be part of my evidence
> >in the suit. Get your lawyers ready....What is your net worth?
>
> This is the clincher. It is clear that your intent is not some
'correctional'
> desire (not that there is something to correct) but a mere nuisance

suit --
> where you have publicly stated your objective is to diminish my life
savings,
> all that I have worked for as a working person. Ask your attorney whether
the
> law sympathizes with suits in order to drain the resources of an
individual.

He didn't want to demand an amount you were unable to pay in your lifetime.

>
> Also, ask your attorney how such a public admission makes you liable and
in a
> weak position for a countersuit.
>
> >
> >This effort of your's will be forwarded to the appropriate individuals.
>
> The only 'appropriate individual(s)' is your attorney.I strongly urge you
to
> bring this to his or her attention.
>
> >
> >hope this helps...
> >with all best regards,
> >Chuck K1KW
>
> It does Chuck. Again, that is my opinion.. ANYTHING you do that gets you
to
> take responsibility for your actions AND STOP HARRASSING ME is very
> constructive. Even if it wastes $300 of your money having your lawyer
write me
> a letter (which I will reproduce here).
>
> That is why I will pledge to make daily effort to exhort you in this, as
long
> as you continue to send harrassing and libelous replies.
>
> So please: SEEK COUNSEL. That is the ONLY way you will stop this obsessive
> game.Believe me; I'm not interested in playing.
>
> Thanks!
>
>
> Nathan Cohen, Ph.D.

4112. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 06:50:48 UTC
From: LA8AK@online.no
Message-ID: <3a37fc72.192731294@news.online.no>
Source record: 174711
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

for most RF filter types, it isn't too much different, so perhaps even
22uH is sufficient, or use a 1/4w reistor with so many turns you can
wind on it using the thinnest wire you can find..

73
-jm
On Wed, 13 Dec 2000 15:40:02 -0700, "Kelly Bersch"
<kbersch@not-sofast.net> wrote:

>Do you actually need two different values of chokes (1-mH and 100-uH) or did
>you mean 1-mH or 1000-uH?
>
>73 de AC7EW
>Kelly
>
>"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message
>news:3a356651$1@news.microsoft.com...
>Am building a project out of a Sept 95 QST article (automatic remote antenna
>tuner) requiring extensive RF filtering of every input/output lead. Each PI
>section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF
>choke.
>
>Can anyone recommend a part number/type and source for the inductors? What
>type of caps would be recommended?
>
>-rob
>
>
>
>
>
>
>

---
ide forum http://home.c2i.net/la2pj/ide/index.html

4113. High gain factors calculated for a dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 06:59:56 UTC
From: pa2ion@my-deja.com
Message-ID: <919r5b$52s$1@nnrp1.deja.com>
Source record: 174712

High gain factors calculated for a dipole

L.s.

Using NEC as a tool to make predictions of the electromagnetic fields from a 15 m band dipole at varying altidudes some high gain results were obtained at some situations.

NEC-2 from Nittany Scientific calculates up to 14.9 db gain in downward directions (abt. -170 deg) when taking soil conditions with low conductivity and low permittivity and an antenne height of 18 meter. In my understanding a dipole (gain of 2.17 db in free space) has a max. gain of 8.2 db at 100 procent ground reflection. I am still looking for an explanation for this phenomena.

Questions:
1) Are the results right? If so, are those results valid for WORSTCASE calculations at a particular point in the neighborhood of the antenne site (by far-field calculation)?
2) The model output gives also info abt. the near electric field and the near magnetic field: are those values a good estimation of the reality?
3) If both radiation pattern and the near EM-fields are right: can i use those data as a source for an estimation of the bandwith of the EM-field values?

Model parameters:

```
CM Dipole, Horizontal, h=18m, ground= soil conditions urban and industry
area
CE
GW 1,21, 0,-3.5,18, 0,3.5,18, 0.0025
GS 0 0 1
GE 1
GN 0 0 0 0 3 .001
FR 0 1 0 0 21.43 0.1
EX 0 1 11 00 300.00000 0.00000
NE 0 50 1 1 1 0 1.75 1 0 0
NH 0 50 1 1 1 0 1.75 1 0 0
RP 0 90 1 1000 -180 0 1 1
EN
```

Ron, PA2ION.

Sent via Deja.com
http://www.deja.com/

4114. Bush wins, the Goron concedes, & the ARRL trembles.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 07:29:40 UTC
From: no-ARRL@all.com
Message-ID: <no-ARRL@for-liberals>
Source record: 174713
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.swap

Now the conservatives can fill the FCC with people that will oppose the ARRL and work to improve amateur radio and license requirements. If the ARRL really cared about amateur radio they would have done so by sending monthly petitions to the FCC proposing ways to improve the service, but it can be clearly seen that the ARRL doesn't care. They want ham radio to be like CB and hams to be like CBer's... crude, stupid and waiting for their next free ham radio license handout.

wouff

4115. Re: Bush wins, the Goron concedes, & the ARRL trembles.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 08:06:34 UTC
From: Who Cares? <a@b.c>
Message-ID: <3A387F8A.F5A9CAEB@b.c>
Source record: 174714
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.swap

```
Wondering who this is? Here's a hint:
Name: pool-63.53.187.191.snfr.grid.net
Address: 63.53.187.191

Last 3 routes:
core-snfx1-atm9-0.2.grid.net (206.80.170.70)
srv17-6-16.snfr.bd.ans.net (207.205.247.124)
pool-63.53.187.191.snfr.grid.net (63.53.187.191)
```

4116. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 08:23:05 UTC
From: "Ken M." <poboxdc@ix.netcom.com>
Message-ID: <3A388369.BB3288AC@ix.netcom.com>
Source record: 174715
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

reallyrosie@my-deja.com wrote:
>
> Just last week Sprint applied for a conditional permit for six antennae
> on a apartment building that is separated by my son's kindergarten by a
> five foot alley, not to mention that they point directly across school
> property. Personally, I'm deeply disturbed by this, and, yes, I think
> this is a new strategy for them. Heck, I'm an adult, I can choose to
> be near six cell phone antennae for six hours a day. Our children have
> no choice. They will be exposed to RF radiation. And I don't care how
> innocuous Sprint will tell me it is, I don't want my children exposed.
> Can anyone help me in getting some email contact info for Sprint PCS.
> The parents here are mobilizing a protest, including TV and newspapers,
> but we would also like to flood them with email, etc. Help!

Most people will tell you there is NO problem with this practice
and others will tell you there IS a problem.

I live about 1,500 feet from a high-rise apartment building (20 floors)
and they have about 40-50 antennas on the roof that are being used
by two-way radio companies, paging companies and cellular companies.

Is it dangerous? I believe a paging transmitter (200-300 watts@900mhz)
could be harmful for those living on the tops floors, but the
owners are more interested in making ($$$) money. We will never
know the effects of these antennas for many years.

Comments?

--
(ken)

IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
http://www.zyworld.com/maryland/amazing.JPG

To respond to this place (-) between x and d.

Because e-mail can be altered electronically,
the integrity of this communication cannot be guaranteed.

4117. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 08:24:27 UTC
From: "Ken M." <poboxdc@ix.netcom.com>
Message-ID: <3A3883BB.85281B86@ix.netcom.com>
Source record: 174716
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

BillRadio wrote:
>
> Rosie,
> Instead of fighting the beast, control it! Schools in other states are
> EMBRACING the cellular carriers and the cash they generate. Instead of
> fighting, ask to be part of the process. An antenna that directs the
> signal OVER the school (and grounds) is far less harmful than a site
> just a little farther away that directs its signal INTO the school!
>
> The cellular antenna directs its signal hozontally. If the building
> next door is taller than the school, the signal is directed to the
> horizon and over the school, not to the ground below. Your kids get far
> more radiation potential from the school's microwave oven!
>
> Please understand I am not discussing whether or not cellular
> transmissions are harmful. I am explaining where the signal is pointed.
> Like the rotating red light on the roof of a police car: the officer is
> close to it, but but no means is he getting a bright red light in the
> eye. The light is directed to the other cars, and would be even if he
> were driving a convertible.

And many of those officers who laid a radar gun in their laps
have developed cancer of the testicles.

--
(ken)

IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
http://www.zyworld.com/maryland/amazing.JPG

To respond to this place (-) between x and d.

Because e-mail can be altered electronically,
the integrity of this communication cannot be guaranteed.

4118. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 08:28:14 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A38849F.7CB9167B@haertig.com>
Source record: 174717

Hey Carl,

It is not uncommon to mount other antennas on a series fed AM radiator. There is generally not a problem with intermodulation or receiver desensitization because of the wide frequency separation. The challenge is to bring the antenna coax over the base insulator of the tower. There is a substantial RF voltage at this point and shorting it out causes the AM to not work any more.

There are three common methods for handling this problem. The first is to use a device called an isocoupler. It is essentially a tuned transformer operating at the frequency on the coax. There is a large physical separation between the primary and secondary which presents a minimum shunt capacitance to the AM. The isocoupler has a coax connector on the top and on the bottom. Depending on design it can be mounted to the tower or on and adjacent frame. The top haf of the isocoupler is securely bonded to the tower with copper strap, and the bottom half of the isocoupler is bonded to ground. In all cases, the ground side of the antenna should be well bonded to the tower. The coax should be bonded to the tower approximately every 20 feet.

Using isocouplers can be expensive if there are a quite a few coaxes to be brought across the base insulator. Kintronic Labs is a good source for well made and designed isocouplers.

The second method to solve this problem is to run the coax up the inside of the tower, stood off on insulators. Where the coax crosses the base insulator, the outer conductor is well bonded to the ground system. At a point that is 1/4 wavelength up the tower (at the AM frequency) the coax outer conductor is bonded to the tower and every 20 feet thereafter. Standard coax hangers are used above the short point. This forms a 1/4 wave stub, so the short circuit at the base of the tower appears as an open circuit where the coax bonds to the tower. Again the antenna should be well bonded to the tower. Obviously this will only work on towers over 1/4 wavelength tall.

The third method is to turn the AM radiator into a skirted radiator. 3 to 6 wires are run down parallel to and symmetrically around the tower and spaced away from the tower on fiberglass insulators anywhere from 3 to 6 feet. These wires are bonded together near the top with a circle of wire and the circle is bonded to the tower in 3 or more places. They are also bonded together with a circle at the bottom of the skirts. 3 or more grounding straps are connected between the bottom of the tower and ground, thus effectively removing the insulator from the circuit. The feed from the antenna tuning unit (ATU) of the AM is disconnected from the tower and connected to the bottom of the skirts. This may

require some redesign of the ATU.

In all these cases the ATU will have to be retuned and there some measurements that the FCC requires to be made. In addition a form has to be filed with the FCC indicating what the new base impedance of the tower is and hence the proper base current.

There are a number of trade-offs, depending on the electrical height of the tower, the number of coaxes needing to go across the base, and what the potential for future expansion is. If you are not familiar with AM practice, measurement and tuning, you should hire an engineering consultant to help you through the process of deciding which technique to use, to design the the system and to make the required measurements and adjustments after the antennas are installed.

If you wish to discuss your project with me, please feel free to contact me off list or call me at the office. These are the kind of services my firm offers.

Gray

carl westerman wrote:
>
> Here you go..
>
> I have a radiating AM Tower and I need to install some cellular panel
> antennas on standoffs at the top of it.
> Now I know that my copper coaxial cable will interfere with the radiation
> pattern of the AM tower and that I will have to get it working in sympathy
> of the am tower buy grounding the coax along the length.
>
> Question?
>
> AM is kicking out somewhere between 600khz and 1700khz.. I don't know what
> the power is but may be a kilo watt or less.
> My cellular system will be at 1850mhz .. on maybe less than 100 watts...
>
> I remembered I once used a 2m antenna very close to a CB antenna that when I
> transmitted on 20 watts it blatted out my cb signal... right across the
> spectrum on the analyser... even though the frequencies were apart by about
> 120megs...
>
> How do you think the cellular tx / rx signal will be affected by this due to
> the sheer power and proximity???????
>
> Also any other facts that I may have not realised would be appreciated.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227

503-282-2989
503-282-3181 FAX
gfh@haertig.com

4119. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 08:46:38 UTC
From: Bill Rubin <billrubin@prodigy.net>
Message-ID: <3A3888EE.3AD2035@prodigy.net>
Source record: 174718
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Ken M." wrote:
>
> reallyrosie@my-deja.com wrote:
> >
> > Just last week Sprint applied for a conditional permit for six antennae
> > on a apartment building that is separated by my son's kindergarten by a
> > five foot alley, not to mention that they point directly across school
> > property. Personally, I'm deeply disturbed by this, and, yes, I think
> > this is a new strategy for them. Heck, I'm an adult, I can choose to
> > be near six cell phone antennae for six hours a day. Our children have
> > no choice. They will be exposed to RF radiation. And I don't care how
> > innocuous Sprint will tell me it is, I don't want my children exposed.
> > Can anyone help me in getting some email contact info for Sprint PCS.
> > The parents here are mobilizing a protest, including TV and newspapers,
> > but we would also like to flood them with email, etc. Help!
>
> Most people will tell you there is NO problem with this practice
> and others will tell you there IS a problem.
>
> I live about 1,500 feet from a high-rise apartment building (20 floors)
> and they have about 40-50 antennas on the roof that are being used
> by two-way radio companies, paging companies and cellular companies.
>
> Is it dangerous? I believe a paging transmitter (200-300 watts@900mhz)
> could be harmful for those living on the tops floors, but the
> owners are more interested in making ($$$) money. We will never
> know the effects of these antennas for many years.
>
> Comments?

There was a big protest here in New York because Sprint signed a
contract with the local school district to put an antenna on top
of a flagpole at the local high school. People only found out
about it after the contract was signed and there were all sorts
of protests, they went to the state education commissioner, but
were unable to get it voided.

What I find amusing is that many of the people who protested
this likely complain to their cellular company about poor
coverage, and many of the high school kids who are protesting
probably put cellular phones up to their heads every day.

Bill

4120. ....Phil / W7OX....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 10:26:23 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A38A04F.E27A6B0C@oio.net>
Source record: 174819

Phil W.,
I am extremely sorry! I will certainly do my best to
be more specific in the future. The only excuse I can
offer is that one of the 'personalities' of ol'Frac is also
called 'Phil'.
'Doc

4121. Re: C3S and C3SS?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 11:30:10 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <Ya2_5.1089$65.1064992@newsfeed1.thebiz.net>
Source record: 174820

I'm sure you could get the exact specs from Force 12. Off the top of my head, the C3SS has a shorter boom and shortened elements. The C3S is full-sized and I believe was actually the first design in the C3 series. If you have the room, go for the C3S.

The C3S performs on a par with the C3 - did an extensive on-air comparison test and confirmed this myself.

GL/73,
Barry N1EU

Jim <aa5f@hiwaay.net> wrote in message news:3A383673.A79D788B@hiwaay.net...
> Anyone know the difference between the Force 12 C3S and C3SS? Thanks!
>
> Jim N4AL

4122. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 11:40:02 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001214064002.08895.00004714@ng-ca1.aol.com>
Source record: 174821

>I read in this news group a while back on the best height for a six
>meter antenna, if I recall right someone was saying that one
>wavelength above ground,,,,, I think,,,,,,I understand it will work
>better the higher it is,,,,,,,,,,,,,,,,,,,,,,, but what I wanted to
>know ,,,,, what was the least elevation above ground that would work
>really well. Appreciate your refreshing my memory. thanks. Chuck
>Lorentson "73"
>
>
>
>
>
>

Chuck,
I have my 3 element home brew at 42 ft. This works FB on both local and long distance coms on 6 meters. Fun band and with a minimum of equipment you can have a great time dxing the 6 meter band.
73 and see you on 6 meters de KG4FET Sandor EM90 Proud FT 100 owner

4123. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 11:45:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91adt2$30k$1@plutonium.btinternet.com>
Source record: 174826

Dear all,

The various responses to my question have been quite interesting. But only one response was from someone who had had practical experience and he reported no unusual problems encountered in using the network. Perhaps one conclusion I could draw is that Pi-L networks are very few and far between.

Ordinary circuit analysis programs provide no guidance on what happens during a minimum-dip tune-up procedure. They merely demonstrate the existence of double humps in the input impedance versus frequency curve, the spacing and lack of symmetry of which depend on circuit Q. Someone has pointed out that, in general, a pair of humps is deducible from the numbers of coils and capacitors. From an impedance matching aspect one C and one L are redundent.

But when tuning up the frequency is not a variable. - it is the two capacitors which vary. What I would like to know is to where on the input Z/f response does the tuning up procedure lead ?

And are the two capacitors used in exactly the same manner as the "Load" and "Tune" capacitors in an ordinary Pi-match network ?

Reg, G4FGQ

4124. Re: A-99 Won't Work, How About:

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 11:56:48 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001214065648.08895.00004716@ng-ca1.aol.com>
Source record: 174822

>Can set up A99 or Hy-Gain 18V-S when I use it and take it down when I'm
>done.
>

I put an A 99 up here as a joke @ 7 ft off the ground and ran 4 6 guage 8 ft 4 in radials that I clamped to the gounding section of the antenna with a pipe clamp. The antenna worked as well or better in some cases on DX then my Anttron 305 with no radials @ 47 ft on top of the tower. also found that I could work 17 and 12 mtrs as well bypassed on the tuner with this antenna. There are a couple of very good ground mount lifts that you could purchase. These fold over and lay a verticle down. look up Alphs Delta DH 1 or DH 2 on the hamradio.com web site, or in your HRO catalog(ordered from above web site). Good luck on the upcoming tests and hope to hear you al others reading this soon on the 10 meter Wacky Wingding net on 28.390 Monday nights @ 7:30 EST. 73 and Happy Holidays de KG4FET Sandor

4125. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:10:31 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <91adbkieb1@nnrp1.deja.com>
Source record: 174824
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <3A3883BB.85281B86@ix.netcom.com>,
"Ken M." <poboxdc@ix.netcom.com> wrote:
>
> And many of those officers who laid a radar gun in their laps
> have developed cancer of the testicles.
>
> --
> (ken)
>

What??!!?? I doubt it. I really doubt it.

The radar gun has a trigger that turns the emitter on and off. When a police officer wants to check your speed, he points the gun at your vehicle and pulls the trigger -- just like hitting the PTT switch on a handheld. The radar gun is not emitting any signal when the trigger is not pulled.

I doubt that police offices sit around with the radar gun in their laps with the trigger pulled. The ones I have seen have the gun mounted in a "holster" on the dash or lying on the dash when not in use.

Please cite a documented medical source for this claim -- not some urban legend and certainly not Art Bell.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com
http://www.deja.com/

4126. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:19:39 UTC
From: fractenna@aol.com
Message-ID: <20001214071939.28392.00004934@ng-cr1.aol.com>
Source record: 174823

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001213222708.21724.00002865@ng-fl1.aol.com...
>> >"So don't f*ck with me..."--Chuck O'Neal
>>
>> >So....fracky...do you want to try and dispute it? I will post it
>> >as .wav file if you do.
>>
>> There is no wav file to post. That is why you have not posted it. Just
>like
>> you didn't post, or e-mail, the summary of our conversation. (Remember; I
>> asked you, politely, for this doc and you threatened to sue me?) And even
>if
>> there is some 'file' --which cannot be what you say it is because what you
>are
>> saying is false-- your attorney would be ill-advised to have his client
>> initiate a suit when his client has broken federal law. If, as you say,
>you
>> recorded our conversation.
>
>
>Several states have one party consent laws.
>
>>
>> I never, ever, ever, gave permission for you to record our conversation. I
>> never, ever was aware that our conversation was being recorded.
>
>In a one party consent state you wouldn't have to.
>
> If I was aware
>> of that, I would have asked you to turn off the machine.Furthermore, I am
>> prepared to demonstrate that your experience in broadcast radio makes you
>more
>> than aware of the wiretap laws and requirements of taping notification;
>that
>> your broadcast radio background makes you aware of the techniques which
>can be
>> used to fabricate a tape which sounds like the other person was
>co-recorded
>> with said 'beeps' , and so on.
>>
>> Also, it WILL be part of my evidence
>> >in the suit. Get your lawyers ready....What is your net worth?

>>
>> This is the clincher. It is clear that your intent is not some
>'correctional'
>> desire (not that there is something to correct) but a mere nuisance
>suit --
>> where you have publicly stated your objective is to diminish my life
>savings,
>> all that I have worked for as a working person. Ask your attorney whether
>the
>> law sympathizes with suits in order to drain the resources of an
>individual.
>
>He didn't want to demand an amount you were unable to pay in your lifetime.
>
>>
>> Also, ask your attorney how such a public admission makes you liable and
>in a
>> weak position for a countersuit.
>>
>> >
>> >This effort of your's will be forwarded to the appropriate individuals.
>>
>> The only 'appropriate individual(s)' is your attorney.I strongly urge you
>to
>> bring this to his or her attention.
>>
>> >
>> >hope this helps...
>> >with all best regards,
>> >Chuck K1KW
>>
>> It does Chuck. Again, that is my opinion.. ANYTHING you do that gets you
>to
>> take responsibility for your actions AND STOP HARRASSING ME is very
>> constructive. Even if it wastes $300 of your money having your lawyer
>write me
>> a letter (which I will reproduce here).
>>
>> That is why I will pledge to make daily effort to exhort you in this, as
>long
>> as you continue to send harrassing and libelous replies.
>>
>> So please: SEEK COUNSEL. That is the ONLY way you will stop this obsessive
>> game.Believe me; I'm not interested in playing.
>>
>> Thanks!
>>
>>
>> Nathan Cohen, Ph.D.
>

Chuck O'Neal has defined his own agenda and it is a full one. Now please be quiet and let him pursue it--and let his attorney advise his client to stop harassing and libeling the very person he wants to sue. Or let him stop harassing me. Period.

Either way we all win, as we return to a nice, quiet NG and no mendacious claims of small beams with 6 dBd gain.

NC

4127. Re: Bush wins, the Goron concedes, & the ARRL trembles.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:20:35 UTC
From: fractenna@aol.com
Message-ID: <20001214072035.28392.00004935@ng-cr1.aol.com>
Source record: 174825

>
>wouff
>

"who let the dogs out"?

73
Chip N1IR

4128. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:28:04 UTC
From: Ronald Kushner <ron@glis.net>
Message-ID: <3A38BCD4.66AFAA6A@glis.net>
Source record: 174827
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Joe Schlatter wrote:
>
> In article <3A3883BB.85281B86@ix.netcom.com>,
> "Ken M." <poboxdc@ix.netcom.com> wrote:
> >
> > And many of those officers who laid a radar gun in their laps
> > have developed cancer of the testicles.
> >
> > --
> > (ken)
> >
>
> What??!!?? I doubt it. I really doubt it.
>
> The radar gun has a trigger that turns the emitter on and off. When a
> police officer wants to check your speed, he points the gun at your
> vehicle and pulls the trigger -- just like hitting the PTT switch on a
> handheld. The radar gun is not emitting any signal when the trigger is
> not pulled.
>
> I doubt that police offices sit around with the radar gun in their laps
> with the trigger pulled. The ones I have seen have the gun mounted in
> a "holster" on the dash or lying on the dash when not in use.
>
> Please cite a documented medical source for this claim -- not some
> urban legend and certainly not Art Bell.

Actually some of the older models blasted all the time. You had stupid cops who would take units made to be mounted permanently to the vehicle and put them in their lap. Those devices were cheaper to buy than the ones with the triggers. It took 20 years of doing this to develop tumors.

From what I understand the radar guns give off substantial energy, you can pick up a cop for miles and miles with a radar detector, but the stores which use X band radar for automatic door openers are only picked up for a few thousand feet when you're driving down the road. Also knowing that radar is 45 GHz and a bit about radio propagation, they do appear to be high power devices compared to cellular towers that operate at a much lower frequency in a band with considerably less free space loss.

-Ron

4129. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:33:19 UTC
From: 2w8ji@contesting.com
Message-ID: <3a38bda1.159880848@news.akorn.net>
Source record: 174828

On Wed, 13 Dec 2000 23:02:02 GMT, Mike Mayer <mwmayer@tds.net> wrote:

>>>>>> "Rick" == Rick Littlefield <k1bqt@aol.com> writes:
>
> > There are patents existing on very short-range induction-based
> > communication links precisely because they DON'T radiate EMR and
> > thus explicitly exclude communication over distance. That might
> > be food for thought when considering the validity (or invalidity)
> > of CFA technology.
>
> > Rick K1BQT
>
>I could understand a situation where far-field radiation was poor, but
>if the magnetic field is changing, you've got EM waves.
>
>--
>==
>Mike Mayer

Right you are Mike. The induction fields can be be strong
(concentated) and radiation poor, but there will always be radiation.

73 Tom

4130. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:49:42 UTC
From: 2w8ji@contesting.com
Message-ID: <3a38bf95.160381342@news.akorn.net>
Source record: 174829
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Thu, 14 Dec 2000 12:10:31 GMT, Joe Schlatter <joe@schlatter.org>
wrote:

>What??!!?? I doubt it. I really doubt it.

Some people really are foolish. They will suck up any urban lmyth and
pass it on as a fact.

The only link ever found between non-ionizing radiation and cell
damage turned out to be falsified. The "scientist" who did the study
was fired from the school he worked at, and the data in the study
dismissed as false.

Because of that one single false study we now will have years and
years of urban myth talking about dangers of non-ionizing radiation.

Bottom line is if the EM radiation from power lines or radio signals
is not strong enough to elevate your cell's temperature, it will do no
harm no matter how long you are exposed to it. There has never,
despite some of the most extensive tests ever made, been any link
between this type of EM radiation and damage to animals unless the
field gets so intense it cooks them.

You know the stories about the cops is pure unvarnished bullcrap
because the guns are off unless the cop is checking the speed of his
crotch, and the damage is not accumulated over time.

73 Tom

4131. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 12:53:20 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <91afrqnhd1@bob.news.rcn.net>
Source record: 174830

Mr Nathan Cohen:
Where is your apology? Last request. You cannot
call me a liar just because you disagree with me.
Any credibility you had for objective pursuit
of the truth is slipping away with your behavior.
Your attack on me was unjustified! What is left
of your reputation is on the line here.
Do the right thing.

4132. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:05:12 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a38c58b_1@news.cybertours.com>
Source record: 174831

Funny Cecil ....
"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A384A10.4E9ED053@IEEE.org...
> Wolfgang Schliess wrote:
> > have anybody experience to (home) build a 160m isotron antenna ? Please
let
> > me know.
>
> I have a similar antenna called a Termaline made by Bird. :-)
> --
> http://www.mindspring.com/~w6rca

4133. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:08:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91ahdv$65h$1@plutonium.btinternet.com>
Source record: 174834

An antenna on any band will work at very high efficiency
(>90%) when 3/8ths or more wavelengths above any sort of
ground. For the 6 metre band that's anywhere above 8 feet.
And even as low as 5 feet you will get around very well.

What REALLY matters is height above obstructions in the
immediate vicinity. A satisfactory height in New York City
is 8 feet above the Empire State Building. But at the
bottom of the Colorado Canyon you have REAL problems.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

4134. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:08:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91aho6$ou6$1@neptunium.btinternet.com>
Source record: 174836

An antenna on any band will work at very high efficiency
(>90%) when 3/8ths or more wavelengths above any sort of
ground. For the 6 metre band that's anywhere above 8 feet.
And even as low as 5 feet you will get around very well.

What REALLY matters is height above obstructions in the
immediate vicinity. A satisfactory height in New York City
is 8 feet above the Empire State Building. But at the
bottom of the Colorado Canyon you have REAL problems.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

4135. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:12:27 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A38C73B.2050006@hiwaay.net>
Source record: 174832

Chuck- I note that Chips attack has changed since it has been pointed out that recording is OK, if one party aggrees.- However- I have one quibble- with regard to his"reputation".
His reputation is intact, but it is highly negative. His current approach is only enhancing his reputation, which resembles that of "a junk-yard dog".

Stick in there- I hope this helps.

Bill-W4BSG

Chuck O'Neal wrote:

> Mr Nathan Cohen:
> Where is your apology? Last request. You cannot
> call me a liar just because you disagree with me.
> Any credibility you had for objective pursuit
> of the truth is slipping away with your behavior.
> Your attack on me was unjustified! What is left
> of your reputation is on the line here.
> Do the right thing.

4136. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:20:10 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <fsg4OmgoYExaLnGRmhZrsz7AAzMl@4ax.com>
Source record: 174833

kc5cqa <kc5cqa@devtex.net> wrote:

>I read in this news group a while back on the best height for a six
>meter antenna, if I recall right someone was saying that one
>wavelength above ground,,,,, I think,,,,,,I understand it will work
>better the higher it is,,,,,,,,,,,,,,,,,,,,,, but what I wanted to
>know ,,,,, what was the least elevation above ground that would work
>really well. Appreciate your refreshing my memory. thanks. Chuck
>Lorentson "73"

A vertical ground plane antenna of aluminum tubing worked fine at 15
feet with 5 watts. You don't need much when 6 meters is open.

Bob

4137. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:26:03 UTC
From: fractenna@aol.com
Message-ID: <20001214082603.24627.00005482@ng-cd1.aol.com>
Source record: 174835

>
>Mr Nathan Cohen:
>Where is your apology? Last request. You cannot
>call me a liar just because you disagree with me.
>Any credibility you had for objective pursuit
>of the truth is slipping away with your behavior.

Chuck, I've heard this so many times on this NG--especially from you-- I must confess that I wonder if credibility is like a gas tank where you say 'fill'er up'. How else could I have any left--according to you:-)? The fact is that you have called me a homosexual ; fool; and sundry other libelous things. The fact is that you have illegally--by your own admission--wiretapped a phone conversation we had . The fact is that you claim that my signal is a factor of--1000-- down from yours (yet it looks like I came in second in the country in my class on the recent 10M contest). The fact is that you now claim a 6 dBd small yagi that beats the FQY. Among other things.

My 'attack'--to use your incorrect characterization --is an expression of the truth, to counterbalance the lies and distortions you introduce.

>Your attack on me was unjustified! What is left
>of your reputation is on the line here.
>Do the right thing.
>

Chuck--

If you are going to sue me then please get on with it.

If you are going to post a wav file from an illegal wiretap then please get on with it.

If you are going to notify the "appropriate individuals" then please get on with it. Be sure to tell them you are party to a lawsuit against me.

If you are going to drive me into insolvency then please get on with it.

All these--and more --you claim to be doing. So just do it. Or be quiet.

It is a switch Chuck. Either be truthful and nice-- or be litigious and quiet. Either way the NG wins and I won't have you harrassing me anymore.

As to my response, I think you would have done well to measure and understand WHY the NG has been so quiet lately--until you decided to rant things up.

Do you want an apology? OK: show us published data on your 6 dBd small Yagi and I will not only 'apologize' but I will remove the 10M FQY from the web.

Do the right thing.

Cordially,

Nathan Cohen, Ph.D.

4138. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:48:29 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A38CFA9.327A6E45@home.com>
Source record: 174837
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Ken M." wrote:
>
> reallyrosie@my-deja.com wrote:
> >
> > Just last week Sprint applied for a conditional permit for six antennae
> > on a apartment building that is separated by my son's kindergarten by a
> > five foot alley, not to mention that they point directly across school
> > property. Personally, I'm deeply disturbed by this, and, yes, I think
> > this is a new strategy for them. Heck, I'm an adult, I can choose to
> > be near six cell phone antennae for six hours a day. Our children have
> > no choice. They will be exposed to RF radiation. And I don't care how
> > innocuous Sprint will tell me it is, I don't want my children exposed.
> > Can anyone help me in getting some email contact info for Sprint PCS.
> > The parents here are mobilizing a protest, including TV and newspapers,
> > but we would also like to flood them with email, etc. Help!
>
> Most people will tell you there is NO problem with this practice
> and others will tell you there IS a problem.
>
> I live about 1,500 feet from a high-rise apartment building (20 floors)
> and they have about 40-50 antennas on the roof that are being used
> by two-way radio companies, paging companies and cellular companies.
>
> Is it dangerous? I believe a paging transmitter (200-300 watts@900mhz)
> could be harmful for those living on the tops floors, but the
> owners are more interested in making ($$$) money. We will never
> know the effects of these antennas for many years.
>
> Comments?
>

Reinforced concrete makes an excellent shield. Also, the
signals decrease in strength with the square of distance.
i.e. when you move twice as far from the antenna, the signal
strength is reduced to 1/4. In addition, I doubt the antenna
patterns would be configured to send the power straight
down.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4139. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 13:51:03 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A38D043.605E6F29@home.com>
Source record: 174838
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Joe Schlatter wrote:

> Please cite a documented medical source for this claim -- not some
> urban legend and certainly not Art Bell.

Who's Art Bell?

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4140. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:02:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A38D310.48AAADC0@IEEE.org>
Source record: 174839
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

James Knott wrote:
> Who's Art Bell?

He is W6OBB and was the late night AM radio talk show host for
"Coast to Coast AM" and "Dreamland". These shows are still on
the air but Art Bell retired. I miss him. Guess I'll have to
look for him on 75m.
--
http://www.mindspring.com/~w6rca

4141. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:18:57 UTC
From: Bob Smith <rsmith7_NoSpam_@carolina.rr.com>
Message-ID: <lF4_5.53616$4K4.7653098@typhoon.southeast.rr.com>
Source record: 174842
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"James Knott" <the.lights.are.on.but.no.one.is@home.com> wrote in message
news:3A38D043.605E6F29@home.com...
: Joe Schlatter wrote:
:
: > Please cite a documented medical source for this claim -- not some
: > urban legend and certainly not Art Bell.
:
: Who's Art Bell?

Before he quit this past year, Art Bell was a nationally syndicated radio announcer, broadcasting out of his home in Nevada, who had a 4 hour night show, on the paranormal, Nostradamus predictions, alien and government conspiracies, etc. Think of him like a rabid Fox Muldar, and that describes Art Bell. He's been replaced by someone else for the broadcasts, but if this kinda stuff still interests you, there is a website, IIRC - www.artbell.com
.

Bob

4142. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:52:39 UTC
From: Mark Swope <mswope@ieee.org>
Message-ID: <3a392118$0$170$3936f1fe@news-core.twtelecom.net>
Source record: 174856
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Amazing... By my count, we made it about 3 days before someone's knee jerked and the "radiation and kids" issue came out (back up this thread a ways). Three days on Internet time... Everyone must be out shopping.

mas

"James Knott" <the.lights.are.on.but.no.one.is@home.com> wrote in message news:3A38CFA9.327A6E45@home.com...
> "Ken M." wrote:
> >
> > reallyrosie@my-deja.com wrote:
> > >
> > > Just last week Sprint applied for a conditional permit for six antennae
> > > on a apartment building that is separated by my son's kindergarten by a
> > > five foot alley, not to mention that they point directly across school
> > > property. Personally, I'm deeply disturbed by this, and, yes, I think
> > > this is a new strategy for them. Heck, I'm an adult, I can choose to
> > > be near six cell phone antennae for six hours a day. Our children have
> > > no choice. They will be exposed to RF radiation. And I don't care how
> > > innocuous Sprint will tell me it is, I don't want my children exposed.
> > > Can anyone help me in getting some email contact info for Sprint PCS.
> > > The parents here are mobilizing a protest, including TV and newspapers,
> > > but we would also like to flood them with email, etc. Help!
> >
> > Most people will tell you there is NO problem with this practice
> > and others will tell you there IS a problem.
> >
> > I live about 1,500 feet from a high-rise apartment building (20 floors)
> > and they have about 40-50 antennas on the roof that are being used
> > by two-way radio companies, paging companies and cellular companies.
> >
> > Is it dangerous? I believe a paging transmitter (200-300 watts@900mhz)
> > could be harmful for those living on the tops floors, but the
> > owners are more interested in making ($$$) money. We will never
> > know the effects of these antennas for many years.
> >
> > Comments?
> >
>

> Reinforced concrete makes an excellent shield. Also, the
> signals decrease in strength with the square of distance.
> i.e. when you move twice as far from the antenna, the signal
> strength is reduced to 1/4. In addition, I doubt the antenna
> patterns would be configured to send the power straight
> down.
>
> --
> Replies sent via e-mail to this address will be promptly
> ignored.
> To reply, replace everything to the left of "@" with
> "james.knott".

4143. Re: Bush wins, the Goron concedes, & the ARRL trembles.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:56:53 UTC
From: k3bu@aol.com
Message-ID: <20001214095653.28868.00004713@ng-cl1.aol.com>
Source record: 174840

>
>"who let the dogs out"?
>
>73
>Chip N1IR
>
>
>

Skunk got out too (again)!

4144. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:59:47 UTC
From: richardharrison@webtv.net
Message-ID: <16146-3A38E063-13@storefull-114.iap.bryant.webtv.net>
Source record: 174843

Reg wrote:
"A satisfactory height in New York City is 8 feet above the Empire State Building. But at the bottom of the Colorado Canyon you have real problems."

Exactly right. Some folks realize this is true only because the 6 metre band is usually not propagated by the ionosphere as it is above the maximum usable frequency. Others may miss the point that 50 MHz is usually only good for line-of-sight paths.

For ionospheric propagation, 1/2-wave antenna elevation is enough. For line-of-sight, the elevation needed is whatever it takes.

I spent a week rafting down the Grand Canyon. Medium wave reception was near zero. Shortwave reception at the bottom of the canyon was actually very good.

Best regards, Richard Harrison, KB5WZI

4145. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 14:59:50 UTC
From: k3bu@aol.com
Message-ID: <20001214095950.28868.00004714@ng-cl1.aol.com>
Source record: 174841

>So please: SEEK COUNSEL.
.....
>Thanks!
>
>
>Nathan Cohen, Ph.D.
>
>

Freak
Please SEEK HELP and the hell outa here with your crap!!!

4146. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 15:09:08 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <91anqe$r29$1@nnrp1.deja.com>
Source record: 174844
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <3A38D043.605E6F29@home.com>,
James Knott <the.lights.are.on.but.no.one.is@home.com> wrote:
> Joe Schlatter wrote:
>
> > Please cite a documented medical source for this claim -- not some
> > urban legend and certainly not Art Bell.
>
> Who's Art Bell?
>

A wacko who made his fortune on AM late-night talk radio featuring such
topics as:

-- Area 51
-- Aliens, Roswell, alien autopsy
-- Every Y2K conspiracy you ever heard
-- Long-distance mind control

He is also a ham, W6something. I believe he recently retired from the
talk show -- should be right at home on 75 meters.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com
http://www.deja.com/

4147. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 15:34:31 UTC
From: "Robert L. Spooner" <rls19@psu.edu>
Message-ID: <3A38E887.8541BB@psu.edu>
Source record: 174845

Reg,

I would think that Pi-L networks are fairly common, because they are needed to provide enough filtering for amplifiers to meet the FCC's requirement for spurious emissions. I don't say this from experience, because I don't own a power amp, but if you do the math, I think you'll find that a Pi network alone won't do the job, particularly if coupled to a multi-band antenna that provides a good response at a harmonic of the frequency in use.

73,
Bob AD3K

Reg Edwards wrote:
>
> Dear all,
>
> The various responses to my question have been quite
> interesting. But only one response was from someone who had
> had practical experience and he reported no unusual problems
> encountered in using the network. Perhaps one conclusion I
> could draw is that Pi-L networks are very few and far
> between.
>
< snip >
> Reg, G4FGQ

--
Robert L. Spooner
Registered Professional Engineer
Associate Research Engineer
Intelligent Control Systems Department

Applied Research Laboratory Phone: (814) 863-4120
The Pennsylvania State University FAX: (814) 863-7841
P. O. Box 30
State College, PA 16804-0030 rls19@psu.edu

4148. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR Kook alert!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 15:56:45 UTC
From: Sri Billy Bob <nulport@home.com>
Message-ID: <p8rh3t4049hr0gfaja4gh5crh6cg0ugru0@4ax.com>
Source record: 174846

On 14 Dec 2000 03:27:08 GMT, fractenna@aol.com (Fractenna) nominated
himself for official Kookdom with:

Parinoid drivel snipped
PLONK

A killfile is a great noise filter for Usenet ;)

SBB

4149. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 16:05:13 UTC
From: rwclark@seanet.com
Message-ID: <3abeeef5.7705029@news.seanet.com>
Source record: 174848

On Wed, 13 Dec 2000 22:26:29 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Jim Fuller wrote:
>>
>> Cecil wrote:
>> > Yep, and with any luck you can find a hippy lady to keep you warm.
>>
>> You trigger fond memories of my year and something in 30th MPs at the
>> Presidio in 1969 and early 1970.
>
>I moved to California in 1971. Man, those were the days.

..my friend, we thought they'd never end;
we'd last forever and a day! ;-)

73's
Richard Clark, KB7QHC (ET1, Treasure Island '69 - '72)

4150. Epiphany on the T2FD (or B&W folded dipole)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 16:13:39 UTC
From: munsch@attglobal.net
Message-ID: <3a39a456_3@news1.prserv.net>
Source record: 174660

Group:
I ran across an old Army manual which discussed the T2FD, and one of the points made may explain some of the divergence of opinion on here concerning the B&W version so frequently asked about. The manual recommended against horizontal mounting, but indicated that more nearly omni directional coverage was obtained by having one end much higher than the other(sloper, I guess). While the antenna is not real efficient at the low end, it is wide band, and for the military or other users which require frequency agility way beyond a half-dozen ham bands, it fits the bill.
Crazy George

4151. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 16:31:48 UTC
From: Mike Berger <berger@shout.net>
Message-ID: <3A38F5F4.76B91A7A@shout.net>
Source record: 174847
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In England, the cell phone companies have been negotiating with
churches to put the antennas inside the church steeples.
>
> reallyrosie@my-deja.com wrote:
> >
> > Just last week Sprint applied for a conditional permit for six antennae
> > on a apartment building that is separated by my son's kindergarten by a
> > five foot alley, not to mention that they point directly across school
> > property. Personally, I'm deeply disturbed by this, and, yes, I think

4152. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 17:57:14 UTC
From: Steve Punter <punter1445@home.com>
Message-ID: <_R7_5.118107$3u1.31984571@news3.rdc1.on.home.com>
Source record: 174849
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Well, if you live 1,500 feet from the antennas, you are exposed to 10,000 time less energy that someone standing 15 feet from the same antennas, and 2.5 million times less than someone standing 1 foot from the antennas. This is based on the distance-squared law that all radiating signals abide by in open space. Your risks from the site are so marginal that you probably stand a higher risk of being hit by a crashing 747 with Stephen Hawkings onboard.
--
Steve Punter
http://www.arcx.com/sites

4153. Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 18:03:11 UTC
From: goodbye@P3D.com
Message-ID: <goodbye@AO40>
Source record: 174850
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner

```
AO-40, (Phase 3D), is dead.

It was fun while it lasted.

Back to AO-10
```

4154. Re: C3S and C3SS?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 18:25:24 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <91b3ci$q5a$1@iac5.navix.net>
Source record: 174852

My Force 12 catalog shows only a C3 and a C3S (Special) where the C3 is
rated to survive 80 MPH winds and the "S" 100 MPH winds

The catalog indicates that versions capable of 120 and >140 are available.
From the data I would suspect that it is a 120 MPH version.

"Jim" <aa5f@hiwaay.net> wrote in message
news:3A383673.A79D788B@hiwaay.net...
> Anyone know the difference between the Force 12 C3S and C3SS? Thanks!
>
> Jim N4AL

4155. Re: Impedance of 2 dipoles-1 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 18:26:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91b3cj$l6q$0@208.207.71.173>
Source record: 174851

I use 160/80/40 meter *halfwave* dipoles paralleled on a single coax
feedline, have for many years. The system tunes and works well on -any-
HF band. I haven't made any attempt to analyze any pattern on any band.

Dick

k5fni@my-deja.com wrote:
>
> I'm in a quandary. I got EZNEC and thought it would help me solve my
> problem. It did not. My situation is two dipoles off one feedline. The
> longer dipole must work on its quarter-wave frequency and the third harmonic
> of that. The shorter dipole (not related to the other two frequencies) is
> along for the ride on the same coax feedline.
>
> Using EZNEC showed me that the ICOM gear feeding these antennas will cut the
> power back on all frequencies but the shorter dipole's, since with 50 ohms,
> the SWR will be above 2:1. Am I missing something here? I thought I'd known
> of folks doing this same trick in earlier days. Maybe they got by with it
> due to having either a tube transmitter with good matching network or a
> solid-state transmitter with an antenna tuner. I am constrained from doing
> any tuning with this antenna. [This is a back-up antenna for an emergency
> installation. The "long-wire" antenna will have an electronic tuner on it to
> tune to the necessary frequencies. My design will be the fall-back, assuming
> lightning or mechanical failure will remove the "long-wire" antenna from
> service. Another assumption is that the operator cannot operate a normal HF
> tuner.]
>
> For my calculations, I've assumed the ends of the longer dipole are up 30'
> and the center is 25' high.
>
> TNX for any ideas you feed back. Replies can be sent to K5FNI at the ARRL
> dot NET address.
>
> Richard
> Austin TX
>
> Sent via Deja.com
> http://www.deja.com/

4156. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 18:28:56 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91b3h8$l6q$1@208.207.71.173>
Source record: 174853

Cecil wrote:
>
> Wolfgang Schliess wrote:
> > have anybody experience to (home) build a 160m isotron antenna ? Please let
> > me know.
>
> I have a similar antenna called a Termaline made by Bird. :-)
>

Aw, comeon CC... the Isotron has a tuned circuit. I fact that's all it
is- a larger scale tuned circuit, up in the air. I suspect an
oldfashioned plate tank circuit mounted where your antenna feedpoint is
would radiate as well.

4157. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 18:55:24 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91b52spfu0@208.207.71.173>
Source record: 174854
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

W2MDM wrote:
>
> OK Now a question..
> If my vertical, in this case a Hustler 6BTV, mounted on the side of the house, work if the
> radials are buried a short distance away from the antenna?
>
> How would I connect them to the antenna!
> Should I just forget about it?
>

Sure they'll work. You might get a bit of a skewed pattern but so what?
Hams use all sorts of schemes that they find in their surroundings for
antenna systems, metal fences, small diameter wires hidden in the grass,
cracks between grass and sidwalk, you get the drift. Just run a wire
from the radial wire feed to the antenna and hook it to the coax shield
at the vertical feedpoint. Of course that wire will also be a part of
the radial system but it WILL work.

You'd be amazed at how many hams in past years have just driven a
ground rod at the spot where the vertical antenna was mounted, and
hooked to it for the counterpoise. In fact many vendors have asserted
that was all that was needed, and in fact it usually worked very well,
if you base that evaluation on contacts made on the air.
Your unusual radial system is certain to work better than a ground rod
alone.

> What is Pizza Cake?

As in a piece of....

Dick W0EX

4158. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:09:42 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <mt5b19.j5l.ln@mail.specsol.com>
Source record: 174855
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner

In rec.radio.amateur.antenna ALL GONE <goodbye@p3d.com> wrote:
> AO-40, (Phase 3D), is dead.

> It was fun while it lasted.

> Back to AO-10

Maybe, maybe not. From http://www.amsat.org/amsat/news/ans.html

"Early Wednesday, December 13th, telemetry transmissions from AO-40
stopped while work on the 400 N propulsion system was in progress. An
investigation by the AO-40 development team has begun. They are now
waiting for certain on-board software events to occur on Saturday
afternoon, December 16th. These are programmed to start a spacecraft
emergency routine called 'command-assist' which attempts to re-establish
communications. This offers the best chance of recovering evidence of
the incident which made the telemetry transmissions stop."

Jim Pennino

4159. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:10:28 UTC
From: richardharrison@webtv.net
Message-ID: <15081-3A391B24-25@storefull-118.iap.bryant.webtv.net>
Source record: 174857

I agree that Carl Westerman`s 1850 MHz cellular coax would be better decoupled at one MHz, more or less, by using an isocoupler than by making a 2 millihenry coil of coax. Small coax would be too lossy and large coax would take too much space.

Best regards, Richard Harrison, KB5WZI

4160. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:21:19 UTC
From: dreinhart@iris.com
Message-ID: <91b6jfqjd1@localhost.localdomain>
Source record: 174863
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner

A little premature. According to the bulletin from AMSAT there's an emergency routine that will kick of on Saturday afternoon that may help to re-establish communications. I'll be holding my breath until then.

4161. Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:24:18 UTC
From: paul@netburner.com
Message-ID: <3a391ac6.861605@news.harvard.net>
Source record: 174455

I am working on a project to set the Solar powered radio controlled model altitude record. My airframe should be good for > 30K ft and I need to make sure that my radio liks will operate reliably to that altitude.

My page of notes pictures electronics notes etc...:
(Not well organized)
http://www.rasdoc.com/splinter/

The FCC regs limit me to 1W maximum output on the uplink.
At the present time the downlink is a 900Mhz 1/2W video transmitter.

I am looking for an antenna guru to help me design the needed antennas.

For the 900 Mhz downlink I am using a commercial loop yagi for the RX and need to develop a transmitter antenna with a hemispherical pattern for the plane.

My current plans are for a homebuilt 1W 6M uplink, then using a normal RC receiver on the aircraft.

My current thought on this is as follows:

On the ground use a simple 1/4 wave steerable rigid dipole.
This might be upgraded to a 2 or three element YAGI if I need the gain.

On the plane I was goint to use a pair of 1/4 wave dipole's at 90 degrees to each other, how can I combine these to provide a full hemisphere of coverage?

Paul (Kl7JG)

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

4162. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:36:33 UTC
From: Tony Davila <antonio.l.davila@boeing.com>
Message-ID: <3A392141.D7B45F2F@boeing.com>
Source record: 174861

I note that Bill's idea could help a non-ham friend receive an AM
broadcast band radio station at 1340kHz in his SAAB. His wife has given
up on HIS car so we'll apply technique and help him get a one-turn loop
to increase his reception (including all the noise he can stand).
til we meet again. . . . . .Tony D., KC4YBE, dah-di-dah

Jerry Oxendine wrote:
>
> Hmmm,
>
> It's been a long time since I've heard of someone using a "current"
> loop. Never tried it, but have been tempted to put another screwdriver
> on the front and ground it directly to bumper and operate them together.
> Haven't tried it yet, tho.
>
> Jerry
> K4KWH
>
> Bill Turner wrote:
> >
> > >Also using the longest stinger
> > >possible will also help alot.
> > ____
> >
> > If you're in an experimental mode, consider adding a wire from the top of the
> > stinger forward horizontally to another antenna mounted on the front bumper.
> > This increases the length of the stinger considerably, although a good divorce
> > lawyer should be consulted beforehand.
> >
> > And if you're REALLY into tinkering, ground the bottom end of the forward
> > antenna and feed the whole thing as a big one-turn loop. Your car body provides
> > the missing part of the loop.
> >
> > 73, Bill W7TI

4163. FS KLM KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:48:48 UTC
From: Tony Seaton <tony.seaton@turner.com>
Message-ID: <3A392420.4FBB46F5@turner.com>
Source record: 174859
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

FS KT34XA dissassembled. Have new end caps and Phillystran cable that
need to be installed. $200
Also another KT34XA already rebuilt will be available in mid Jan. $200

both antennas pick up only near Atlanta

Tony W4SX tony.seaton@turner.com

4164. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:50:10 UTC
From: Robert Wallace <robertw@panix.com>
Message-ID: <91b89i$en0$2@news.panix.com>
Source record: 174858
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In misc.consumers Steve Punter <punter1445@home.com> wrote:
> Well, if you live 1,500 feet from the antennas, you are exposed to 10,000
> time less energy that someone standing 15 feet from the same antennas, and
> 2.5 million times less than someone standing 1 foot from the antennas. This
> is based on the distance-squared law that all radiating signals abide by in
> open space. Your risks from the site are so marginal that you probably stand
> a higher risk of being hit by a crashing 747 with Stephen Hawkings onboard.

As the pilot!

Robert Wallace
robertw@panix.com

4165. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:54:21 UTC
From: pwk@nospam.usol.com
Message-ID: <Xns900A70569Paulk@207.126.101.92>
Source record: 174860
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Robert Wallace <robertw@panix.com> wrote in
<91b89i$en0$2@news.panix.com>:

>In misc.consumers Steve Punter <punter1445@home.com> wrote:
>> Well, if you live 1,500 feet from the antennas, you are exposed to
>> 10,000 time less energy that someone standing 15 feet from the same
>> antennas, and 2.5 million times less than someone standing 1 foot from
>> the antennas. This is based on the distance-squared law that all
>> radiating signals abide by in open space. Your risks from the site are
>> so marginal that you probably stand a higher risk of being hit by a
>> crashing 747 with Stephen Hawkings onboard.
>
>As the pilot!
>
>Robert Wallace
>robertw@panix.com
>
You can not argue with this type of thinking If they feel the radiation
will kill children NOTHING you can say will change their minds. It is a mob
mentality

4166. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 19:57:53 UTC
From: richardharrison@webtv.net
Message-ID: <22247-3A392641-51@storefull-113.iap.bryant.webtv.net>
Source record: 174864

J.M. Noedling wrote:
"For most filter types, it isn`t too much different, so perhaps even 22 microhenries is sufficient, or use a 1/4-watt resistor with so many turns as you can wind on it using the thinnest wire you can find."

Mr. Noedling is probably exactly right. For grins, my ARRL coil calculator says single-layer 1-mhy coil could be wound with No. 22 wire at 37 turns per inch. If you have a 4-inch diameter, you need a winding length of about 3 inches. If you have a 2-inch diameter, you need a length of about 8 inches for your 1-mhy coil.

Best regards, Richard Harrison, KB5WZI

4167. Re: Study materials for Amateur Extra

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 20:04:32 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A3927D2.D90B1602@bellatlantic.net>
Source record: 174862

Thank you! Now I understand your point. And you pointed
out some better ways the text could have been worded. Seems
that most people don't put in the extra effort you just did, to not
only explain but point out a better way.

Sylvan Butler wrote:

> On Mon, 11 Dec 2000 03:12:44 GMT, ehsjr@bellatlantic.net <ehsjr@bellatlantic.net> wrote:
> >In the first case - the quoted material from the ARRL text -
> >it is a checkpoint, similar to those found in many electronic kits.
>
> Yes.
>
> >It tells you what you should be capable of by a particular point
> >in the course, if you did the exercises. Many self-study courses
>
> Yes.
>
> >tell you what you should have learned by doing the exercises.
> >(They should also tell you what you will learn by doing the exercises
> >at the beginning of the section.)
>
> Sure. Those are all fine and good. But _how_ it is done is just as
> important.
>
> I have NEVER seen a real textbook contain phrasing such as the
> condescending phrasing found in the ARRL book:
>
> >> >> >[If you worked all of these problems along with the text, you should have no
> >> >> >trouble with the phase-angle questions on the Advanced class exam. Just
>
> A non-condescending version would read:
>
> Everything you need to know to solve the phase-angle questions on the
> Advanced class exam has been covered by the problems in this text.
>
> Or:
>
> The problems along with the text illustrate all you need to know to
> answer the phase-angle questions on the Advanced class exam.
>
> (both are a simple statement of fact)
>
> Or even:
>

> If you understand how to work all of these problems along with the text,
> you should have no trouble with the phase-angle questions on the
> Advanced class exam.
>
> (that is an opportunity for self-assessment)
>
> But:
>
> If you had worked all the problems ...
>
> Or:
>
> If you had read what I've written ...
>
> Are both equally condescending.
>
> >condescending, as you have stated. Context makes a big difference!
>
> Not as big a difference as phrasing. My context was as an example.
> The ARRL context was to introduce a "checkpoint." Both are equally
> condescending.
>
> sdb
>
> --
> More guns means less crime. ISBN:0-226-49363-6
> ***
> Watch out for munged e-mail address.
> User should be sylvandb1 and host is at bigfoot.com
> Do NOT send me unsolicited commercial e-mail (UCE)!

4168. Re: C3S and C3SS?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 20:36:34 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A392F52.648109BE@netscape.net>
Source record: 174865

Fred Hambrecht wrote:
>
> My Force 12 catalog shows only a C3 and a C3S (Special) where the C3 is
> rated to survive 80 MPH winds and the "S" 100 MPH winds

Then you need to get a new catalogue. http://www.qth.com/force12/

It is described just after the C4SXL, at the bottom of page 12.

--
Jim Fuller

4169. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 20:42:04 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <91bbas$cu8$1@nnrp1.deja.com>
Source record: 174867

See you there on field day!

> Seems like the bridge would work better as a toploaded short vertical
> at VLF. With the suspenson cables as capacitive loading. Like an
> aviation NDB transmitter.
>
> I like the idea of carrying the rig and a dipole up into the Marin
> Heights. You even have a shelter, in the form of some of the old WW2
gun
> emplacements still there which were built early in the war when an
> invasion from the Far East seemed likely.
>
> Dick
>

Sent via Deja.com
http://www.deja.com/

4170. Re: C3S and C3SS?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 20:46:24 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A3931A0.42E507CF@netscape.net>
Source record: 174866

Jim wrote:
>
> Anyone know the difference between the Force 12 C3S and C3SS? Thanks!
>
> Jim N4AL

The catalogue, available for download at http://www.qth.com/force12/
says that it's just a smaller version of the C3S, using shortened
elements.

--
Jim Fuller

4171. It was so quiet in here

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 20:55:29 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3A3933C1.3CC1537E@yahoo.com>
Source record: 174626

Until now,

Lurker/occasional poster.
Rick KF7QZ

4172. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 21:02:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <91bcg5dto1@nnrp1.deja.com>
Source record: 174620

In article <20001213183400.10982.00001719@ng-cu1.aol.com>,
fractenna@aol.com (Fractenna) wrote:

> Nope.
>
> In case you didn't notice, I am concerned about issues relating to an
> individual's rights, that includes, but is not limited to, issues of
privacy;
> intellectual property; and so on.
>

Sounds more like you don't want what was said in that conversation made
public for reasons OTHER than those listed above.

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

4173. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 21:04:27 UTC
From: Orac <Orac@mac.com>
Message-ID: <Orac-B1EAD8.16042714122000@news.earthlink.net>
Source record: 174619
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

In article <Xns900A70569Paulk@207.126.101.92>, pwk@nospam.usol.com (Paul k) wrote:

>Robert Wallace <robertw@panix.com> wrote in
><91b89i$en0$2@news.panix.com>:
>
>>In misc.consumers Steve Punter <punter1445@home.com> wrote:

>>> Well, if you live 1,500 feet from the antennas, you are exposed to
>>> 10,000 time less energy that someone standing 15 feet from the same
>>> antennas, and 2.5 million times less than someone standing 1 foot from
>>> the antennas. This is based on the distance-squared law that all
>>> radiating signals abide by in open space. Your risks from the site are
>>> so marginal that you probably stand a higher risk of being hit by a
>>> crashing 747 with Stephen Hawkings onboard.
>>
>>As the pilot!
>>
>>Robert Wallace
>>robertw@panix.com
>>
>You can not argue with this type of thinking If they feel the radiation
>will kill children NOTHING you can say will change their minds. It is a mob
>mentality

All too true, because in science you can never prove anything 100%. People like that therefore seize on the "potential" hazard, even if all available evidence cannot actually prove a measurable hazard.

--
Orac |"A statement of fact cannot be insolent."
|
|"If you cannot listen to the answers, why do you
| inconvenience me with questions?"

4174. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 21:36:20 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A393D54.1C914D24@uci.edu>
Source record: 174621

Fractenna wrote:
> He also has a clear public record of libel against me. Which, unfortunately, he
> continues.

> I had hoped that he would, like the others on this NG, just drop his obsession
> and move onto other things.

> Maybe that can happen, but it's not up to me.

> In any case, I do hope he sees an attorney this time. I,myself, would like to
> stick with the fond memories rather than the bitter rantings of Chuck O'Neal.

Did you forget that you wrote this? Seems to me you're the one who
stirred the pot, Chip.

>Mr. O'Neal is caught in a lie.

>Readers of this NG will recall as a matter of FACT that O'Neal stated that
the
>fractal quad he built was superior. This -3dB to that Yagi of the same size
>would require a very small 2 element Yagi with 6 dB gain!

>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>publish them in a magazine or journal. You will not ever manage to undo
this
>lie of yours.

>Nathan Cohen, Ph.D.

4175. Re: Chuck O'Neal K1KW-- Lawsuit against N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 21:49:54 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A394082.3BB6881D@uci.edu>
Source record: 174622

Fractenna wrote:
> If you are going to post a wav file from an illegal wiretap then please get on
> with it.

An answering machine is not an "illegal wiretap". Jeez. Besides the
only thing in dispute evidently is what he said - not what you said.

4176. Re: Larsen or Diamond for 706 rig

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:02:44 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3a3944bd$0$30010$44a10c7e@news.net-link.net>
Source record: 174624

Get a Comet SBB5 dual band antenna in either pl-259 or mno mount. It is a fold over antenna with only an air coil half way up. Very rugged antenna. 2m is 2.15dBi and 446 is 5.5dBi. 39" high. Max power 120w. I have had one on top of a pick up and/or Suburban for several years and it has held up well. Using it with either a MKII or a MKIIG. If you really want a lot of gain, but are willing to sacrifice ruggedness and deal with a higher antenna, get the Comet Z780. 62" high. 150w. fold over. 2m is 4.5dBi and 446 is 7.2dbi. Average mag mounts will NOT hold this antenna at highway speeds.
Eddie Bryant N4UMJ wrote in message ...
>I have an antenna dilemma on my car and the new
>706 MKIIG I am about to order.
>
>I am considering going with a single 2Meter/440
>antenna on my vehicle to connect up to the new
>706 MK IIG .
>
>Currently I have two separate antennas.
>A Larsen 5/8 wave 2 meter NMO-150 (3dbd) 49"
>and
>A Larsen 5/8 over 1/2 wave NMO-440 (4.5dbd)31"
>antennas that I have been using on my Kenwood
>Dual band TM-741radio.
>
>As you probably know ,the 706 has a single antenna
>connection for the VHF/UHF antenna.
>This leaves me in the situation to use a Diamond MX-72D
>(with a 0.15 db loss) duplexer to connect these two existing
>antennas into one antenna port on my 706.
>
>Or I have a choice to buy a single dual band antenna and
>do away with the duplexer and an extra antenna.
>
>I am looking at the
>Larsen NMO-2/70 dual band 33.5"rated at 2.4/4.0 db gain
>and also at the
>Diamond NR770HBNMO 2M/70cm 38.2" dual band
>3.0/5.0 db gain.
>
>Is Diamond fluffing up their numbers or do they have a
>better antenna ? Is the bigger (longer) antenna the better
>choice here? Obviously db's should be the determining
>factor here.
>

>Curious to know what VHF/UHF antenna people out there
>are happy with on their 706 rigs ?
>
>Also had thoughts of just leaving my Kenwood TM-741
>dual band radio in the car along with the newer 706 anyhow
>but I like the idea of the 706 covering HF plus all the bands
>my Kenwood 741 does now. That's another topic for sure.
>
>Thanks for any input on this !
>Eddie Bryant
>N4UMJ
>
>

4177. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:06:06 UTC
From: fractenna@aol.com
Message-ID: <20001214170606.21074.00004807@ng-fc1.aol.com>
Source record: 174623

Hi Jim!

Phile here--

Nice talkin at you--and go screw urself:-)

4178. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:09:08 UTC
From: fractenna@aol.com
Message-ID: <20001214170908.20958.00005330@ng-fc1.aol.com>
Source record: 174625

>
><john@homebrew.free-online.co.uk> wrote in message
>news:3a2e983d.4373702@news.free-online.net...
>> Has anyone built a CFA "crossed field antenna"
>> What is the typical radiation efficiency and bandwith for a small 160m
>> operating antenna?
>> Are they any better than other antennas?
>> Do they really work?
>>
>
>The Cross Field Antenna (CFA) is an electrically small antenna and operates
>under the same laws of physics that all electrically small antennas do. All
>electrically small antennas "work" to some extent in that they radiate some
>portion of the energy delivered to their input terminals. The real question
>is what percentage of delivered power is actually radiated.
>
>Additionally, the CFA and all other electrically small antennas can be
>impedance matched to 50 ohms at any single frequency. Usually, this
>impedance match is constrained to a very small bandwidth and is very
>sensitive to minor changes in the antenna structure and the surrounding
>environment.
>
>The question of whether or not the installed broadcast CFA antennas "work as
>claimed" appears to be an open issue. To anyone who states that the CFA
>antenna works as claimed by the inventors, I ask the following question -
>Have you personally witnessed testing of these antennas and personally
>verified the level of power delivered to the antenna and personally verified
>the measured radiated field strength? I have spoken with one of the RF
>engineers that traveled to Egypt to verify the installed CFA performance.
>He indicated that his group was able to measure field strength but were
>never allowed to determine the power delivered to the antenna. I am certain
>that those on the other side of the evaluation would have a different story.
>Since I would prefer not to draw conclusions based on one individual's
>statements, I think its important for anyone stating that the antenna works
>as claimed to identify the basis upon which this statement is made.
>
>There are also numerous issues surrounding measuring the CFA performance
>that need to be considered and identified when presenting measured data.
>For example, when the broadcast CFA is energized, are the original broadcast
>tower antennas still present? If so, the near-field energy created by the
>CFA will couple to the existing broadcast antennas and the "antenna" being
>measured is now an array consisting of the CFA and the original broadcast
>towers. This situation does not represent a true "CFA test".
>

>Additionally, field strength measurements from the CFA must be presented as
>compared to a standard antenna with the same power delivered to its input
>terminals. I mention this because I have seen absolute measured field
>strength data presented for the CFA with no relative comparison data. Field
>strength data presented with no comparison to a standard antenna is
>virtually meaningless because the measurements will vary as a function of
>ground parameters, terrain topology, multipath, and the presence reflecting
>objects near the CFA antenna.
>
>Comparison data must be presented in evaluating the CFA antenna performance.
>Additionally, the antenna should be tested with no other reflecting resonant
>structures (like existing broadcast towers) nearby.
>
>Just some thoughts ...
>
>Steve VE9SRB

These 'thoughts' have been discused and explored at length on the CFA
reflector. You may wish to check out the archive.

Cordially,

NC

4179. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:09:34 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A39451E.4933@pacbell.net>
Source record: 174630

Richard Clark wrote:
>
> On Wed, 13 Dec 2000 22:26:29 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Jim Fuller wrote:
> >>
> >> Cecil wrote:
> >> > Yep, and with any luck you can find a hippy lady to keep you warm.
> >>
> >> You trigger fond memories of my year and something in 30th MPs at the
> >> Presidio in 1969 and early 1970.
> >>
> >I moved to California in 1971. Man, those were the days.
>
> ..my friend, we thought they'd never end;
> we'd last forever and a day! ;-)
>
> 73's
> Richard Clark, KB7QHC (ET1, Treasure Island '69 - '72)

You mean they've ended? When? I went down to the Haight not
long ago and was surprised to see it looking pretty much
as it looked in the halcyon days of yore (1968.) Many intense
young people seemingly having a good time. Not a computer in
sight, nor anyone who knew his way around one.

Tom Donaly KA6RUH

4180. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:40:04 UTC
From: fractenna@aol.com
Message-ID: <20001214174004.15071.00002358@ng-mj1.aol.com>
Source record: 174627

>In misc.consumers Steve Punter <punter1445@home.com> wrote:
>> Well, if you live 1,500 feet from the antennas, you are exposed to 10,000
>> time less energy that someone standing 15 feet from the same antennas, and
>> 2.5 million times less than someone standing 1 foot from the antennas. This
>> is based on the distance-squared law that all radiating signals abide by in
>> open space. Your risks from the site are so marginal that you probably
>stand
>> a higher risk of being hit by a crashing 747 with Stephen Hawkings onboard.
>
>As the pilot!
>
>Robert Wallace
>robertw@panix.com
>
>
>
>
>
>

Placing base station arrays on public buildings is a clever use of extant infrastructure.

I especially like it when they're on fire stations and police buildings:-)

But schools sounds very clever. Generates much needed income for the towns as well!

73
Chip N1IR

4181. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:50:04 UTC
From: David Pearce <david.e.pearce@lmco.com>
Message-ID: <3A394E9C.4E2BD190@lmco.com>
Source record: 174628
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

First and foremeost, the FCC now requires a site evaluation to make sure
RF levels are low enough to not endanger the general public.

4182. Needed Tailtwister antenna rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:52:34 UTC
From: gpewitt@execpc.com
Message-ID: <3a3933a9$0$75803$272ea4a1@news.execpc.com>
Source record: 174868

Hi, I need a tailtwister rotor to replace mine which is dead. I don't need the control box but might take one with the rotor.

Thanks Joe Williams WA9TSG wa9tsg@execpc.com

4183. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 22:56:22 UTC
From: marsgal42@hotmail.com
Message-ID: <91bj6jjjq1@nnrp1.deja.com>
Source record: 174631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <goodbye@AO40>,
goodbye@P3D.com (ALL GONE) wrote:

> AO-40, (Phase 3D), is dead.
>
> It was fun while it lasted.

No.

All that is known is that AO-40 abruptly went off the air during ground station operations. AMSAT have confirmed this. There was an anomaly with the 400N thruster firing. Again, AMSAT have confirmed this.

Exactly what has happened is not yet known, so it is inappropriate to declare the satellite lost.

There are several levels of recovery, and the controllers are working on them. Let them do so.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..." - Hospital/Shafte

Sent via Deja.com
http://www.deja.com/

4184. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 23:07:33 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <5jc_5.517$_X4.31168@news-east.usenetserver.com>
Source record: 174629

It is easy to check a trap. Connect one side of a grid dip coil to the inboard end of the trap with a small capacitor, 2 to 5 pf. A good trap will give a pronounced dip at its resonant frequency. Some traps seem to be set for the low end of the band to reject, others at band center. I havn't found any difference in performance.

If ypu want to try shrink tubing, check the trap before and after. If there is a change in frequency or dip depth, the material shouldn't be used.

I have covered very old traps with clear epoxy, and used them for years.

A trap with a poor dip can SOMETIMES be restored by placing it in an oven at 150 degrees for a time. Don't get them really hot- they might melt the coil form.
bob w4mb

4185. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 23:19:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91bkha$8fi$1@uranium.btinternet.com>
Source record: 174632

Ric, what makes you think your coil calculator is correct ?
Is it your Bible or Koran?

Reg.

4186. Re: Wermager K0EOU sloper

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 23:32:01 UTC
From: dcoffey@mindspring.com
Message-ID: <3a3957aa.697905566@news.mindspring.com>
Source record: 174633

Thanks Tom,
Yes, my concern is that if I replace the tower leg with a vertical wire, or even a gang of vertical wires, the bandwidth will be reduced...greatly. This Wermager antenna is a bit different from a sloper in that the main element is almost like a vee-beam, and the shield-fed element is like an inverted-vee with a vertical leg (usually the tower)....but it's omni. Anyway, maybe I'll play around with the thing a report back here what I find. Thanks again for the input.
Dennis WA4YYQ

2w8ji@contesting.com (Tom W8JI) wrote:

>On Tue, 12 Dec 2000 05:42:25 GMT, dcoffey@mindspring.com (Dennis
>Coffey) wrote:
>
>> I'd appreciate any info, experiences with the ant, etc.
>> Thanks,
>> WA4YYQ Dennis
>
>
>Hi Dennis,
>
>Remember is any slopper worked against a tower, the tower IS the other
>half of the antenna. Bandwidth, SWR and overall performance depend
>heavily on the tower providing a very low impedance for the coax
>shield.
>
>At times the tower's common mode impedance is fairly low, because the
>owner often has a big yagi on the tower and maybe even a bunch of
>uninsulated guy lines or other things that act like a counterpoise.
>
>On the other had, an empty mast or tower, grounded at the bottom and
>60 feet or so tall, won't work at all with an 80 meter slopper
>because the top would be an extremely high impedance.
>
>Sloppers are very unpredictable antennas, since the "other half" of
>the slopper is the tower or mast itself.
>
>Keep that in mind when planning your system.
>
>73 Tom

4187. Re: "Bridge" antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 23:45:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A395B90.235DE807@IEEE.org>
Source record: 174634

Donaly wrote:
> You mean they've ended? When? I went down to the Haight not
> long ago and was surprised to see it looking pretty much
> as it looked in the halcyon days of yore (1968.)

Only one difference. The good looking young hippie ladys, who once
did a double take when I walked by, don't even notice me now. :-(
--
http://www.mindspring.com/~w6rca

4188. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-14 23:53:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A395D5E.C05049AE@IEEE.org>
Source record: 174635

Dick Carroll wrote:
>
> Cecil wrote:
> >
> > Wolfgang Schliess wrote:
> > > have anybody experience to (home) build a 160m isotron antenna ? Please let
> > > me know.
> > >
> > > I have a similar antenna called a Termaline made by Bird. :-)
> > >
>
> Aw, comeon CC... the Isotron has a tuned circuit. I fact that's all it
> is- a larger scale tuned circuit, up in the air. I suspect an
> oldfashioned plate tank circuit mounted where your antenna feedpoint is
> would radiate as well.

You're right, Dick. The 160m Isotron has a little less bandwidth than
my Termaline.
--
http://www.mindspring.com/~w6rca

4189. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:05:23 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <7fd_5.4002$UN1.338784@newsread2.prod.itd.earthlink.net>
Source record: 174636

Just hook up about 6 feet of wire to a dummy load and your rig and you will
most likely have a better antenna.
Larry N0SA

Wolfgang Schliess <schliess@gmx.de> wrote in message
news:t3gbvj4397qnba@corp.supernews.com...
> HI
> have anybody experience to (home) build a 160m isotron antenna ? Please
let
> me know.
> ------------------
> !
> !
> !
> lllllll
> lllllll
> lllllll
> !
> O
> !
> ------------------
>
> cu
> Wolf
> W5/DL6RCN
>
>
>
>

4190. Re: It was so quiet in here

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:20:57 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A3963B1.2644E5E8@cmcorp.com>
Source record: 174637

Rick Scott wrote:

> Until now,
>
> Lurker/occasional poster.
> Rick KF7QZ

Yea, Someone is NOT taking their Prozak.

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

4191. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:45:24 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3A3969A4.454820CA@bctv.com>
Source record: 174638
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

marsgal42@hotmail.com wrote:
>

> Exactly what has happened is not yet known, so it is
> inappropriate to declare the satellite lost.

It's not lost. Some Altarian curio trader knows exactly where it is,
and how much it will bring on SpaceBay!

4192. Re: Fractal Partners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:47:33 UTC
From: fractenna@aol.com
Message-ID: <20001214194733.28534.00004681@ng-cr1.aol.com>
Source record: 174639

>x-no-archive:yes
>FYI
>
>info@telcomcity.com
>support@nimblemicro.com
>cormon@attglobal.net
>symarc@attglobal.net
>
>
>
>
>
>
>
>
>
>--
>Posted from host4.websitesource.com [209.239.38.252]
>via Mailgate.ORG Server - http://www.Mailgate.ORG

Excuse me?

What is it exactly you are trying to say?

73
Chip N1IR

4193. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:49:22 UTC
From: kctom@my-deja.com
Message-ID: <91bpqh$p1a$1@nnrp1.deja.com>
Source record: 174640
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <3A3883BB.85281B86@ix.netcom.com>,
"Ken M." <poboxdc@ix.netcom.com> wrote:
> BillRadio wrote:
> >
> > Rosie,
> > Instead of fighting the beast, control it! Schools in other states
are
> > EMBRACING the cellular carriers and the cash they generate. Instead
of
> > fighting, ask to be part of the process. An antenna that directs
the
> > signal OVER the school (and grounds) is far less harmful than a site
> > just a little farther away that directs its signal INTO the school!
> >
> > The cellular antenna directs its signal hozontally. If the building
> > next door is taller than the school, the signal is directed to the
> > horizon and over the school, not to the ground below. Your kids get
far
> > more radiation potential from the school's microwave oven!
> >
> > Please understand I am not discussing whether or not cellular
> > transmissions are harmful. I am explaining where the signal is
pointed.
> > Like the rotating red light on the roof of a police car: the officer
is
> > close to it, but but no means is he getting a bright red light in
the
> > eye. The light is directed to the other cars, and would be even if
he
> > were driving a convertible.
>
> And many of those officers who laid a radar gun in their laps
> have developed cancer of the testicles.

This is factually incorrect. Two officers in one state contracted
testicular cancer. No other officers anywhere else contracted testicular
cancer, at least that could be attributed to a radar gun. Seems like the
exception that proves the rule.

TOM
> --
> (ken)
>
> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:

> http://www.zyworld.com/maryland/amazing.JPG
> --
>
> To respond to this place (-) between x and d.
>
> Because e-mail can be altered electronically,
> the integrity of this communication cannot be guaranteed.
>

Sent via Deja.com
http://www.deja.com/

4194. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 00:58:46 UTC
From: kctom@my-deja.com
Message-ID: <91bqc3pga1@nnrp1.deja.com>
Source record: 174642
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

> I live about 1,500 feet from a high-rise apartment building (20
floors)
> and they have about 40-50 antennas on the roof that are being used
> by two-way radio companies, paging companies and cellular companies.
>
> Is it dangerous? I believe a paging transmitter (200-300 watts@900mhz)
> could be harmful for those living on the tops floors, but the
> owners are more interested in making ($$$) money. We will never
> know the effects of these antennas for many years.
>
> Comments?
>
> --
> (ken)
>
> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
> http://www.zyworld.com/maryland/amazing.JPG
> --
>

Don't worry about it. The FCC has stringent regulations concerning acceptable exposure to RF radiation. The guidlines apply to all tenants occupying a common site. Therefore the total radiation emitted from all of the transmitters must not exceed the specification.

Tom

Sent via Deja.com
http://www.deja.com/

4195. UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 01:07:49 UTC
From: fractenna@aol.com
Message-ID: <20001214200749.28473.00005015@ng-cr1.aol.com>
Source record: 174641

12/14/00

These info pieces will be posted from time to time to keep others up to date.

Mr. O'Neal has yet to take measureable action against Dr. Cohen, despite his claimed pending lawsuit.

In related news, Mr. O'Neal has not made available a .wav file which he claimed he would post. This file alleges to contain material revealing that Dr.Cohen has prevaricated and fabricated material relevant to a conversation he had by phone with Mr. O'Neal in 1998. Dr. Cohen was not aware of the recording of any conversations he has had with anyone, and did not give permission for any recording.

Dr. Cohen has consulted a Boston attorney in the event that wiretapping charges need to be brought against Mr. O'Neal. Dr. Cohen reviewed the Massachusetts Wiretap law and was advised on its implications and seriousness of transgression. Dr. Cohen was also asked to summarize multiple post transmissions by Mr. O'Neal on USENET which targeted Dr. Cohen with statements of malicious libel ny Mr. O'Neal. Such statements are publicly archived and available worldwide.

Separately, Dr. Cohen is now reviewing whether to bring suit against Mr. O'Neal for malicious libel and other charges. Such charges, if pursued, will be brought up in Midddlesex County, Massachusetts.

NNNNNNN

4196. Re: Fractal Partners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 01:23:27 UTC
From: fractenna@aol.com
Message-ID: <20001214202327.20894.00005128@ng-fc1.aol.com>
Source record: 174643

>
>x-no-archive:yes
>FYI
>
>info@telcomcity.com
>support@nimblemicro.com
>cormon@attglobal.net
>symarc@attglobal.net
>
>
>
>
>
>
>
>
>
>--
>Posted from host4.websitesource.com [209.239.38.252]
>via Mailgate.ORG Server - http://www.Mailgate.ORG
>
>
>
>
>
>

"OpsyHopsy.com - Virtual home of the Psycho Locals. (You've been warned...) "

4197. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 01:35:03 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <bze_5.108842$751.2650780@typhoon.ne.mediaone.net>
Source record: 174654

Be advised that all your postings are available too!
Show them to your lawyer and see if he still will
represent you!

4198. OPSYHOPSY.COM

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 01:35:44 UTC
From: fractenna@aol.com
Message-ID: <20001214203544.21074.00004862@ng-fc1.aol.com>
Source record: 174644

: Keith Huntington (KH927-BR) kjh@wizardfish.com
Genesis Consulting 116 Sycamore Lake Road
Siler City, North Caro 27344 US Phone- 919-742-4123
Fax- 919-742-4110

NNNNNNNNNN

4199. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 01:52:13 UTC
From: kk5yy@arrl.net
Message-ID: <3a3978dd.420361478@nntp.mindspring.com>
Source record: 174645

Shut up you insufferable Jackass. Just go away.
By the way, what did "hate" do. It sure didn't stop
your idiot postings.

You haven't sued anyone either Jackass

On 15 Dec 2000 01:07:49 GMT, fractenna@aol.com (Fractenna) wrote:

>
>12/14/00
>
>These info pieces will be posted from time to time to keep others up to date.
>
>Mr. O'Neal has yet to take measureable action against Dr. Cohen, despite his
>claimed pending lawsuit.
>
>In related news, Mr. O'Neal has not made available a .wav file which he claimed
>he would post. This file alleges to contain material revealing that Dr.Cohen
>has prevaricated and fabricated material relevant to a conversation he had by
>phone with Mr. O'Neal in 1998. Dr. Cohen was not aware of the recording of any
>conversations he has had with anyone, and did not give permission for any
>recording.
>
>Dr. Cohen has consulted a Boston attorney in the event that wiretapping charges
>need to be brought against Mr. O'Neal. Dr. Cohen reviewed the Massachusetts
>Wiretap law and was advised on its implications and seriousness of
>transgression. Dr. Cohen was also asked to summarize multiple post
>transmissions by Mr. O'Neal on USENET which targeted Dr. Cohen with statements
>of malicious libel ny Mr. O'Neal. Such statements are publicly archived and
>available worldwide.
>
>Separately, Dr. Cohen is now reviewing whether to bring suit against Mr. O'Neal
>for malicious libel and other charges. Such charges, if pursued, will be
>brought up in Midddlesex County, Massachusetts.
>
>NNNNNNN

4200. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 02:15:35 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.1001214181243.18503I-100000@oso.slonet.org>
Source record: 174646
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner

Your a complete JERK! To make such a premature statement indicates to me
that you are satisfied looking at a damn computer screen with no
evaluation ability whatever and little desire to do better. Cliff K7RR

On Thu, 14 Dec 2000, ALL GONE wrote:

> AO-40, (Phase 3D), is dead.
>
> It was fun while it lasted.
>
> Back to AO-10
>
>
>

4201. Hy-Gain DX-88 Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 02:42:32 UTC
From: Raj <raj_narayan@satellite.bigpond.com>
Message-ID: <Mpf_5.159020$e5.118938@newsfeeds.bigpond.com>
Source record: 174647

Hi,

Can somebody please help me with a copy of the Hy-Gain DX88 HF Multiband Vertical Antenna (preferably an electronic copy by email). Thanks in advance. - Raj

4202. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 02:59:58 UTC
From: dentronman
Message-ID: <OOf_5.4050$04.2113557@newsfeed.intelenet.net>
Source record: 174648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner

```
EHHEEH OMG what a joke.. cant we keep anything running up there?
"ALL GONE" <goodbye@P3D.com> wrote in message news:goodbye@AO40...
> AO-40, (Phase 3D), is dead.
>
> It was fun while it lasted.
>
> Back to AO-10
>
```

4203. In need of an Radio Tuner IC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:01:30 UTC
From: psychojo@my-deja.com
Message-ID: <91c1i7$v75$1@nnrp1.deja.com>
Source record: 174649

Is there such thing as an AM/FM Digital Radio
Tuner IC? can anybody tell me if there is such
thing, if there is what is it ?

Sent via Deja.com
http://www.deja.com/

4204. Re: In need of an Radio Tuner IC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:09:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A398B69.978F5801@IEEE.org>
Source record: 174650

psychojo@my-deja.com wrote:
> Is there such thing as an AM/FM Digital Radio
> Tuner IC? can anybody tell me if there is such
> thing, if there is what is it ?

Are you talking about a digital frequency synthesizer?
--
http://www.mindspring.com/~w6rca

4205. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:23:01 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A398BC0.781F635C@home.com>
Source record: 174651
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Bill Rubin wrote:
> What I find amusing is that many of the people who protested
> this likely complain to their cellular company about poor
> coverage,

Improbable.
Did you just dreamed that up or what?

Don

4206. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:28:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91c341guv0@208.206.142.89>
Source record: 174652

Larry Naumann wrote:
>
> Just hook up about 6 feet of wire to a dummy load and your rig and you will
> most likely have a better antenna.
> Larry N0SA
>

To give the devil his due, the darn things WILL radiate. I tried one on
75 meters and worked about 200 miles on it with a copyable signal, and I
had not been able to get it resonated to my satisfaction so used the
rigs internal autotuner @100 watts. They are like any normal resonant
tuned circuit, pretty darn narrowbanded. Of course the 160meter version
will just be that much less efficient.

4207. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:43:34 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <Grg_5.108993$751.2663819@typhoon.ne.mediaone.net>
Source record: 174653

Fractenna AKA Nathan Cohen spewed forth:
>
>Mr. O'Neal has yet to take measureable action against Dr. Cohen, despite
his
>claimed pending lawsuit.

Hey fracky, I know you just can't wait to get sued in this age of instant
gratification...but you are just going to have to wait. It appears that I
will
add to my claims given the results of today's preliminary investigation.
We estimate another three (3) weeks before all claims are properly defined.
This does not include two individuals that have come forward with
additional relevant information. We also need to plan for the Discovery
phase.
>
>In related news, Mr. O'Neal has not made available a .wav file which he
claimed
>he would post. This file alleges to contain material revealing that
Dr.Cohen
>has prevaricated and fabricated material relevant to a conversation he had
by
>phone with Mr. O'Neal in 1998. Dr. Cohen was not aware of the recording of
any
>conversations he has had with anyone, and did not give permission for any
>recording.

1) You indicate your knowledge of the recording at the time it was made. I
can not
post it until the suit is concluded. Sorry, but you will wait on this as
well.

2) We haven't alleged anything yet contained in the recording, so you are
guessing.
However, we will listen to it yet again and see if you did prevaricate and
fabricate as you suggest above. Thanks for the tip! (We thought you
did but with your admission above, we may add it to the claims)

>Dr. Cohen has consulted a Boston attorney in the event that wiretapping
charges
>need to be brought against Mr. O'Neal. Dr. Cohen reviewed the Massachusetts
>Wiretap law and was advised on its implications and seriousness of
>transgression.

You knew the tape was being made. As an aside, why do you speak of yourself
in the third person? Is one of your alternate personalities emerging again?

Dr. Cohen was also asked to summarize multiple post
>transmissions by Mr. O'Neal on USENET which targeted Dr. Cohen with
statements
>of malicious libel ny Mr. O'Neal. Such statements are publicly archived and
>available worldwide.

Just wait until your alleged lawyer sees all your posts!!! Has he seen them
yet?
If he does, 1) Either his rate will go up by at least 10dB or
2) he will drop you as a client.
>
>Separately, Dr. Cohen is now reviewing whether to bring suit against Mr.
O'Neal
>for malicious libel and other charges. Such charges, if pursued, will be
>brought up in Midddlesex County, Massachusetts.

I'm dissapointed. It took you this long to threaten to sue me? Generally,
you issue such
threats within a day. What's the matter, losing your edge?

>
>NNNNNNN
-----ooohhhhh!!!! some kind of weird attempt at a news release!!!!
What a stupid attempt at legitimizing the original post.
What is the origin of NNNN on news releases?

4208. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 03:59:39 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <LGg_5.109063$751.2665182@typhoon.ne.mediaone.net>
Source record: 174655

BTW...This thread is now closed.

73,
Chuck...

4209. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 04:02:07 UTC
From: fractenna@aol.com
Message-ID: <20001214230207.24639.00005073@ng-cd1.aol.com>
Source record: 174656

>Fractenna AKA Nathan Cohen spewed forth:
>>
>>Mr. O'Neal has yet to take measureable action against Dr. Cohen, despite
>his
>>claimed pending lawsuit.
>
>Hey fracky, I know you just can't wait to get sued in this age of instant
>gratification...but you are just going to have to wait. It appears that I
>will
>add to my claims given the results of today's preliminary investigation.
>We estimate another three (3) weeks before all claims are properly defined.

In the meantime, i will take a bit of vacation time to summarize and publicly promulgate the libelous statements you have made, at least the highlights.

>This does not include two individuals that have come forward with
>additional relevant information. We also need to plan for the Discovery
>phase.
>>

Why don't you just post your address so you can get all sorts of people to 'aid' you in your cause?

Here it is: available from http://ww.qrz.com publicly:

CHARLES D. O NEAL, III
PO BOX 369
BOLTON MA 01740
USA

I think one should also take this opportunity to more widely disseminate your ongoing suit so that it gets maximum coverage within the radio amateur community and elsewhere . That's what you want , isn't it? I mean, that's why you put this on a public forum with global and archived ability, isn't it?

>>In related news, Mr. O'Neal has not made available a .wav file which he
>claimed
>>he would post. This file alleges to contain material revealing that
>Dr.Cohen
>>has prevaricated and fabricated material relevant to a conversation he had
>by
>>phone with Mr. O'Neal in 1998. Dr. Cohen was not aware of the recording of
>any
>>conversations he has had with anyone, and did not give permission for any
>>recording.
>

>
>1) You indicate your knowledge of the recording at the time it was made. I
>can not
>post it until the suit is concluded. Sorry, but you will wait on this as
>well.
>

You have and had NO CONSENT. . I was aware that when I called you, I was leaving a message. BEYOND THAT I ws NOT aware--and wopuld never agree to-- your recording of our CONVERSATION. It is in our CONVERSATION that information was EXCHANGED.

Show that to your attorney, who is.... ?

We did not have an authorized, recorded conversation. Your attempt to claim such--and to present ANY recording of me is illegal and will lead to efforts for your arrest.

>2) We haven't alleged anything yet contained in the recording, so you are
>guessing.
>However, we will listen to it yet again and see if you did prevaricate and
>fabricate as you suggest above. Thanks for the tip! (We thought you
>did but with your admission above, we may add it to the claims)
>
>>Dr. Cohen has consulted a Boston attorney in the event that wiretapping
>charges
>>need to be brought against Mr. O'Neal. Dr. Cohen reviewed the Massachusetts
>>Wiretap law and was advised on its implications and seriousness of
>>transgression.
>
>You knew the tape was being made. As an aside, why do you speak of yourself
>in the third person? Is one of your alternate personalities emerging again?

Again, you libel me. WHAT IS YOUR PROBLEM!! Is this summary SIGNED BY ME??

>
>Dr. Cohen was also asked to summarize multiple post
>>transmissions by Mr. O'Neal on USENET which targeted Dr. Cohen with
>statements
>>of malicious libel ny Mr. O'Neal. Such statements are publicly archived and
>>available worldwide.
>
>Just wait until your alleged lawyer sees all your posts!!! Has he seen them
>yet?

Yes, the relevant ones.

>If he does, 1) Either his rate will go up by at least 10dB or
>2) he will drop you as a client.
>>

Are you suggesting that I appear at court defending myself? Or should I request an attorney by appointment of the court? Is your attorney aware of your attempt

here to intimidate me to prevent me from seeking qualified counsel? What, exactly, is the intent of your comment Mr. O'Neal?

>>Separately, Dr. Cohen is now reviewing whether to bring suit against Mr.
>O'Neal
>>for malicious libel and other charges. Such charges, if pursued, will be
>>brought up in Midddlesex County, Massachusetts.
>
>I'm dissapointed. It took you this long to threaten to sue me? Generally,
>you issue such
>threats within a day. What's the matter, losing your edge?
>
>
>>
>>NNNNNNN
>-----ooohhhhh!!!! some kind of weird attempt at a news release!!!!
>What a stupid attempt at legitimizing the original post.

Again, you make personal attacks. JUST BE QUIET! If you are going to do something, then GET ON WITH IT--DON'T CONTINUE TO ATTACK ME PERSONALLY.

>What is the origin of NNNN on news releases?
>

Cordially, NC

4210. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 04:08:08 UTC
From: fractenna@aol.com
Message-ID: <20001214230808.24633.00005682@ng-cd1.aol.com>
Source record: 174657

>Be advised that all your postings are available too!
>Show them to your lawyer and see if he still will
>represent you!
>

Again, your comments do not seem to indicate a knowledge of lawsuit law. Mine is rudimentary but under the advice of counsel.

If yours was under legal counsel, it certainly would not suggest that the party you claim to be suing, had so prejudiced his case that legal representation was not possible. That is exactly what you have just said--twice. Your insinuation is that the party you are suing should not be represented by the legal system.

One must further remember that you have clearly stated that your intent for said suit is to bring financial ruin upon me; not as a settlement against alleged grievance, but purely to destroy me financually. In other words, that was ALWAYS your intent, and any 'grievance' is just a ruse for that plan.

I presume this will now be run past a judge.

Cordially,

NC

4211. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 04:09:56 UTC
From: fractenna@aol.com
Message-ID: <20001214230956.24633.00005683@ng-cd1.aol.com>
Source record: 174658

>BTW...This thread is now closed.
>
>73,
>Chuck...
>

I doubt it; I am sure you will continue to libel and harass me.

Make no mistake Chuck. I WILL press this point. I'va had enough libel and harassment and yours will be the case which stops it.

Cordially,

NC

4212. CQ baby one more time!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 04:11:25 UTC
From: jason_hsu@my-deja.com
Message-ID: <91c5l9$2f5$1@nnrp1.deja.com>
Source record: 174659
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I hope you are amused by my ham radio parody of the Britney Spears
song "Baby One More Time":
http://www.bigfoot.com/~jason_hsu/humor-ham_radio-
cq_baby_one_more_time.html

--
Jason Hsu, AG4DG
jason_hsu@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/ham_radio.html

Sent via Deja.com
http://www.deja.com/

4213. Re: UPDATE: Another N1IR Nathan Cohen lie...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 05:02:36 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <MBh_5.109521$751.2672300@typhoon.ne.mediaone.net>
Source record: 174661

I can't let this additional lie go without comment....

fracky spewed forth:

"One must further remember that you have clearly stated that your intent for said suit is to bring financial ruin upon me; not as a settlement against alleged grievance, but purely to destroy me financually"

Please provide the quote or reference.

All you need to do is apologize for calling me a liar in this one case. Quoted exactly from a NG posting on 12/8/00:

>Mr. O'Neal is caught in a lie.

>Readers of this NG will recall as a matter of FACT that O'Neal stated that the
>fractal quad he built was superior. This -3dB to that Yagi of the same size
>would require a very small 2 element Yagi with 6 dB gain!

>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>publish them in a magazine or journal. You will not ever manage to undo this
>lie of yours.

>Nathan Cohen, Ph.D.

Just apologize and state that you were in error then it's all over...I don't need or want your money.

4214. Re: UPDATE: Another N1IR Nathan Cohen lie...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 05:11:09 UTC
From: fractenna@aol.com
Message-ID: <20001215001109.07785.00005190@ng-fy1.aol.com>
Source record: 174662

>
>I can't let this additional lie go without comment....
>
>fracky spewed forth:
>
>"One must further remember that you have clearly stated that your intent for
>said suit is to bring financial ruin upon me; not as a settlement against
>alleged grievance, but purely to destroy me financually"
>
>Please provide the quote or reference.
>
>
>All you need to do is apologize for calling me a liar in this one case.
>Quoted exactly from a NG posting on 12/8/00:
>
>>Mr. O'Neal is caught in a lie.
>
>>Readers of this NG will recall as a matter of FACT that O'Neal stated that
>the
>>fractal quad he built was superior. This -3dB to that Yagi of the same size
>>would require a very small 2 element Yagi with 6 dB gain!
>
>>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>>publish them in a magazine or journal. You will not ever manage to undo
>this
>>lie of yours.
>
>>Nathan Cohen, Ph.D.
>
>Just apologize and state that you were in error then it's all over...I don't
>need or want your money.
>

Read your e-mail. Show it to your attorney. And stop talking about this
publicly.

Yours, NC

4215. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 05:59:17 UTC
From: Bill Rubin <billrubin@prodigy.net>
Message-ID: <3A39B335.9EC45CCE@prodigy.net>
Source record: 174663
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Don K." wrote:
>
> Bill Rubin wrote:
> > What I find amusing is that many of the people who protested
> > this likely complain to their cellular company about poor
> > coverage,
>
> Improbable.
> Did you just dreamed that up or what?
>
> Don

Up where I am (suburban NYC), all companies have spots where they have poor coverage because they have trouble getting approval to put up more towers. I'm sure that people complain about this all the time, and I don't think it's unreasonable to think that some of them are the same ones protesting this new tower, which would improve their signal.

Bill

4216. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 06:06:19 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <rccc19.j61.ln@mail.specsol.com>
Source record: 174664

Chuck O'Neal <coneal@ultranet.com> wrote:
> BTW...This thread is now closed.

> 73,
> Chuck...

Chuck, Chuck, Chuck.

You should know by now trying to get meaningfull dialog out of the multiple "fractenna" personas is like trying to teach a pig to sing.

Jim Pennino

4217. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 06:33:21 UTC
From: treynolds@email.exide.com
Message-ID: <91cdvi$8ev$1@nnrp1.deja.com>
Source record: 174665
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <goodbye@AO40>,
goodbye@P3D.com (ALL GONE) wrote:
> AO-40, (Phase 3D), is dead.
>
> It was fun while it lasted.
>
> Back to AO-10
>
>
Good job of trolling, nimrod!

Tom

Sent via Deja.com
http://www.deja.com/

4218. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 07:38:13 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A39CA65.7B58B97C@haertig.com>
Source record: 174666

Richard brings up a fourth method commonly used to solve this problem
that I neglected to mention in my other post - and that is an isocoil.

This is large inductor (typically 150 uH or so) wound out of whatever
coax one desires, though in most applications at the relatively low
powers found in PCS service, 3/8", 1/2" or 5/8" foam heliax is used.
The the amount of cable incorporated in the inductor doesn't constitute
a great loss. If there is more than one coax to bring across the base,
the inductor can be wound in a multifilar fashion using multiple coaxes.
These coils are on the order of 1.5' to 2' in diameter and about 3' to
3.5 feet long. It would go inside its own weatherproof enclosure
adjacent to the tower. The outer conductor of the bottom end of the
coil is bonded to ground, and the outer of the upper end is bonded to
the tower. The coaxes are usually wire tied to the feed pipe going out
to the tower. There is a type N or UHF connector(s) for the input and
output. The connector(s) on the tower side are usually mounted in an
insulating window.

If the base impedance of the tower is very high, the isocoil can be
parallel resonated with a vacuum cap so that it presents a very high
impedance to the base of the tower.

This is probably the least expensive way to bring several coaxes (6 or
so) across the base insulator.

Kintronic Labs makes these. Their work is very high quality. The can
also provide the enclosure and, if necessary, the vacuum cap, pretuned
at the factory.

You would still need to have a consultant come in and measure the base
impedance of the tower after installation.

Thanks for jogging my memory, Richard.

Gray

Richard Harrison wrote:
>
> I agree that Carl Westerman`s 1850 MHz cellular coax would be better
> decoupled at one MHz, more or less, by using an isocoupler than by
> making a 2 millihenry coil of coax. Small coax would be too lossy and
> large coax would take too much space.
>
> Best regards, Richard Harrison, KB5WZI

--
Telecommunications Engineering

Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4219. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 09:20:20 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91cnoo$5vm$1@plutonium.btinternet.com>
Source record: 174667

A trap with its capacitor can also be checked far more
accurately than by gdo, by using an antenna analyser, Autek
or MFJ.

Just connect a 2-inch diameter loop to the analyser
terminals and hold it near or over one end of the trap.

Vary frequency and search for a very sharp increase in
impedance from zero to perhaps a few hundred ohms.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
R.P.Haviland <bobh@iag.net> wrote in message
news:5jc_5.517$_X4.31168@news-east.usenetserver.com...
> It is easy to check a trap. Connect one side of a grid dip
coil to the
> inboard end of the trap with a small capacitor, 2 to 5 pf.
A good trap will
> give a pronounced dip at its resonant frequency. Some
traps seem to be set
> for the low end of the band to reject, others at band
center. I havn't found
> any difference in performance.
>
> If ypu want to try shrink tubing, check the trap before
and after. If there
> is a change in frequency or dip depth, the material
shouldn't be used.
>
> I have covered very old traps with clear epoxy, and used
them for years.
>
> A trap with a poor dip can SOMETIMES be restored by
placing it in an oven at
> 150 degrees for a time. Don't get them really hot- they
might melt the coil
> form.
> bob w4mb
>
>

4220. Wanted: Hy-Gain DX88 Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 10:27:07 UTC
From: Raj Narayan <vk2ipd@hotmail.com>
Message-ID: <E9m_5.159536$e5.119410@newsfeeds.bigpond.com>
Source record: 174668

Hi,

Can somebody please help me with a copy of the Hy-Gain DX88 HF Multiband Vertical Antenna Manual (preferably an electronic copy by email). Thanks in advance. - Raj

4221. Re: UPDATE: Chuck O'Neal lawsuit Against Nathan Cohen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 11:00:34 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A39F997.4FB6A562@cmcorp.com>
Source record: 174569

Jim Pennino wrote:

> Chuck O'Neal <coneal@ultranet.com> wrote:
> > BTW...This thread is now closed.
>
> > 73,
> > Chuck...
>
> Chuck, Chuck, Chuck.
>
> You should know by now trying to get meaningfull dialog out of the multiple
> "fractenna" personas is like trying to teach a pig to sing.
>
> Jim Pennino

Yes, Jim.

But I think Chuck is trying to get some milage out of all his legal efforts
defending himself from K1MAN.

Another one bites the dust...

Another one bites the dust...

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

4222. Re: Impedance of 2 dipoles-1 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 11:07:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A39FB8A.268A@wt.net>
Source record: 174570

k5fni@my-deja.com wrote:
>
> I'm in a quandary. I got EZNEC and thought it would help me solve my
> problem. It did not. My situation is two dipoles off one feedline. The
> longer dipole must work on its quarter-wave frequency and the third harmonic
> of that. The shorter dipole (not related to the other two frequencies) is
> along for the ride on the same coax feedline.
>
> Using EZNEC showed me that the ICOM gear feeding these antennas will cut the
> power back on all frequencies but the shorter dipole's, since with 50 ohms,
> the SWR will be above 2:1. Am I missing something here? I thought I'd known
> of folks doing this same trick in earlier days. Maybe they got by with it
> due to having either a tube transmitter with good matching network or a
> solid-state transmitter with an antenna tuner. I am constrained from doing
> any tuning with this antenna. [This is a back-up antenna for an emergency
> installation. The "long-wire" antenna will have an electronic tuner on it to
> tune to the necessary frequencies. My design will be the fall-back, assuming
> lightning or mechanical failure will remove the "long-wire" antenna from
> service. Another assumption is that the operator cannot operate a normal HF
> tuner.]
>
> For my calculations, I've assumed the ends of the longer dipole are up 30'
> and the center is 25' high.
>
> TNX for any ideas you feed back. Replies can be sent to K5FNI at the ARRL
> dot NET address.
>
> Richard
> Austin TX
>
> Sent via Deja.com
> http://www.deja.com/

One thing about looking at parallel dipoles on one coax feed in eznec
etc. When you change bands, you need to change the source. I'm getting
the feeling you may not be doing this. If you don't, you will get some
funny readings. Say you are running a 160,80,40 dipoles one one feed.
Lets say wire 3 is 160, wire 5 is 80, wire 7 is 40 as an example. When
you look at the plot for a certain band you need you set the source to
match the band.
In the real world ,the unused legs will be ignored unless there is
coupling. So I think it's most accurate to look at each band with the
proper source. I bet your data falls more into line with the normal if
you do that.MK

--
http://web.wt.net/~nm5k

4223. Re: Pi-L Matching Networks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 11:56:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3A06D8.1EAE@wt.net>
Source record: 174571

Reg Edwards wrote:
>
> Dear all,
>
> The various responses to my question have been quite
> interesting. But only one response was from someone who had
> had practical experience and he reported no unusual problems
> encountered in using the network. Perhaps one conclusion I
> could draw is that Pi-L networks are very few and far
> between.
>
> Ordinary circuit analysis programs provide no guidance on
> what happens during a minimum-dip tune-up procedure. They
> merely demonstrate the existence of double humps in the
> input impedance versus frequency curve, the spacing and lack
> of symmetry of which depend on circuit Q. Someone has
> pointed out that, in general, a pair of humps is deducible
> from the numbers of coils and capacitors. From an impedance
> matching aspect one C and one L are redundent.
>
> But when tuning up the frequency is not a variable. - it is
> the two capacitors which vary. What I would like to know is
> to where on the input Z/f response does the tuning up
> procedure lead ?
>
> And are the two capacitors used in exactly the same manner
> as the "Load" and "Tune" capacitors in an ordinary Pi-match
> network ?
>
> Reg, G4FGQ

I've been going over the diagram for this henry. If I'm reading this thing right only the #2 L-net cap is variable. Lets say the normal pi-l uses 3 L-nets back to back. In a diagram I'm looking at in the Orr radio handbook, his example uses variables for each cap in each L-net. But my amp is not set up that way. On mine, the first L-net in the line uses fixed caps which are set by the bandswitch. This amp uses a roller for the inductor. And it is the "tune" control on the amp. The cap in the "2nd" L-net is the variable in this case. It is the "load" control. On the 3rd L-net, again the caps are fixed and set by the bandswitch. Also the 3rd inductor in the pi-l is also tapped by the switch according to band. So in this case, the only cap that is variable is the "2nd" L-net cap. And it is the load control. This connects to the inductor tap which is the "tune" control. The first and third caps in the network are fixed

and selected by the bandswitch. Hopefully, this makes some kind of sense...I could make a copy of this circuit if it would help to see it. Also I notice in this book, Orr, sez a formal calculation of the pi-L circuit parameters are given in the article "The pi-L plate circuit in Kilowatt amplifiers" QST, july 62. It's says a free reprint of the article may be had by writing to the amatuer service dept. of EIMAC. You might ask around on the amp reflector. They could probably give you more info. Also, if anyone notices a mistake in my description of the henry circuit, chime in. It's still early for me yet, and my brain is only at half speed. I haven't yet finished my first cup of mud, so the caffeine hasn't kicked in yet. MK

http://web.wt.net/~nm5k

4224. Antenna comic episode

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 12:11:53 UTC
From: scannerdweeb@aol.comicstrip
Message-ID: <20001215071153.08231.00005568@ng-mi1.aol.com>
Source record: 174572

Here is one about a Christmas antenna !

The 88th episode of
The Adventures of Scanner Dweeb comic strip
titled " Up a tree... "
is ready for your viewing pleasure at
http://www.ScannerDweeb.com
And thanks for your support of the hobby of radio !

See them first !
Want to be sent new comic strips
or special episodes via your e-mail
before they are put on the web site ?
Subscribe to the ScannerDweeb eGroup

http://www.egroups.com/group/ScannerDweeb

The Adventures of Scanner Dweeb comic strip
http://www.ScannerDweeb.com
http://scannerdweeb.netfirms.com
http://www.ScanShack.com
Special monthly episodes, not shown
on the web site, can ONLY be seen
in Popular Communications magazine !

4225. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:07:01 UTC
From: richardharrison@webtv.net
Message-ID: <7137-3A3A1775-44@storefull-116.iap.bryant.webtv.net>
Source record: 174574

Reg wrote:
"---what makes you think your coil calculator is correct?"

My confidence in the coil slide rule comes from finding approximate values using the device, and the knowledge that thousands of others have also found satisfactory answers.

Bugs in the calculator have most likely been found and eliminated.

I can make mistakes using the coil calculator, but I can make them faster with the calculator than without it.

Best regards, Richard Harrison, KB5WZI

4226. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:08:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3A17B3.2F1C@wt.net>
Source record: 174573

Richard Harrison wrote:

>
> I spent a week rafting down the Grand Canyon. Medium wave reception was
> near zero. Shortwave reception at the bottom of the canyon was actually
> very good.
>
> Best regards, Richard Harrison, KB5WZI

One reason why I like the lower hf bands when camping. You have the same problem even in the fairly shallow river bottoms here in TX. I kayak on a few of them in the hill country. Being I'm usually on 80/40 meters and working regional, it doesn't hurt me much at all. But try to tune a local 2m repeater? Might as well hang it up, or get in the car and drive up the hill to get out of the "rut". But I string low dipoles up that aren't ten ft off the ground and I'm below grade 80 ft, and still do fine on 80/40. Even the higher hf bands will work ok usually. Ten meters would see a big cut if working local or dx though. MK
--
http://web.wt.net/~nm5k

4227. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:28:28 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <00p_5.18015$Ei1.1259004@bgtnsc05-news.ops.worldnet.att.net>
Source record: 174575

"Fractenna" <fractenna@aol.com> wrote in message
news:20001214170908.20958.00005330@ng-fc1.aol.com...
> >
>
> These 'thoughts' have been discused and explored at length on the CFA
> reflector. You may wish to check out the archive.
>
> Cordially,
>
> NC

Thanks,

Steve

4228. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:40:22 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3A1F3F.852C96B2@home.com>
Source record: 174576
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

I had assumed, after reading Wayne Green's editorials 73
Magazine, that he had a talk show, but I knew nothing of the
contents. However, given Wayne's recent editorials and
Wayne's endorsements of him, I began to suspect that he was
also as flakey as Wayne has become in the past few years. I
wonder if either of them has read "A Demon Haunted World",
by Carl Sagan?

Joe Schlatter wrote:
>
> In article <3A38D043.605E6F29@home.com>,
> James Knott <the.lights.are.on.but.no.one.is@home.com> wrote:
> > Joe Schlatter wrote:
> >
> > > Please cite a documented medical source for this claim -- not some
> > > urban legend and certainly not Art Bell.
> >
> > Who's Art Bell?
> >
>
> A wacko who made his fortune on AM late-night talk radio featuring such
> topics as:
>
> -- Area 51
> -- Aliens, Roswell, alien autopsy
> -- Every Y2K conspiracy you ever heard
> -- Long-distance mind control
>
> He is also a ham, W6something. I believe he recently retired from the
> talk show -- should be right at home on 75 meters.
>
> --
> Regards,
> Joe Schlatter
>
> Respond to: joe@schlatter.org
>
> Sent via Deja.com
> http://www.deja.com/

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with

"james.knott".

4229. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:43:44 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3A200C.DC6D60BD@home.com>
Source record: 174577
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Don K." wrote:
>
> Bill Rubin wrote:
> > What I find amusing is that many of the people who protested
> > this likely complain to their cellular company about poor
> > coverage,
>
> Improbable.
> Did you just dreamed that up or what?
>

Actually, it's a common problem. A while ago, I read an
article about cell phones, and someone from one of the
Canadian cell companies said there are people who want to
use cell phones, so long as the base antenna is not near
them. Something about property values. ;-)

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4230. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:47:42 UTC
From: richardharrison@webtv.net
Message-ID: <25931-3A3A20FE-9@storefull-112.iap.bryant.webtv.net>
Source record: 174581

Gray Frierson Haertig wrote:
"If the base impedance of the tower is very high, the isocoil can be parallel resonated with a vacuum capacitor so that it presents a very high impedance at the base of the tower."

Yes. This is a sensible solution. A high impedance with few turns can be obtained using parallel resonance. Often at h-f, coiled coax chokes are made approximately self resonant. At AM broadcast frequencies, this would take many turns.

As usually only one frequency is involved (my first broadcasting job was at KPRC, 950 KHz / KXYZ, 1320 KHz, which shared a common tower at the time) tuning is simple and doesn`t often need resetting.

Few enough turns to avoid excessive loss at the cell phone frequencies in the coax can be used by resonating them at the AM broadcast frequency with a vacuum variable capacitor. If the voltage isn`t too high due to power and base impedance, an ordinary air-dielectric capacitor may be adequate.

Best regards, Richard Harrison, KB5WZI

4231. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:48:29 UTC
From: fractenna@aol.com
Message-ID: <20001215084829.15119.00002522@ng-mj1.aol.com>
Source record: 174579

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001214170908.20958.00005330@ng-fc1.aol.com...
>> >
>>
>> These 'thoughts' have been discused and explored at length on the CFA
>> reflector. You may wish to check out the archive.
>>
>> Cordially,
>>
>> NC
>
>Thanks,
>
>Steve
>

My pleasure.

Jack Belrose did a lot of work debunking this stuff and Ben Lawson has taken a strong role in debunking it.

If Ben is going to do measurements it sure has my best of wishes and scientific thanks. Having done enough debunking myself I know how thankless it can be.

73
Chip N1IR

4232. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:48:40 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3A2137.69525D83@home.com>
Source record: 174578
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

Paul k wrote:
>
> Robert Wallace <robertw@panix.com> wrote in
> <91b89i$en0$2@news.panix.com>:
>
> >In misc.consumers Steve Punter <punter1445@home.com> wrote:
> >> Well, if you live 1,500 feet from the antennas, you are exposed to
> >> 10,000 time less energy that someone standing 15 feet from the same
> >> antennas, and 2.5 million times less than someone standing 1 foot from
> >> the antennas. This is based on the distance-squared law that all
> >> radiating signals abide by in open space. Your risks from the site are
> >> so marginal that you probably stand a higher risk of being hit by a
> >> crashing 747 with Stephen Hawkings onboard.
> >>
> >>As the pilot!
> >>
> >>Robert Wallace
> >>robertw@panix.com
> >>
> > You can not argue with this type of thinking If they feel the radiation
> > will kill children NOTHING you can say will change their minds. It is a mob
> > mentality

Well, we'd better ban aspirin, as it kills about 1000
people/year in the U.S. Kids with meningitis are
particularly vulnerable.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4233. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 13:57:23 UTC
From: Orac <Orac@mac.com>
Message-ID: <Orac-F687B0.08572215122000@news.earthlink.net>
Source record: 174580
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <3A3A200C.DC6D60BD@home.com>, James Knott
<the.lights.are.on.but.no.one.is@home.com> wrote:

>"Don K." wrote:
>>
>> Bill Rubin wrote:

>> > What I find amusing is that many of the people who protested this likely
>> > complain to their cellular company about poor coverage,
>>
>> Improbable. Did you just dreamed that up or what?
>
>Actually, it's a common problem. A while ago, I read an article about cell
>phones, and someone from one of the Canadian cell companies said there are
>people who want to use cell phones, so long as the base antenna is not near
>them. Something about property values. ;-)

In New Jersey, I've suspected that this is the reason cell phone signals are so terribly weak around Princeton, a town chock full of very rich people. The last couple of times I was in Princeton on the University campus, the phone was all but unusable.

--
Orac |"A statement of fact cannot be insolent."
|
|"If you cannot listen to the answers, why do you
| inconvenience me with questions?"

4234. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:16:07 UTC
From: n1kk@my-deja.com
Message-ID: <91d934$so3$1@nnrp1.deja.com>
Source record: 174584

When using the MFJ antenna anlyzer on the Diamond V2000A the 2 meter
resonance was around 155MHz and the 6 meter had 2 dips (49MHz and 55MHz)
Before I had a chance to describe this to the people at Diamond they
told me with the MFJ analyzer they noticed some of there antennas show
a higher resonant frequency. The Bird 43 measured the resonance
on 6 meters favoring the FM section of 6 meters. This is where I
adjusted the tuning based on their chart. The built in SWR on my
IC-746 backed the bird 43 measurements.
On 2 meters the bird 43 measured resonance in the middle of the band.
I used my IC-706 for 440 and with the bird it was fine. My MFJ 259
does not cover 440MHz

Ken N1KK

In article <3A3576AD.97D32153@grove.iup.edu>,
Scott McClements <yetbbwa@grove.iup.edu> wrote:
> How did you measure the resonance of the antenna with your Bird Watt
Meter?
> Did Diamond tell you the antenna is resonate at 50 Ohms? Also, how
would the
> coax or the MFJ meter alter the resonance frequency of the antenna?
>
> Scott McClements.
>
> n1kk@netzero.net wrote:
>
> > I have recently installed a Diamond V2000A vertical for 6,2,and 440.
> > I connected my MFJ model 259 to look at the SWR on 6 and 2 meters
> > and it made the antenna look like it was resonating out side the Ham
> > bands. After several attempts to adjust the 6 meter tunning
adjustment
> > on the V2000A I finaly gave up and assumed the antenna or coax was
> > bad.
> >
> > I gave Diamond a call and told them of my experience. They asked me
> > what I was using to measure the SWR and I told them. I was told
> > the MFJ analyzer will not measure the correct resonant freq of
> > Diamond antennas and he sugguested I try another meter.
> > I tried my bird 43 and sure enough he was right as the antenna
resonated
> > right in the middle of the bands.
> >
> > I would like to hear some techincal disscussion on how this could
be.
> > My only thought so far is the MFJ does not represent a 50 ohm source

> > and has altered the resonance of the antenna.
> >
> > Ken N1KK
> > n1kk@netzero.net
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
>

Sent via Deja.com
http://www.deja.com/

4235. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:17:35 UTC
From: pelikandrp@aol.com
Message-ID: <20001215091735.17337.00007516@ng-cg1.aol.com>
Source record: 174582
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

Hmmm...I just think they're waiting for Verizon or AT&T to make them a better offer :-)

"Minds and fountain pens will work when willed,
but minds, like fountain pens, must first be filled"

4236. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:20:48 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A3A25EB.4388CB59@home.com>
Source record: 174583
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Bill Rubin wrote:
>
> "Don K." wrote:
> >
> > Bill Rubin wrote:
> > > What I find amusing is that many of the people who protested
> > > this likely complain to their cellular company about poor
> > > coverage,
> >
> > Improbable.
> > Did you just dreamed that up or what?
> >
> > Don
>
> Up where I am (suburban NYC), all companies have spots where
> they have poor coverage because they have trouble getting
> approval to put up more towers. I'm sure that people complain
> about this all the time, and I don't think it's unreasonable to
> think that some of them are the same ones protesting this new
> tower, which would improve their signal.
>
> Bill

You've invented a scenario intended to discredit those who protest
the site. IMO it's unlikely anyone who actually complained to the
cellular company about poor coverage would also protest a new cell site.

Not everyone benefits from cell phones. People have a right to try
to limit their exposure to unreasonable or unnecessary levels of
radiation. Safety standards change. What is considered safe today
might be considered unsafe tomorrow. Ask asbestos workers.

I looked up a website about a Sprint PCS hearing for placing a site
on a school's water tower. The exposure numbers involved there were:
PCS sites transmit up to 100 Watts.
The Federal exposure limit was quoted as 1.1 milliWatt/sq cm
The Sprint PCS exposure to kids was estimated to be 0.08 milliWatt/sq cm

For what it's worth, that PCS level is above the official Russian safety
standard. As I recall, the safety standard in the former USSR was
-20 dBm/sq cm or .01 milliWatt/ sq cm. Is the US standard too loose,
or is the Russian standard too tight? --I don't know. Do you?

http://www.ci.shorewood.mn.us/Pages/Planning/1997/061797pm.html#PUBLIC HEARING

Don

4237. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:34:21 UTC
From: fractenna@aol.com
Message-ID: <20001215093421.20876.00005666@ng-fc1.aol.com>
Source record: 174585

>Not everyone benefits from cell phones. People have a right to try
>to limit their exposure to unreasonable or unnecessary levels of
>radiation. Safety standards change. What is considered safe today
>might be considered unsafe tomorrow. Ask asbestos workers.

OK:

"Hello Asbestos workers. Can you name one detriment caused by cell phones.?"

I shall suppose that we will now see this NG degrade to pseudo-biometry and the pernicious misinterpretations it engenders.

The fact is that not ONE health or social problem is CAUSED or AGGRAVATED by cell phones.

Not ONE.

Keep the pseudoscience off this NG please.

73
Chip N1IR

4238. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:48:30 UTC
From: NS1Z <ns1z@arrl.net>
Message-ID: <2bq_5.127$FS6.2537@pm02news.wcom.com>
Source record: 174586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Just what is being done to interfere with these recovery efforts at this time??

<marsgal42@hotmail.com> wrote in message news:91bj6jjjq1@nnrp1.deja.com...
| There are several levels of recovery, and the
| controllers are working on them. Let them do so.
|
| Laura Halliday VE7LDH "Que les nuages soient notre
| Grid: CN89mg pied a terre..." - Hospital/Shafte

4239. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:50:24 UTC
From: pwk@nospam.usol.com
Message-ID: <Xns900B4F31BPaulk@207.126.101.92>
Source record: 174587
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Don K." <dk@home.com> wrote in <3A3A25EB.4388CB59@home.com>:

>Bill Rubin wrote:
>>
>> "Don K." wrote:
>> >
>> > Bill Rubin wrote:
>> > > What I find amusing is that many of the people who protested
>> > > this likely complain to their cellular company about poor
>> > > coverage,
>> >
>> > Improbable.
>> > Did you just dreamed that up or what?
>> >
>> > Don
>>
>> Up where I am (suburban NYC), all companies have spots where
>> they have poor coverage because they have trouble getting
>> approval to put up more towers. I'm sure that people complain
>> about this all the time, and I don't think it's unreasonable to
>> think that some of them are the same ones protesting this new
>> tower, which would improve their signal.
>>
>> Bill
>
>You've invented a scenario intended to discredit those who protest
>the site. IMO it's unlikely anyone who actually complained to the
>cellular company about poor coverage would also protest a new cell site.
>
>Not everyone benefits from cell phones. People have a right to try
>to limit their exposure to unreasonable or unnecessary levels of
>radiation. Safety standards change. What is considered safe today
>might be considered unsafe tomorrow. Ask asbestos workers.
>
>I looked up a website about a Sprint PCS hearing for placing a site
>on a school's water tower. The exposure numbers involved there were:
> PCS sites transmit up to 100 Watts.
> The Federal exposure limit was quoted as 1.1 milliWatt/sq cm
> The Sprint PCS exposure to kids was estimated to be 0.08 milliWatt/sq
> cm
>
>For what it's worth, that PCS level is above the official Russian safety
>standard. As I recall, the safety standard in the former USSR was

>-20 dBm/sq cm or .01 milliWatt/ sq cm. Is the US standard too loose,
>or is the Russian standard too tight? --I don't know. Do you?
>
>http://www.ci.shorewood.mn.us/Pages/Planning/1997/061797pm.html#PUBLIC
>HEARING
>
>Don
>I told you you can not win with thse people, they probably belive gays can
be cured. Don't argue with them they know it all and if they say it is
unsafe then it is

4240. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:55:31 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3a2d54.254026310@news.akorn.net>
Source record: 174588
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Hi Don

On Fri, 15 Dec 2000 14:20:48 GMT, "Don K." <dk@home.com> wrote:

>You've invented a scenario intended to discredit those who protest
>the site. IMO it's unlikely anyone who actually complained to the
>cellular company about poor coverage would also protest a new cell site.

His "invented scenario" pales compared to the bolognia heap of the
paranoid people who quote folklore and half-truths as fact.

IMO, it seems quite reasonable to assume some of the overly paranoid
about exposure also want better coverage. That happens here in my
county, where some of the people I saw show up at a meeting to protest
a new tower were the same people who bitched personally to me about
how poor their phones work around here.

>Not everyone benefits from cell phones. People have a right to try
>to limit their exposure to unreasonable or unnecessary levels of
>radiation. Safety standards change. What is considered safe today
>might be considered unsafe tomorrow. Ask asbestos workers.

This is probably one of the most investigated things in studies that
we have ever had. I personally know someone who has been looking at
effects of EM radiation in a lab for at least 20 years for medical
research! He, and everyone else I know of in the field (and I know
many people), all say over and over again if the temperature of the
cells aren't raised there is no effect on the cells.

He told me the ONLY study linking EM radiation to cancer was falsified
a year or two before the government finally concluded it was faked.
While the correction made it on national TV, it was a short blurb. All
the paranoid people inventing stories or repeating false rumors get
all the press.

It is the Chicken-Little syndrome.

>I looked up a website about a Sprint PCS hearing for placing a site
>on a school's water tower. The exposure numbers involved there were:
> PCS sites transmit up to 100 Watts.
> The Federal exposure limit was quoted as 1.1 milliWatt/sq cm
> The Sprint PCS exposure to kids was estimated to be 0.08 milliWatt/sq cm
>
>For what it's worth, that PCS level is above the official Russian safety
>standard. As I recall, the safety standard in the former USSR was
>-20 dBm/sq cm or .01 milliWatt/ sq cm. Is the US standard too loose,

>or is the Russian standard too tight? --I don't know. Do you?

Please tell me where I can look that alleged "Russian Standard" up Don. Even the US standard is extremely safe. The damage concern is COOKING, not cell mutation. It takes an ionizing form of radition to cause accumulated damage, not a lower frequency (radio spectrum or lower) form.

73 Tom

4241. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 14:57:31 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3a30f5.254954880@news.akorn.net>
Source record: 174589

On Thu, 14 Dec 2000 23:38:13 -0800, Gray Frierson Haertig
<gfh@haertig.com> wrote:

>
>Richard brings up a fourth method commonly used to solve this problem
>that I neglected to mention in my other post - and that is an isocoil.
>
>This is large inductor (typically 150 uH or so) wound out of whatever
>coax one desires, though in most applications at the relatively low
>powers found in PCS service, 3/8", 1/2" or 5/8" foam heliax is used.
>The the amount of cable incorporated in the inductor doesn't constitute
>a great loss. If there is more than one coax to bring across the base,
>the inductor can be wound in a multifilar fashion using multiple coaxes.
> These coils are on the order of 1.5' to 2' in diameter and about 3' to
>3.5 feet long. It would go inside its own weatherproof enclosure

That's what I use on my 300 foot tower to get the higher frequency
feedlines past the base insulator.

73 Tom

4242. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:08:01 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3a3164.255066075@news.akorn.net>
Source record: 174590

On Fri, 15 Dec 2000 14:16:07 GMT, n1kk@my-deja.com wrote:

>When using the MFJ antenna anlyzer on the Diamond V2000A the 2 meter
>resonance was around 155MHz and the 6 meter had 2 dips (49MHz and 55MHz)
>Before I had a chance to describe this to the people at Diamond they
>told me with the MFJ analyzer they noticed some of there antennas show
>a higher resonant frequency. The Bird 43 measured the resonance
>on 6 meters favoring the FM section of 6 meters. This is where I
>adjusted the tuning based on their chart. The built in SWR on my
>IC-746 backed the bird 43 measurements.
>On 2 meters the bird 43 measured resonance in the middle of the band.
>I used my IC-706 for 440 and with the bird it was fine. My MFJ 259
>does not cover 440MHz
>
>Ken N1KK

Ken and all,

It amazes me the antenna manufacturers seem to not understand how an analyzer works.

Let's assume the analyzer is functioning properly as shipped, and you do not have a very strong local source of RF screwing up the analyzer's detetectors (which will cause a high SWR reading everywhere).

If the analyzer is showing a different resonant frequency, it can ONLY be because the antenna has a design flaw such as a lack of perfect feedpoint unbalance.

I know that balance flaws are very very common with VHF antennas because many manufacturers use an inadequate groundplane or decoupling at the antenna base. This allows common mode currents to spill over onto the feedline shield.

Depending on how and where that shield is grounded, the SWR will vary. At times when the feedline is grounded by the physically large radio and everything connected to it, common mode current becomes less noticable. An analyzer, especially with a short feedline attached to the antenna, presents little or no termination to these unwanted currents. They may show as a high SWR (because they are are actually causing a high SWR).

It's a common excuse, when the antenna has a design shortfall, to blame the test equipment. But if the antenna analyzer is NOT DEFECTIVE, and measures test loads correctly, it will measure an antenna correctly.

Claiming otherwise is a clear demonstartion they simly don't have any idea what they are talking about.

73 Tom

4243. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:39:38 UTC
From: richardharrison@webtv.net
Message-ID: <24713-3A3A3B3A-17@storefull-117.iap.bryant.webtv.net>
Source record: 174591

Jason Hsu, AG4DG wrote:
"No, I don`t expect to win contests, bust pile-ups, or earn my WAS with lightning speed."

Shortened radials can be effective say some experts. Some say total wire used for h-f radials can be the same in either twice the number of 1/8-wave radials as would be used in 1/4-wave radials, or in the 1/4-wave radials themselves, with almost the same results.

This may be the wrong question for short hop communications. The U.S. Army made tests at 3 MHz over a 75-mile path in South Florida where soil conductivity was excellent. Using a 15-foot whip on each end, and excellent ground connections, produced a 38 db weaker signal than 1/2-wave dipoles at each end when these dipoles were only suspended at 7 feet above the ground.

Raising the dipoles to 30 feet above ground at each end improved the received signals by another 21 db at each end of the path. For an unexplained reason, the army increased the path length to 150 miles for the 30 foot dipole elevation tests. As the radiation is about the same for either elevation angle for the different path lengths, the same gain would be expected at 75 miles path length.

The point is that the 1/2-wave dipole is a much better antenna for short distance sky wave communications than is a resonant loaded short whip, even when the dipole is only 7 feet off the ground and and the whip is 15 feet tall. 38 db better for two similar antennas at each end of the path!

Best regards, Richard Harrison, KB5WZI

4244. Re: Geographic location software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:54:39 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <p9r_5.8125$t3.10505@tor-nn1.netcom.ca>
Source record: 174593
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

You may also want to check out DXVIEW at www.qsl.net/dxview

It has over 250 maps, bearing, distance etc based on prefix

Rob

"Phil" <philvdk@pandora.be> wrote in message
news:504U5.18727$zF6.158702@afrodite.telenet-ops.be...
> Hi,
>
> I'm looking for a program to use in Windows that shows all PREFIX on a
> detailed map.
> It would be great if I even can calculate worked distances and bearings.
> All info is welcome on thsi subject !
>
> Thanks and 73 de Phil
> ON4BAW
>
>

4245. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:55:52 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3A3F08.314@wt.net>
Source record: 174592

>
> >Not everyone benefits from cell phones. People have a right to try
> >to limit their exposure to unreasonable or unnecessary levels of
> >radiation. Safety standards change. What is considered safe today
> >might be considered unsafe tomorrow. Ask asbestos workers.
>
> OK:
>
Fractenna wrote: > "Hello Asbestos workers. Can you name one detriment
caused by cell phones.?"

Duhhhhhhhh, I would think most effected by asbestos never used a cell
phone in that time span. They didn't exist. That analogy doesn't really
flush too well. Not to mention that cell phones have nothing to do with
asbestos.
>
> I shall suppose that we will now see this NG degrade to pseudo-biometry and the
> pernicious misinterpretations it engenders.

Either that or a bunch of whiny lawyer threats. I think I prefer the
pseudo-biometry and the
pernicious misinterpretations they engender.
>
> The fact is that not ONE health or social problem is CAUSED or AGGRAVATED by
> cell phones.
>
> Not ONE.

Well, one social problem is people like to talk when driving. Some
people don't do two things at once well. So that kind of blows your not
ONE in the social dept.
>
> Keep the pseudoscience off this NG please.

Boy, you are one to talk about NG content. Maybe he will make a deal
with you. If you help keep the whiny lawyer crap off the NG , maybe they
will keep the pseudoscience off also. Sounds like a fair deal to me. But
actually I don't consider what they said as pseudoscience. Maybe undo
paranoia, but not pseudoscience. Can you prove that there are no long
term effects of cell phone radiation to the head? Being as they haven't
been around too awful long, I don't see how you could. And people do
have the right to limit their exposure to this rf is they so choose. So
I'd say he has a leg up on you in the NG content dept compared to other
posts I see recently. Pot+kettle=black MK
--

http://web.wt.net/~nm5k

4246. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:59:02 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A3A3CF1.2826E58A@home.com>
Source record: 174594
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Tom W8JI wrote:
> Please tell me where I can look that alleged "Russian Standard" up
> Don. Even the US standard is extremely safe. The damage concern is
> COOKING, not cell mutation. It takes an ionizing form of radition to
> cause accumulated damage, not a lower frequency (radio spectrum or
> lower) form.

I remember reading the Russian standards back in the 70's and 80's
in IEEE Spectrum magazine when I was involved with microwave
transmitter design.

I found a web reference to the Russian standard in the IEEE Antennas
and Propagation magazine at

http://www.eecs.uic.edu/eecspeople/lin_ieee4.htm
It says:
Indeed, it has been known for years that the RF guidelines promulgated
for limiting human exposure vary from country to country. For example,
according to the Sanitary Regulations and Standards 2.2.4/2.1.8.055-96,
"Radiofrequency Electromagnetic Radiation under Occupational and Living
Conditions," the permissible exposure level for the general population
in the Russian Federation is 10 ï¿½W/cm2 or 0.1 W/m2 in the 300 MHz to
300 GHz frequency range [3]. The American National Standards Institute
(ANSI) guidelines for the same frequency range are 1 to 10 mW/cm2 or
10 to 100 W/m2, depending on frequency [4].

Note that 10 uW/cm2 is .01 milliWatt/sq cm.

Don

4247. Re: MFJ antenna analyzer, NG on Diamond ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 15:59:26 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a3a3d2a.1148647@news.azstarnet.com>
Source record: 174595

On Fri, 15 Dec 2000 15:08:01 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>On Fri, 15 Dec 2000 14:16:07 GMT, n1kk@my-deja.com wrote:
>
>>When using the MFJ antenna anlyzer on the Diamond V2000A the 2 meter
>>resonance was around 155MHz and the 6 meter had 2 dips (49MHz and 55MHz)
>>Before I had a chance to describe this to the people at Diamond they
>>told me with the MFJ analyzer they noticed some of there antennas show
>>a higher resonant frequency. The Bird 43 measured the resonance
>>on 6 meters favoring the FM section of 6 meters. This is where I
>>adjusted the tuning based on their chart. The built in SWR on my
>>IC-746 backed the bird 43 measurements.
>>On 2 meters the bird 43 measured resonance in the middle of the band.
>>I used my IC-706 for 440 and with the bird it was fine. My MFJ 259
>>does not cover 440MHz
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>>Ken N1KK
>
>Ken and all,
>
>It amazes me the antenna manufacturers seem to not understand how an
>analyzer works.
>
>Let's assume the analyzer is functioning properly as shipped, and you
>do not have a very strong local source of RF screwing up the
>analyzer's detetectors (which will cause a high SWR reading
>everywhere).
>
>If the analyzer is showing a different resonant frequency, it can
>ONLY be because the antenna has a design flaw such as a lack of
>perfect feedpoint unbalance.
>
>I know that balance flaws are very very common with VHF antennas
>because many manufacturers use an inadequate groundplane or decoupling
>at the antenna base. This allows common mode currents to spill over
>onto the feedline shield.
>
>Depending on how and where that shield is grounded, the SWR will
>vary. At times when the feedline is grounded by the physically large
>radio and everything connected to it, common mode current becomes less
>noticable. An analyzer, especially with a short feedline attached to
>the antenna, presents little or no termination to these unwanted
>currents. They may show as a high SWR (because they are are actually
>causing a high SWR).

>
>It's a common excuse, when the antenna has a design shortfall, to
>blame the test equipment. But if the antenna analyzer is NOT
>DEFECTIVE, and measures test loads correctly, it will measure an
>antenna correctly.
>
>Claiming otherwise is a clear demonstartion they simly don't have any
>idea what they are talking about.

Tom is correct. When you change your instrumentation configuration, you are also changing the antenna *system* that you are measuring. Without good common mode current reduction (typical in a "ground plane" antenna) the outside of the cable is part of the antenna. As you fiddle with its length, you change the system resonances.

Having been spoiled by having access to high quality netwrk analyzers, I'm no big fan of some of the hand-held instruments offered to the ham community, mostly because they promise more accuracy than they can deliver. Nevertheless, in this case I wouldn't fault the instrument.

73,

Wes N7WS

4248. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 16:06:33 UTC
From: Steve Cannell <scannell2000@hotmail.com>
Message-ID: <91dfi2$2o0$1@nnrp1.deja.com>
Source record: 174597
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

> This is factually incorrect. Two officers in one state contracted
> testicular cancer.

Nevada, huh, maybe too many visits to the Mustang Ranch.

Sent via Deja.com
http://www.deja.com/

4249. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 16:13:13 UTC
From: fractenna@aol.com
Message-ID: <20001215111313.18060.00009949@ng-fi1.aol.com>
Source record: 174596

>> >Not everyone benefits from cell phones. People have a right to try
>> >to limit their exposure to unreasonable or unnecessary levels of
>> >radiation. Safety standards change. What is considered safe today
>> >might be considered unsafe tomorrow. Ask asbestos workers.
>>
>> OK:
>>
>Fractenna wrote: > "Hello Asbestos workers. Can you name one detriment
>caused by cell phones.?"
>
>Duhhhhhhhh, I would think most effected by asbestos never used a cell
>phone in that time span. They didn't exist. That analogy doesn't really
>flush too well. Not to mention that cell phones have nothing to do with
>asbestos.
>>
>> I shall suppose that we will now see this NG degrade to pseudo-biometry and
>the
>> pernicious misinterpretations it engenders.
>
>Either that or a bunch of whiny lawyer threats. I think I prefer the
>pseudo-biometry and the
>pernicious misinterpretations they engender.
>>
>> The fact is that not ONE health or social problem is CAUSED or AGGRAVATED
>by
>> cell phones.
>>
>> Not ONE.
>
>Well, one social problem is people like to talk when driving. Some
>people don't do two things at once well. So that kind of blows your not
>ONE in the social dept.
>>
>> Keep the pseudoscience off this NG please.
>
>Boy, you are one to talk about NG content. Maybe he will make a deal
>with you. If you help keep the whiny lawyer crap off the NG , maybe they
>will keep the pseudoscience off also. Sounds like a fair deal to me. But
>actually I don't consider what they said as pseudoscience. Maybe undo
>paranoia, but not pseudoscience. Can you prove that there are no long
>term effects of cell phone radiation to the head? Being as they haven't
>been around too awful long, I don't see how you could. And people do
>have the right to limit their exposure to this rf is they so choose. So
>I'd say he has a leg up on you in the NG content dept compared to other

>posts I see recently. Pot+kettle=black MK
>--
>http://web.wt.net/~nm5k
>
>
>
>
>
>

For the moment I will forgive your personal content and concentrate on the other statements.

Cell phones do not cause car accidents. Distracted people (among other causes) produce such accidents. If you are distracted by ANYTHING--be it a cell phone or hot Danish in hand--then put it down and drive. If you aren't, then don't.

Locally, there is now a cell phone ordinance when driving. My next question is: should we now also put an ordinance on children; CD players; argumentative passengers; and --or course-- that hot MacDonald's morning coffee? And what about that oh-so-distracting smell of a pepperoni pizza coming back from the local pizza place?

As for the asbestos analogy, it wasn't mine. So don't ascribe it to me. My point is that it WAS irrelevant.

73
Chip N1IR

4250. Re: Trap Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 16:55:36 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3A4D08.6BEEDBB7@dvol.com>
Source record: 174598

Reg Edwards wrote:

> Just connect a 2-inch diameter loop to the analyser
> terminals and hold it near or over one end of the trap.
>
> Vary frequency and search for a very sharp increase in
> impedance from zero to perhaps a few hundred ohms.

>
That is truly a slick trick. Tnx, Reg.

>
> --
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********

>
w3rv

4251. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:00:19 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <91dimu$5ke$1@nnrp1.deja.com>
Source record: 174599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <Pine.GSO.3.95.1001214181243.18503I-100000@oso.slonet.org>,
Clifford Buttschardt <cbuttsch@slonet.org> wrote:

> Your a complete JERK!

Lighten up. If it blew up, it blew up. There were no souls aboard.

73, Hans, K0HB

--
A rock pile ceases to be a rock pile the moment a single man
contemplates it, bearing within him the image of a cathedral.
-- Antoine de Saint-Exupery

Disclaimer: All I know I learned from reading Usenet.

Sent via Deja.com
http://www.deja.com/

4252. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:15:19 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10012151727130.4570-100000@unics>
Source record: 174600

On 15 Dec 2000, Fractenna wrote:

>
> I shall suppose that we will now see this NG degrade to pseudo-biometry and the
> pernicious misinterpretations it engenders.
>
> The fact is that not ONE health or social problem is CAUSED or AGGRAVATED by
> cell phones.
>
> Not ONE.
>
> Keep the pseudoscience off this NG please.
>
> 73
> Chip N1IR
>
>
Hi Chip,

The argumentation on topics like this partly relies on statistical
results.
Not one of the people who are running lawsuits agains tobacco companies in
your country can prove that his "personal" lung cancer is a result of
smoking their cigarettes. You can only have a statistical answer. This is
true of almost everything related to medicine. Does that mean that
medicine, biology, partly chemistry etc. are pseudosciences ?
Most of the things around us can be led back to the law of physics, but
given all quantum formulas no one on this planet is able to describe
exactly how a HIV virus enters into a cell or what happens exactly at the
cells membranes. But I think biochemistry is no pseudoscience. For most
medicines nobody knows exactly why they have an effect, anyway the people
working in this field are not pseudoscientists to me.

With only very few exceptions you always measure "bulk quantities", even
in "exact" physics.

I agree that rf radiation will not ionize any DNA molecule and that the
energy absorbed by human bodies and converted to heat should be far from
being critical.

Anyway I do not know if the spatial "shape" of a DNA molecule can be
modified by rf radiation and what effect this might have. I just know that

1. You could not measure it (you just don't have the resolution)

2. The action of medicines depends on the spatial structure of the molecules (Their spatial shape can depend on how you produce them). It is not just the chemical formula that counts.

I would argue that the energy of one 1900 MHz quantum is well below a the thermal energy and that all shapes a DNA molecule could be converted into will also be reached by interaction with the warm environment, meaning no effect of the rf radiation.

The fact that you cannot prove any danger does not mean that this danger does not exist.

I've never seen an electron but I believe they exist.

The usage of cell phones when driving and in restaurants, theatres etc. surely is a social problem.

I believe there is potentially a health danger but I think the coincidence will be to weak to prove it, meaning the physical quantity is "smaller than the error bars" and therefore not measurable. To many other factors will smear out all measurements.

I agree with you that there should be better NG for this kind of topic but I would not call it pseudoscience.

Life as we know it developed without the presence of pulsed coherent rf radiation, but seems to be tolerant against most kinds of "pollution" of its environment.

Distance is always a good mean to keep the risk low. Society will accept a small risk if it sees that unnecessary risks are avoided (there surely is a risk in using nuclear power but it is accepted if unnecessary risks are avoided).

If your government gives upper limits for rf radiation it means there is evidence for a risk. (If rf is not dangerous why should I give upper limits ?)

Vy 73

Ralf

DL 6 OAP
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover
Germany (where every vote counts!)

Tel: +49 511 762 2232
==========
Hannover, Germany, where mankind's first motorized flight took place:

Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

4253. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:19:47 UTC
From: k3bu@aol.com
Message-ID: <20001215121947.28822.00004700@ng-cl1.aol.com>
Source record: 174601
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

>
>>Not everyone benefits from cell phones. People have a right to try
>>to limit their exposure to unreasonable or unnecessary levels of
>>radiation. Safety standards change. What is considered safe today
>>might be considered unsafe tomorrow. Ask asbestos workers.
>>

Here we go with crap. Already idiotic, unfounded "standard" is "endangering" people.
More to come, stand by!

There is no proof that RF "radiation" is damaging, the oppsite is true, it has terapeutic effects.
But we have idiotic "standards" and ready lawyers to act.
Combine "unsightly" towers and you have perfect "boost" for expansion of ham radio (yeah, handhelds!)

73 and wear lead suits!

Yuri, K3BU

4254. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:23:09 UTC
From: k3bu@aol.com
Message-ID: <20001215122309.28822.00004701@ng-cl1.aol.com>
Source record: 174602

>
>The point is that the 1/2-wave dipole is a much better antenna for short
>distance sky wave communications than is a resonant loaded short whip,
>even when the dipole is only 7 feet off the ground and and the whip is
>15 feet tall. 38 db better for two similar antennas at each end of the
>path!
>
>Best regards, Richard Harrison, KB5WZI
>
>
>

.... and that's why broadcast stations use verticals to get local coverage on
AM :-)
go figure!

Yuri, K3BU/m

4255. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:28:00 UTC
From: "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de>
Message-ID: <Pine.GSO.4.10.10012151823450.4570-100000@unics>
Source record: 174603
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Thu, 14 Dec 2000, Steve Punter wrote:

> Well, if you live 1,500 feet from the antennas, you are exposed to 10,000
> time less energy that someone standing 15 feet from the same antennas, and
> 2.5 million times less than someone standing 1 foot from the antennas. This
> is based on the distance-squared law that all radiating signals abide by in
> open space. Your risks from the site are so marginal that you probably stand
> a higher risk of being hit by a crashing 747 with Stephen Hawkings onboard.
> --
> Steve Punter
> http://www.arcx.com/sites
>
>
>
>
What is the probability for life to emerge on a 12000 km diameter planet
150 million km away from a 1.4 million km star having a surface
temperature of around 6000 K and being located about 30000 lightyears away
from the galactic center ?
What it the propability that a species generated in this process will
develop nuclear bombs and fly to the moon?
The probability is low, but it happened anyway.

Vy 73

Ralf

DL 6 OAP
==========
Ralf Wilhelm
Inst. f. Quantenoptik
Universität Hannover

Welfengarten 1

30167 Hannover
Germany (where every vote counts!)

Tel: +49 511 762 2232
==========
Hannover, Germany, where mankind's first motorized flight took place:
Karl Jatho, August 18th 1903, 4 months before the Wright Bros.
(When will history notice this ?)
==========

4256. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 17:38:40 UTC
From: Marcus AAkesson <marcus.akesson@NO_SPAM_PLEASE_home.se>
Message-ID: <5olk3to47b9rk743b2rh5bakjjd5m60or9@4ax.com>
Source record: 174604
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Thu, 14 Dec 2000 03:24:27 -0500, "Ken M." <poboxdc@ix.netcom.com>
wrote:

>And many of those officers who laid a radar gun in their laps
>have developed cancer of the testicles.

BS. That's a myth, an urban legend.

/Marcus

--
Marcus AAkesson marcus.akesson@NO_SPAM_PLEASE_home.se
Gothenburg Callsigns: SM6XFN & SB4779
Sweden
>>>>>> Keep the world clean - no HTML in news or mail ! <<<<<<

4257. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:01:16 UTC
From: n2ey@aol.com
Message-ID: <91dm96$8u4$1@nnrp1.deja.com>
Source record: 174605
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <91dimu$5ke$1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:
> In article <Pine.GSO.3.95.1001214181243.18503I-100000@oso.slonet.org>,
> Clifford Buttschardt <cbuttsch@slonet.org> wrote:
>
> > Your a complete JERK!
>
> Lighten up. If it blew up, it blew up. There were no souls aboard.

A lot of folks put pieces of their hearts and souls into building it
and getting it launched, Hans.

A little respect is not out of order.

Hopefully it's just a software problem that will resolve itself - as it
was designed to do.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

4258. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:09:37 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <91dmop$9d6$1@nnrp1.deja.com>
Source record: 174608
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <91dm96$8u4$1@nnrp1.deja.com>,
n2ey@aol.com wrote:

> A little respect is not out of order.

Some of my money (and hopes) flew with that bird too, but nobody need
be publicly called a "jerk" for simply commenting on the obvious.

I hope it recovers and has a long and useful life, but if it doesn't,
then it doesn't.

For further detail on "a little respect", go to
http://www.amishrakefight.org/gfy

73, Hans, K0HB

--
A rock pile ceases to be a rock pile the moment a single man
contemplates it, bearing within him the image of a cathedral.
-- Antoine de Saint-Exupery

Disclaimer: All I know I learned from reading Usenet.

Sent via Deja.com
http://www.deja.com/

4259. Re: CQ baby one more time!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:13:28 UTC
From: Rick Jones <rjones@mail.cccd.edu>
Message-ID: <91dn0b$9s1$1@spock.dis.cccd.edu>
Source record: 174606
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Jason,

My 8 year old daughter will love it! When can we expect the CD out? HI HI

Rick, KG6RJ

<jason_hsu@my-deja.com> wrote in message news:91c5l9$2f5$1@nnrp1.deja.com...
> I hope you are amused by my ham radio parody of the Britney Spears
> song "Baby One More Time":
> http://www.bigfoot.com/~jason_hsu/humor-ham_radio-
> cq_baby_one_more_time.html
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/ham_radio.html
>
>
> Sent via Deja.com
> http://www.deja.com/

4260. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:22:30 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A3A6165.5B23FCD5@haertig.com>
Source record: 174607

Modern AM construction generally tries to avoid air dielectric variables
(though I have quite a collection taken out of old installations when
rebuilt) because of their tendency to change value when the spiders,
wasps and mice move in. Not to mention the bottom of the enclosure
begins to look like a small animal abattoir.

For towers in the range of 1/4 lambda, which a large majority of AM's
are, the base impedance is low enough that resonating the coil is
usually not necessary. It's usually cheaper to add sufficient turns to
bring the impedance up than to add a vacuum variable.

As I mentioned, the commercial units are typically about 150 uH, which
translates to a bit over 500 ohms at 550 KHz. This is more than a 10 to
1 ratio with the base impedance of a 1/4 lambda tower. At 1600 KHz it
is 1500 ohms. The loss at PCS frequencies is not so great as to be a problem.

Gray

Richard Harrison wrote:
>
> Gray Frierson Haertig wrote:
> "If the base impedance of the tower is very high, the isocoil can be
> parallel resonated with a vacuum capacitor so that it presents a very
> high impedanceï¿½at the base of the tower."
>
> Yes. This is a sensible solution. A high impedance with few turns can be
> obtained using parallel resonance. Often at h-f, coiled coax chokes are
> made approximately self resonant. At AM broadcast frequencies, this
> would take many turns.
>
> As usually only one frequency is involved (my first broadcasting job was
> at KPRC, 950 KHz / KXYZ, 1320 KHz, which shared a common tower at the
> time) tuning is simple and doesn`t often need resetting.
>
> Few enough turns to avoid excessive loss at the cell phone frequencies
> in the coax can be used by resonating them at the AM broadcast frequency
> with a vacuum variable capacitor. If the voltage isn`t too high due to
> power and base impedance, an ordinary air-dielectric capacitor may be
> adequate.
>
> Best regards, Richard Harrison, KB5WZI

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100

Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4261. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:24:54 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A3A61F6.86069523@haertig.com>
Source record: 174609

Fractenna wrote:

>
> Jack Belrose did a lot of work debunking this stuff and Ben Lawson has taken a
> strong role in debunking it.
>

I'm sure it's a slip of the finger, but it's Dawson not Lawson, for
those that might not recognize the name.

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4262. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:25:11 UTC
From: Steve Punter <punter1445@home.com>
Message-ID: <bmt_5.127125$3u1.33756740@news3.rdc1.on.home.com>
Source record: 174610
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

>What it the propability that a species generated in this
>process will develop nuclear bombs and fly to the moon?
>The probability is low, but it happened anyway.

And your point is? Are you trying to argue that ANYTHING is possible? If that's the case, then it is also possible that you will contract cancer from signals coming from a transmitter on the opposite of the world. Of course we could argue about how unimaginably weak those signals would be, but you would simply argue that even more improbable things have happened.

So exactly what are you suggesting that we do? Shut down all RF transmitters on the OUTSIDE chance that they MIGHT cause someone to contract cancer?
--
Steve Punter
http://www.arcx.com/sites

4263. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:26:33 UTC
From: richardharrison@webtv.net
Message-ID: <23024-3A3A6259-5@storefull-115.iap.bryant.webtv.net>
Source record: 174612

Yri, K3BU wrote:
"...and that`s why broadcast stations use verticals to get local coverage on AM."

Yes, the AM broadcast station reaches listeners by the ground wave signal. Horizontal antennas see reversed image reflections which produce cancellation of the wave traveling along the earth`s surface.

Vertical grounded antennas produce cancellation at the zenith and maximum radiation along the earth`s surface, at least at the tower heights used for AM broadcasting.

An HF surface wave is attenuated in such a short travel distance along the earth`s surface that it is soon useless. It is absorbed before it can reach the ionosphere for reflection. Only radiation elevated at several degrees above the horizon is useful for ionospheric reflection.

The 3 MHz tests conducted by the U.S. Army depended on ionospheric reflection between path ends. These were "near vertical incidence" tests over path lengths of 75 miles and 150 miles.

Best regards, Richard Harrison, KB5WZI

4264. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:36:45 UTC
From: k1bqt@aol.com
Message-ID: <20001215133645.22213.00004793@ng-da1.aol.com>
Source record: 174611

I confess to overstating the case. I suspect I shoud have said something more definitive and less absolute like, "radiates EMR with such extreme inefficiency so as to permit a short-range communication link while remaining in compliance with FCC guidlelines for unlicensed emissions".

Better?

Rick K1BQT

4265. Mr. O'Phile on Illegal Wire tapping

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 18:57:02 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A3A697E.4DBA8B59@uci.edu>
Source record: 174613

Fractenna wrote:
>
> Hi Jim!
>
> Phile here--

Phile? What kind of a phile?

> Nice talkin at you--and go screw urself:-)

A highly crafted and well reasoned response. But, although persuasive,
I must respectfully decline. :-)

ac6xg

Did you forget that you wrote this? Seems to me you're the one who
stirred the pot, Chip.

>Mr. O'Neal is caught in a lie.

>Readers of this NG will recall as a matter of FACT that O'Neal stated that
the
>fractal quad he built was superior. This -3dB to that Yagi of the same size
>would require a very small 2 element Yagi with 6 dB gain!

>mR o'nEAL: If you have data that shows my measurements to be wrong, then
>publish them in a magazine or journal. You will not ever manage to undo
this
>lie of yours.

>Nathan Cohen, Ph.D.

4266. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 19:10:44 UTC
From: fractenna@aol.com
Message-ID: <20001215141044.21513.00002971@ng-fl1.aol.com>
Source record: 174614

>
>
>
>Fractenna wrote:
>
>>
>> Jack Belrose did a lot of work debunking this stuff and Ben Lawson has
>taken a
>> strong role in debunking it.
>>
>
>
>I'm sure it's a slip of the finger, but it's Dawson not Lawson, for
>those that might not recognize the name.
>
>Gray
>
>--
>Telecommunications Engineering
>Gray Frierson Haertig & Assoc.
>820 North River Street, Suite 100
>Portland, Oregon 97227
>503-282-2989
>503-282-3181 FAX
>gfh@haertig.com
>
>
Thanks for the correction!

73
Chip N1IR

4267. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 19:57:30 UTC
From: Nick Dunklee <SCSIGuy@onemain.com>
Message-ID: <B65F0BB5.48D8%SCSIGuy@onemain.com>
Source record: 174615
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

MMM....stupid people (er to be PC, "uneducated")
....mmmmm....paranoia...mmmm......

Well, for all of you out here who are all paranoid about cell phones...how many of you use 900 MHz cordless phones? You can't use the old skool 49 MHz "25 channel" phones because it's so easy to intercept, so most people these days use 900 MHz digital cordless phones.

A LOT of people use cordless phones, and power levels are a bit different, but not by much. the 800 MHz cellular band might as well just be considered 900 MHz, it's 869-896 MHz, which is pretty close, and anyway, most people think higher frequency means "more radiation."

How many of you are acting hypocritical and using 900 MHz cordless phones? If you think the miniscule amount of "radiation" being emitted from a cell phone is bad, why put yourself at "risk" and use a cordless phone? It's the same radiation, it's in the same place.

Of course I'm sure there are people out there who walk around wrapped up in fine metal mesh clothing all day, to make sure none of the nasty 'radiation' skipping about the ionosphere doesn't get near you. You don't use anything electric, because the theoretical EM "radiation/whatever" may kill you.

Oh! And how about all you who stay away from the cell phones AND the cordless phones, you must be using a computer to type messages to the newsgroup! What about the dangers of those 1 GHz processors? How come nobody's raised radiation issues about them? Oh, you may say "it's not enough radiation, and it's in a metal box anyway," but that'd be using the same excuse that cellular users work.

MY GOD, how many people use TV remotes? That little infrared LED on the end could cause cancer...just think of how many people have their remote control pointed at their leg...and then they bump a button! THEY COULD DIE!

The only real excuse to use is "there is no risk" but nobody can say that for sure on the sole note that there MAY be some connection to cancer or disease and until we rule out that 1/1,000,000,000 chance, you can't say no because then you'd be wrong, and these days, wrong is not good ;) .

Honestly, I do believe we have more pressing matters at hand, like making sure we actually get a president elected! ;) (I do know that it's finally Bush, but still, for sake of example.)

Next month: "cosmic rays" in aircraft? Should you never fly in an airplane because of them? and, a new feature story "My toaster oven killed my husband." See how the evil heat radiation can destroy a family.

::sigh::....

Nick

> From: pwk@nospam.usol.com (Paul k)
> Organization: Posted via Supernews, http://www.supernews.com
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular
> Followup-To: alt.cellular.sprintpcs,rec.radio.amateur.antenna
> Date: Thu, 14 Dec 2000 19:54:21 -0000
> Subject: Re: Sprint PCS antennas on schools!
>
> Robert Wallace <robertw@panix.com> wrote in
> <91b89i$en0$2@news.panix.com>:
>
>> In misc.consumers Steve Punter <punter1445@home.com> wrote:
>>> Well, if you live 1,500 feet from the antennas, you are exposed to
>>> 10,000 time less energy that someone standing 15 feet from the same
>>> antennas, and 2.5 million times less than someone standing 1 foot from
>>> the antennas. This is based on the distance-squared law that all
>>> radiating signals abide by in open space. Your risks from the site are
>>> so marginal that you probably stand a higher risk of being hit by a
>>> crashing 747 with Stephen Hawkings onboard.
>>
>> As the pilot!
>>
>> Robert Wallace
>> robertw@panix.com
>>
> You can not argue with this type of thinking If they feel the radiation
> will kill children NOTHING you can say will change their minds. It is a mob
> mentality

4268. Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 20:09:38 UTC
From: John Harper <ae5x@optonline.net>
Message-ID: <6Uu_5.455997$4d.59200909@news02.optonline.net>
Source record: 174434

Hello amigos,

I've recently moved to a hilltop in northwestern NJ and have been experimenting
with DXing on 80m. I'd like to hear what types of antennas others in the area use on this band. My reason for asking concerns my own dilemma:

The first antenna I tried on this band was a 67' wire vertical with 3 1/4-wave on-the-ground radials. Performance was terrible. I know 3 radials isn't enough, but I should have had some success. Couldn't cross the Atlantic. Then I put up a dipole at about 50 feet and now have almost a dozen European/African countries on the band. But there are still times when I hear a DX station who is 57 or 579 calling CQ. I answer and get no reply - he calls CQ again, never hearing me. I'm running 100 watts.

I know verticals are favored for low angle radiation on the low bands and wonder if more radials would have helped? I also know that a verticals' performance is highly dependant on the conductivity of the ground several wavelengths beyond the length of the radials. Is the nature of the soil conductivity in this part of the state such that horizontally polarized antennas are a better choice? If so, my plans are to install another dipole parallel to my current one to act as a parasitic reflector.

Thanks for any help/suggestions/ideas or donations of 80m Yagis!
73 and happy holidays,

John Harper AE5X
Outdoor QRP: http://www.qsl.net/ae5x

4269. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 20:39:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A3A816D.28143D66@uci.edu>
Source record: 174616
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

K0HB wrote:
> Some of my money (and hopes) flew with that bird too, but nobody need
> be publicly called a "jerk" for simply commenting on the obvious.

> For further detail on "a little respect", go to
> http://www.amishrakefight.org/gfy

That's lovely. And much more congenial than calling someone a "jerk".

4270. Re: am tower question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:01:26 UTC
From: richardharrison@webtv.net
Message-ID: <22684-3A3A86A6-17@storefull-118.iap.bryant.webtv.net>
Source record: 174617

Gray Frierson Haertig wrote:
" Modern AM construction generally tries to avoid air dielectric variables (though I have quite a collection taken out of old installations when rebuilt) because of their tendency to change values when the spiders, wasps, and mice move in."

That is a commendable change. I`ve cleaned up after the beasties in broadcast networks. My AM experience was with roller inductors and air variable capacitors in the medium wave band. In the short wave bands, the equipment was full of vacuum variables. I attributed that to the fewer micromikes required and the 100 KW power outputs. Reduced maintenance is a nice result that should be considered more often.

Best regards, Richard Harrison, KB5WZI

4271. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:09:51 UTC
From: n2ey@aol.com
Message-ID: <91e1ao$j8e$1@nnrp1.deja.com>
Source record: 174618
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <91dmop$9d6$1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:

> For further detail on "a little respect", go to
> http://www.amishrakefight.org/gfy
>
> 73, Hans, K0HB
>
HAW! Hadn't seen that website before, Hans! Those Amish can really do a
job with rakes!

--

Maybe it's a malfunctioning AE-35 unit......

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

4272. Cushcraft R7 base insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:19:38 UTC
From: user
Message-ID: <8g2l3t0vjhdi2n3vl7h65bsfvpfgimvcqu@4ax.com>
Source record: 174419

I have noticed the fiberglass base insulator in my R7 is starting to "fuzz", apparently from UV exposure. Have Krylon plastikote, clear lacquer and Scotch Electrical coating. Any idea which will be best to use on it? Thanks!
--
Eddie Seymour,WB4MLE
Delete the capital letters:
wb4mleAT@mindspringDOT.com

4273. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:43:21 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <91e39oktq1@nnrp1.deja.com>
Source record: 174420
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3A3A816D.28143D66@uci.edu>,
Jim Kelley <jwkelley@uci.edu> wrote:

>
> That's lovely. And much more congenial than calling someone a "jerk".
>

Everyone needs a little romance in their life.

73, Hans, K0HB

--
A rock pile ceases to be a rock pile the moment a single man
contemplates it, bearing within him the image of a cathedral.
-- Antoine de Saint-Exupery

Disclaimer: All I know I learned from reading Usenet.

Sent via Deja.com
http://www.deja.com/

4274. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:45:16 UTC
From: K0HB <k0hb@my-deja.com>
Message-ID: <91e3da$l0a$1@nnrp1.deja.com>
Source record: 174421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <91e1ao$j8e$1@nnrp1.deja.com>,
n2ey@aol.com wrote:
>
> Maybe it's a malfunctioning AE-35 unit......
>

(In a thin voice) "Mary had a little lamb....."

73, Hans, K0HB

--
A rock pile ceases to be a rock pile the moment a single man
contemplates it, bearing within him the image of a cathedral.
-- Antoine de Saint-Exupery

Disclaimer: All I know I learned from reading Usenet.

Sent via Deja.com
http://www.deja.com/

4275. 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 21:52:01 UTC
From: Fred Ruckser <nospam@somewhere.com>
Message-ID: <91e3p6$p73$1@mail.pl.unisys.com>
Source record: 174422

At this point I am using a 4BTV with a 6 ' grounding rod driven into the ground. The performance is so, so. I am thinking of adding two radials for each band, can I use the radials together with the rod or should I disconnect the rod?

Thanks for any replies
73
Fred wb6iiq

4276. WANT SGC-230 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:10:48 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <IFw_5.1616$ju6.247693@dfiatx1-snr1.gtei.net>
Source record: 174423

Will pay up to $250 for mint SGC-230 - no junk, modifieds or burnouts considered!

Reply via Email - thanks...

--
Gary - KJ6Q
==========
Democrat voters claiming stupidity in this election
are no real surprise - they had already PROVED THAT
in the PREVIOUS 2 elections...

4277. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:11:56 UTC
From: Bill Rubin <billrubin@prodigy.net>
Message-ID: <3A3A972C.4CD214F0@prodigy.net>
Source record: 174424
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Orac wrote:
>
> In article <3A3A200C.DC6D60BD@home.com>, James Knott
> <the.lights.are.on.but.no.one.is@home.com> wrote:
>
> >"Don K." wrote:
> >>
> >> Bill Rubin wrote:
>
> >> > What I find amusing is that many of the people who protested this likely
> >> > complain to their cellular company about poor coverage,
> >>
> >> Improbable. Did you just dreamed that up or what?
> >
> >Actually, it's a common problem. A while ago, I read an article about cell
> >phones, and someone from one of the Canadian cell companies said there are
> >people who want to use cell phones, so long as the base antenna is not near
> >them. Something about property values. ;-)
>
> In New Jersey, I've suspected that this is the reason cell phone signals are so
> terribly weak around Princeton, a town chock full of very rich people. The last
> couple of times I was in Princeton on the University campus, the phone was all
> but unusable.

Exactly. I live in Westchester County, NY, and yes there are
also a number of very rich people here (although I am not sure
that this is the case in the example I cited). Rich people who
hire lawyers for recreation when they see something being done
in a nearby town that they do not like. It's called the NIMBY
syndrome -- Not In My BackYard. Currently, they are fighting a
proposed IKEA. The people in the immediate area where they want
to build it are complaining, but I think it's mainly the
neighboring towns who claim that they will get more traffic but
not the tax benefit from it.

I can tell others stories, like everyone who sued to prevent the
airport from being expanded, including the neighboring (and very
affluent) town of Greenwich, CT, when it turns out that a large
percentage of the airport users (especially the corporate jet
users) are from, you guessed it, Greenwich.

Bill

4278. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:17:47 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <816l3t8dqasm01o0rjcp4qi356c1oq5a6q@4ax.com>
Source record: 174425

On Fri, 15 Dec 2000 07:08:03 -0600, Mark Keith <nm5k@wt.net> wrote:

>But I string low dipoles up that
>aren't ten ft off the ground and I'm below grade 80 ft, and still do
>fine on 80/40. Even the higher hf bands will work ok usually. Ten meters
>would see a big cut if working local or dx though.

Similar experience here. When mobiling, 80 and 40 get out equally well whether I'm out in the open or down in a valley. On 20 I begin to notice the valley effect; on 15 and 10 it is quite pronounced. Above that it's almost line of sight.

w7ti

4279. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:29:10 UTC
From: Dan DeClerck <dan.declerck@motorola.com>
Message-ID: <91e5mf$ceo4@nntp.cig.mot.com>
Source record: 174426
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Don K." <dk@home.com> wrote in message news:3A398BC0.781F635C@home.com...
> Bill Rubin wrote:
> > What I find amusing is that many of the people who protested
> > this likely complain to their cellular company about poor
> > coverage,
>
> Improbable.
> Did you just dreamed that up or what?

no.. it happens in chicago and Los Angeles all the time.

when it comes to towers, it's NIMBY..
When it comes to coverage, it's the cellular providers fault.

-Dan

4280. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:46:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3A9F57.3204@wt.net>
Source record: 174427

Fred Ruckser wrote:
>
> At this point I am using a 4BTV with a 6 ' grounding rod driven into the
> ground. The performance is so, so. I am thinking of adding two radials for
> each band, can I use the radials together with the rod or should I
> disconnect the rod?
>
> Thanks for any replies
> 73
> Fred wb6iiq

Keep the rod. Tie the radials to it . MK
--
http://web.wt.net/~nm5k

4281. Re: KLM 2M-14C Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 22:58:14 UTC
From: johnl84238@aol.com
Message-ID: <20001215175814.02280.00004540@ng-fr1.aol.com>
Source record: 174428

Thanks..I will give that a try...I didn't even think about Home Depot as a source for the rod.....I think all the lengths are less than 36", so it should be OK....and I have the detailed drawings with the dimensions.
73,
John

4282. Re: CQ baby one more time!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 23:25:43 UTC
From: "Al, N2NKB"
Message-ID: <XLx_5.221$JH3.11944@bgtnsc07-news.ops.worldnet.att.net>
Source record: 174429
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Rick had better luck than I did.
"FILE NOT FOUND ERROR: Could not find the URL you are searching for...
Please verify the URL and try again."
Al

Rick Jones wrote in message <91dn0b$9s1$1@spock.dis.cccd.edu>...
>Jason,
>
>My 8 year old daughter will love it! When can we expect the CD out? HI HI
>
>Rick, KG6RJ
>
><jason_hsu@my-deja.com> wrote in message news:91c5l9$2f5$1@nnrp1.deja.com...
>> I hope you are amused by my ham radio parody of the Britney Spears
>> song "Baby One More Time":
>> http://www.bigfoot.com/~jason_hsu/humor-ham_radio-
>> cq_baby_one_more_time.html
>>
>> --
>> Jason Hsu, AG4DG
>> jason_hsu@@@@@@planetmail.com
>> http://www.bigfoot.com/~jason_hsu/ham_radio.html
>>
>>
>> Sent via Deja.com
>> http://www.deja.com/
>
>

4283. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-15 23:53:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A3AAF01.FAC307FD@eznec.com>
Source record: 174430
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

I've seen these Russian standards quoted before. And I've always wondered if they were actually enforced, or just published for propaganda purposes ("Look what good care we take of our people!"). Based on the record of Soviet environmental disasters, I strongly suspect the latter. Do you really suppose that Russian microwave ovens, for example, are much better shielded and sealed than ones sold in the U.S.? Or that the level of exposure of people living near the cold war jamming transmitters was really below these levels?

Roy Lewallen, W7EL

"Don K." wrote:

> I remember reading the Russian standards back in the 70's and 80's
> in IEEE Spectrum magazine when I was involved with microwave
> transmitter design.
>
> I found a web reference to the Russian standard in the IEEE Antennas
> and Propagation magazine at
>
> http://www.eecs.uic.edu/eecspeople/lin_ieee4.htm
> It says:
> Indeed, it has been known for years that the RF guidelines promulgated
> for limiting human exposure vary from country to country. For example,
> according to the Sanitary Regulations and Standards 2.2.4/2.1.8.055-96,
> "Radiofrequency Electromagnetic Radiation under Occupational and Living
> Conditions," the permissible exposure level for the general population
> in the Russian Federation is 10 ï¿½W/cm2 or 0.1 W/m2 in the 300 MHz to
> 300 GHz frequency range [3]. The American National Standards Institute
> (ANSI) guidelines for the same frequency range are 1 to 10 mW/cm2 or
> 10 to 100 W/m2, depending on frequency [4].
>
> Note that 10 uW/cm2 is .01 milliWatt/sq cm.
>
> Don

4284. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 00:02:16 UTC
From: WE0H <mikereid1@qwest.net>
Message-ID: <_gy_5.1598$yF.397335@news.uswest.net>
Source record: 174431

The more radials, the better the efficiency. Mike> WE0H.

4285. Re: Homebuild Isotron 160m Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 00:08:32 UTC
From: n8blk@aol.com
Message-ID: <20001215190832.21145.00008105@nso-ch.aol.com>
Source record: 174432

In article <3A395D5E.C05049AE@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>You're right, Dick. The 160m Isotron has a little less bandwidth than
>my Termaline.

It also sadly probably has at least 3dB more output than your Termaline. Of course, your Bird "antenna" does always offer a good match.
-art clemons-

4286. Re: WTB: 1.2Ghz vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 00:43:08 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <3A3ABA9C.1D0C2EB1@qadas.com>
Source record: 174433

Very interesting antenna idea. Made me wonder if a similar antenna for 70 CM or
2M might be constructed out of metal downspouting.

W0LMD

Jim Pennino wrote:

> Ed Mellnik <ema@teleport.com> wrote:
> > Our ATV club needs a 1.2 ghz colineaer or heavy duty commercial antenna with
> > at least 9db gain.
> > Ed
>
> This post sounds familiar...
>
> At http://reality.sgi.com/192.82.208.21/byee_engr/slot_ant.html you will
> find instructions on how to build a slot antenna out of waveguide.
>
> From the page: "With a 16-slot total, the antenna can have 10-12 dbi gain."
>
> Jim Pennino

4287. Re: CQ baby one more time!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 01:07:43 UTC
From: tom <tsokol@adelphia.net>
Message-ID: <zfz_5.553$uz1.38947@news1.news.adelphia.net>
Source record: 174435
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I did some searching and found it on this URL:

http://www3.50megs.com/jhsu/humor-ham_radio-cq_baby_one_more_time.html

Tom
N2LDE

"Al, N2NKB" <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote in message
news:XLx_5.221$JH3.11944@bgtnsc07-news.ops.worldnet.att.net...
> Rick had better luck than I did.
> "FILE NOT FOUND ERROR: Could not find the URL you are searching for...
> Please verify the URL and try again."
> Al
>
> Rick Jones wrote in message <91dn0b$9s1$1@spock.dis.cccd.edu>...
> >Jason,
> >
> >My 8 year old daughter will love it! When can we expect the CD out? HI HI
> >
> >Rick, KG6RJ
> >
> ><jason_hsu@my-deja.com> wrote in message
news:91c5l9$2f5$1@nnrp1.deja.com...
> >> I hope you are amused by my ham radio parody of the Britney Spears
> >> song "Baby One More Time":
> >> http://www.bigfoot.com/~jason_hsu/humor-ham_radio-
> >> cq_baby_one_more_time.html
> >>
> >> --
> >> Jason Hsu, AG4DG
> >> jason_hsu@@@@@@planetmail.com
> >> http://www.bigfoot.com/~jason_hsu/ham_radio.html
> >>
> >>
> >> Sent via Deja.com
> >> http://www.deja.com/
> >
> >
>
>

4288. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 01:40:25 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <huhl3t8r568fg35jrmv3gua03kapk6vj74@4ax.com>
Source record: 174436

On 14 Dec 2000 22:06:06 GMT, fractenna@aol.com (Fractenna) wrote:

>Hi Jim!
>
>Phile here--
>
>Nice talkin at you--and go screw urself:-)
hit a nerve did he?

4289. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 02:58:29 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <uaml3tclaknrvpdmk7l54lk463ljkp2obv@4ax.com>
Source record: 174437

On Fri, 15 Dec 2000 13:52:01 -0800, "Fred Ruckser" <nospam@somewhere.com> wrote:

>At this point I am using a 4BTV with a 6 ' grounding rod driven into the
>ground. The performance is so, so. I am thinking of adding two radials for
>each band, can I use the radials together with the rod or should I
>disconnect the rod?

Disconnect the rod. You want as little as possible of your RF energy flowing through dirt. If at all possible, move the whole thing up as high as you can. With only a couple of radials, you will still have a large portion of the return current flowing through the earth and the earth is very lossy for RF. Salt water would be ok, but plain dirt just gets warmed up.

w7ti

4290. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 03:10:52 UTC
From: fff@yeahoo.com
Message-ID: <3a3add05.6383621@news.jersey.net>
Source record: 174438
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Give me a break. Why don't you go back to posting pictures of gas
station price signs?

On Thu, 14 Dec 2000 03:24:27 -0500, "Ken M." <poboxdc@ix.netcom.com>
wrote:
>
>And many of those officers who laid a radar gun in their laps
>have developed cancer of the testicles.
>
>
>--
>(ken)
>

4291. Re: Mr. O'Phile on Illegal Wire tapping

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 03:26:15 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91encnsqg0@208.207.71.169>
Source record: 174439

Jim Kelley wrote:
>
> Fractenna wrote:
> >
> > Hi Jim!
> >
> > Phile here--
>
> Phile? What kind of a phile?
>
> > Nice talkin at you--and go screw urself:-)
>
> A highly crafted and well reasoned response. But, although persuasive,
> I must respectfully decline. :-)
>
> ac6xg
>

Jim you maybe should suggest that he go unscrew himself....

4292. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 03:29:44 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91enj8sqg1@208.207.71.169>
Source record: 174440

WE0H wrote:
>
> The more radials, the better the efficiency. Mike> WE0H.

It isn't a linear function. Beyond a point, adding more does very
little or no good.

Dick

4293. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:07:13 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <91eppjcck1@bob.news.rcn.net>
Source record: 174442

"Bill Turner" <w7ti@jps.net> wrote in message
news:uaml3tclaknrvpdmk7l54lk463ljkp2obv@4ax.com...
> On Fri, 15 Dec 2000 13:52:01 -0800, "Fred Ruckser" <nospam@somewhere.com>
wrote:
>
> >At this point I am using a 4BTV with a 6 ' grounding rod driven into the
> >ground. The performance is so, so. I am thinking of adding two radials
for
> >each band, can I use the radials together with the rod or should I
> >disconnect the rod?
> ____
>
> Disconnect the rod. You want as little as possible of your RF energy
flowing
> through dirt. If at all possible, move the whole thing up as high as you
can.
> With only a couple of radials, you will still have a large portion of the
return
> current flowing through the earth and the earth is very lossy for RF.
Salt
> water would be ok, but plain dirt just gets warmed up.
>
> w7ti

If my thinking is wrong on this, someone please correct me.

I'd leave the ground rod, just for lightning protection.

If the gentleman has adequate radials, on the ground or elevated. I would
think there should be minimal RF current through the ground rod.

Can a ground rod "steal" RF current from a vertical with an adequate radial
system? If there is RF current flowing into the rod, I would assume it is
contributing something to the antenna efficency, despite the inadequate
number of radials.

Cheers

Peter

4294. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:08:46 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3A3AEACE.F4DFEA88@grove.iup.edu>
Source record: 174441

With a little modification, you could improve the performance on the other bands. The top section uses standard 3/8X24 threads. You could make your improvments there, by swapping in something with more (electrical) length.

Scott.

Dennis wrote:
>
> Will it work?

4295. Re: Apartment Balcony VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:22:58 UTC
From: kc8fwdwv@aol.com
Message-ID: <20001215232258.20803.00004666@ng-cp1.aol.com>
Source record: 174443

cushcraft makes a 3 element 2 meter beam great for apartments later Mike

4296. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:46:49 UTC
From: "Ken M." <poboxdc@ix.netcom.com>
Message-ID: <3A3AF3B8.F2407A80@ix.netcom.com>
Source record: 174445
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

fff@yeahoo.com wrote:
>
> Give me a break. Why don't you go back to posting pictures of gas
> station price signs?

The prices went down!

Before you sign off in a huff, would you be willing to lay an
active cell phone near your testicles (while you sleep) for
eight hours a night -- for one month?

If your answer is NO then shut the hell up!

--
(ken)

IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
http://www.zyworld.com/maryland/amazing.JPG

To respond to this place (-) between x and d.

Because e-mail can be altered electronically,
the integrity of this communication cannot be guaranteed.

4297. Re: CQ baby one more time!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:47:53 UTC
From: Dan <n7slc@diespamxmission.com>
Message-ID: <91es19egu1@news.xmission.com>
Source record: 174444
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

That is funny...

Dan
N7SLC

--
Please remove "diespam" from email address to reply.
Below is an address for the spambots...
spamrecycle@chooseyourmail.com
<jason_hsu@my-deja.com> wrote in message news:91c5l9$2f5$1@nnrp1.deja.com...
> I hope you are amused by my ham radio parody of the Britney Spears
> song "Baby One More Time":
> http://www.bigfoot.com/~jason_hsu/humor-ham_radio-
> cq_baby_one_more_time.html
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/ham_radio.html
>
>
> Sent via Deja.com
> http://www.deja.com/

4298. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 04:53:42 UTC
From: Bill Rubin <billrubin@prodigy.net>
Message-ID: <3A3AF556.3FB03BEB@prodigy.net>
Source record: 174446
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"Don K." wrote:
>
> Bill Rubin wrote:
> >
> > "Don K." wrote:
> > >
> > > Bill Rubin wrote:
> > > > What I find amusing is that many of the people who protested
> > > > this likely complain to their cellular company about poor
> > > > coverage,
> > > >
> > > Improbable.
> > > Did you just dreamed that up or what?
> > >
> > > Don
> > >
> > Up where I am (suburban NYC), all companies have spots where
> > they have poor coverage because they have trouble getting
> > approval to put up more towers. I'm sure that people complain
> > about this all the time, and I don't think it's unreasonable to
> > think that some of them are the same ones protesting this new
> > tower, which would improve their signal.
> >
> > Bill
>
> You've invented a scenario intended to discredit those who protest
> the site. IMO it's unlikely anyone who actually complained to the
> cellular company about poor coverage would also protest a new cell site.
>
> Not everyone benefits from cell phones. People have a right to try
> to limit their exposure to unreasonable or unnecessary levels of
> radiation. Safety standards change. What is considered safe today
> might be considered unsafe tomorrow. Ask asbestos workers.

Fine, so lets say that the high school students who helped
organize the protect against the antenna have their own cell
phones and put them up against their heads every day. Have you
seen how many high school students have cell phones these days?

Bill

4299. European Version of TS 570 with better Filters ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 05:10:46 UTC
From: Wolfgang Schliess <schliess@gmx.de>
Message-ID: <t3lth8mr4jk51f@corp.supernews.com>
Source record: 174447

Hi !
i heard the european version of some Kenwood transceivers (z.B. TS-570SG)
have better filters as the american versions, well the european signal is
(in europa) stronger and so. Does know anyone the truth ?

cu
Wolf

4300. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 05:13:48 UTC
From: Jeff Wilhelm <jwil7090@postoffice.uri.edu>
Message-ID: <91etmdtot1@clamcake.uri.edu>
Source record: 174448
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Is that how you keep warm at night? :)

"Ken M." <poboxdc@ix.netcom.com> wrote in message
news:3A3AF3B8.F2407A80@ix.netcom.com...
> fff@yeahoo.com wrote:
> >
> > Give me a break. Why don't you go back to posting pictures of gas
> > station price signs?
>
> The prices went down!
>
> Before you sign off in a huff, would you be willing to lay an
> active cell phone near your testicles (while you sleep) for
> eight hours a night -- for one month?
>
> If your answer is NO then shut the hell up!
>
>
> --
> (ken)
>
> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
> http://www.zyworld.com/maryland/amazing.JPG
> --
>
> To respond to this place (-) between x and d.
>
>
> Because e-mail can be altered electronically,
> the integrity of this communication cannot be guaranteed.

4301. Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 05:53:46 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3A3B036A.1AF6A829@grove.iup.edu>
Source record: 174449

From what I understand, the characteristic impedance of coax is determined by the distance of the inner conductor to the outer conductor. So, what is the impedance of the PL-259 and the "Barrel" connector (whatever the number is on that thing)? Are they suppose to have a characteristic impedance of 50 ohms? Something to ponder at 12:52 am.

Scott.

4302. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 06:25:50 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3B0AEE.F43FC12@oio.net>
Source record: 174450

John,
There is no single antenna that will be the 'best' for
DX'ing on 80 meters. By the very nature of propagation,
at times, a vertical will perform 'better' than some type
of horizontal antenna, and vis-a-versa. On the average,
the old saying about having lots of metal, high in the air,
is still true...
'Doc

4303. An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 06:32:26 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <91f29snpt1@iac5.navix.net>
Source record: 174451

```
Here is some interesting theory from the CB forum.
--------------------------------------------------------------------------
-----
My antenna is in an old oak tree, if I were to put it in a pine tree I think
the pine sap would create a sort of capacitance with the ground and suck off
some of the signal.
--------------------------------------------------------------------------
------
```

4304. 2 Meter big weel antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 06:48:40 UTC
From: pierreginies@aol.com
Message-ID: <20001216014840.08780.00005199@ng-fz1.aol.com>
Source record: 174452

I am looking for 2 meter big weel (antenne trefle!) drawing
Thanks and best wishes for Chrismas and new year

Is this antenna suitable on 70 cm

Pierre
F1CWG
pierre.ginies@infonie.com

4305. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 07:10:41 UTC
From: R E Heath <re.heath@sympatico.ca>
Message-ID: <3A3B152A.78B19990@sympatico.ca>
Source record: 174453

Scott McClements wrote:
>
> From what I understand, the characteristic impedance of coax is
> determined by the distance of the inner conductor to the outer
> conductor. So, what is the impedance of the PL-259 and the "Barrel"
> connector (whatever the number is on that thing)? Are they suppose to
> have a characteristic impedance of 50 ohms? Something to ponder at 12:52
> am.
>
> Scott.

The PL-259 and other connectors of the "UHF" series are non-constant impedance connectors. The resulting mismatch is of negligible significance at the lower HF frequencies and they are even usable in many circumstances up to about 150 MHz. The manufacturers use them for the simplest reason -- they are CHEAP! I replace "UHF" connectors whenever conveniently possible with N, TNC or BNC connectors and always buy equipment with N connectors if there is the choice.

Bob, W8BZ, VA3BZ

4306. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 07:50:45 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91f6sl$pe5$0@208.207.71.137>
Source record: 174454

R E Heath wrote:
>
> Scott McClements wrote:
> >
> > From what I understand, the characteristic impedance of coax is
> > determined by the distance of the inner conductor to the outer
> > conductor. So, what is the impedance of the PL-259 and the "Barrel"
> > connector (whatever the number is on that thing)? Are they suppose to
> > have a characteristic impedance of 50 ohms? Something to ponder at 12:52
> > am.
> >
> > Scott.
>
> The PL-259 and other connectors of the "UHF" series are non-constant
> impedance connectors. The resulting mismatch is of negligible
> significance at the lower HF frequencies and they are even usable in
> many circumstances up to about 150 MHz. The manufacturers use them for
> the simplest reason -- they are CHEAP! I replace "UHF" connectors
> whenever conveniently possible with N, TNC or BNC connectors and always
> buy equipment with N connectors if there is the choice.
>

I spent a number of years working with UHF gear in the 450-470 mhz
region that all used UHF/PL259-SO239 style connectors of good quality,
installed at the General Electric factory. Never had a hint of a problem
from it and all equipment operated at rated output power an receiver
sensitivity. The impedence bump introduced by the connectors is
completely tolerable through 500mHz.

Dick

4307. Re: Goodbye AO-40, It was fun while it lasted.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 08:31:13 UTC
From: kd1on@arrl.net
Message-ID: <3a3c2085.154781561@news.gte.net>
Source record: 174456
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In <91e3da$l0a$1@nnrp1.deja.com>,
K0HB <k0hb@my-deja.com> wrote:

}In article <91e1ao$j8e$1@nnrp1.deja.com>,
} n2ey@aol.com wrote:
}>
}> Maybe it's a malfunctioning AE-35 unit......
}>
}
}(In a thin voice) "Mary had a little lamb....."

I think you mean "Daisy, Daisy, give me your answer, do . . "

4308. Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 09:32:41 UTC
From: Python <python@interia.pl>
Message-ID: <91fcs0$f81$1@slimek.man.lublin.pl>
Source record: 174457

Hello,
I'd like to built an simple antenna but have following sentence:

"Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
formed from # 10 copper wire "

Could you translate it for me into metric system?

73!
Tomek
sp8ncg

4309. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 09:40:29 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <pqooGhANizO6EwWm@ifwtech.plus.net>
Source record: 174524

Dick Carroll wrote:
>
>
>R E Heath wrote:
>>
>> Scott McClements wrote:
>> >
>> > From what I understand, the characteristic impedance of coax is
>> > determined by the distance of the inner conductor to the outer
>> > conductor. So, what is the impedance of the PL-259 and the "Barrel"
>> > connector (whatever the number is on that thing)? Are they suppose to
>> > have a characteristic impedance of 50 ohms? Something to ponder at 12:52
>> > am.
>> >
>> > Scott.
>>
>> The PL-259 and other connectors of the "UHF" series are non-constant
>> impedance connectors. The resulting mismatch is of negligible
>> significance at the lower HF frequencies and they are even usable in
>> many circumstances up to about 150 MHz. The manufacturers use them for
>> the simplest reason -- they are CHEAP! I replace "UHF" connectors
>> whenever conveniently possible with N, TNC or BNC connectors and always
>> buy equipment with N connectors if there is the choice.
>>
>
> I spent a number of years working with UHF gear in the 450-470 mhz
>region that all used UHF/PL259-SO239 style connectors of good quality,
>installed at the General Electric factory. Never had a hint of a problem
>from it and all equipment operated at rated output power an receiver
>sensitivity. The impedence bump introduced by the connectors is
>completely tolerable through 500mHz.

That's almost true, except for one word: "completely". It isn't quite
that clear-cut.

The impedance bump from a single 'UHF' connector is almost always
tolerable through 500MHz, except in special circumstances like test
equipment.

It becomes less tolerable if there are several of these connectors at
various places along a transmission line, causing reflections at a
variety of phase angles due to the lengths of the line segments.
Murphy's Law says that those small, "completely tolerable" reflections
are going to add rather than cancel. For example, you may find that the
SWR has crept up to around 2, which will start to activate the SWR

shutdown on some transmitters. This can be very difficult to trouble-shoot, because every line segment will test out OK. Since the only thing left untested is the antenna, the next thing is to climb the tower... only to discover there's nothing wrong up there either. Changing to constant impedance connectors such as N and BNC can be a complete cure.

Unfortunately N and BNC fall short in power handling at UHF. BNC drops out of the race because it will only accept small cables which get hot, soften and break down. N connectors are limited by the small center pin and the possibilities for misalignment. Above 1kW on 432MHz, they are right on the edge - if they're not absolutely perfect, you find out very quickly! On the other hand, 'UHF' connectors are reported to be good for many kW up to at least 50MHz.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4310. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 11:05:02 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3B4C5E.645B@wt.net>
Source record: 174461

Bill Turner wrote:
>
> On Fri, 15 Dec 2000 13:52:01 -0800, "Fred Ruckser" <nospam@somewhere.com> wrote:
>
> >At this point I am using a 4BTV with a 6 ' grounding rod driven into the
> >ground. The performance is so, so. I am thinking of adding two radials for
> >each band, can I use the radials together with the rod or should I
> >disconnect the rod?
> ----------
>
> Disconnect the rod. You want as little as possible of your RF energy flowing
> through dirt. If at all possible, move the whole thing up as high as you can.
> With only a couple of radials, you will still have a large portion of the return
> current flowing through the earth and the earth is very lossy for RF. Salt
> water would be ok, but plain dirt just gets warmed up.
>
> w7ti

Hummm, this was the idea behind me trying slightly elevated radials on my 160 inv-L. But I also kept a rod connection and also a few shorter radials layed on the ground. I tried them first on the ground, and then about 2 ft off the ground, which they still are at this time. I stayed connected the rod with both tries. I really couldn't tell much difference that I could notice so far. Maybe I should give it a try with all disconnected except the two elevated radials just to see what it does. I noticed a post where Tom mentioned that if the antenna is large/full size , then elevating the radials doesn't do too much, and so far my tries seem to support that, but I didn't try with the rod unhooked. I'll have to try that just for kicks. My thoughts so far was that it's best to have as much hooked up as possible, including a rod. And also like another poster, I like having the rod as a lightning return. I'll try a few tests this weekend if I can scrounge up a local to give me ground wave reports. I'm curious the difference. Right now, I have the two low elevated 1/4 wl radials, about 5 appx 1/8 wl radials on the ground, a rod, and tied into the mast ground system also which leads across the yard to the mast. The inv-l tree limb supported. My intitial thought was it would be better to add the rest of the ground to the radials, rather than use them alone...Time for a test I guess. MK
--
http://web.wt.net/~nm5k

4311. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 11:06:02 UTC
From: Korinna & Peter <Peter.Hovorka@t-online.de>
Message-ID: <91fial$mf7$04$1@news.t-online.com>
Source record: 174458

Hi Tomek,

1 " is about 2.54 cm
#10 wire using american standards is about 2.59 mm in diameter
using british standards it's about 3.40 mm in diameter
using 'imperial standard' it's about 3,25mm in diameter

Hope that helped,

73,
Peter

--
Korinna Imle & Peter Hovorka
ICQ #74200239
Peter: DG1GPQ
http://WWW.CYBERCATS.DE

4312. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 11:17:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3B4F54.5622@wt.net>
Source record: 174460

John Harper wrote:

>
> Thanks for any help/suggestions/ideas or donations of 80m Yagis!
> 73 and happy holidays,
>
> John Harper AE5X
> Outdoor QRP: http://www.qsl.net/ae5x

What time of year did you have the vertical up? It wasn't summer was it? I would think the 67 ft vertical would have done ok even with 3 radials. But that is just a bare min. I would think with more radials it could be pretty good. But also the idea of the phased array might do ok also. It would sure give you a boost in that direction." I've tried those on 40m and worked pretty well". But you will still have the fairly high angle of radiation of the single dipole. That won't change if the antenna is still at the same height. You might try both, the array and a replay of a vertical. Maybe with the decreasing noise on 80m, the vertical might fare better now. MK
--
http://web.wt.net/~nm5k

4313. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 11:38:17 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a3b542a_1@news.cybertours.com>
Source record: 174459

The Ground Rod will make very little difference in RF performance, Leave it.
and put out a minimum of 16 radials , they do not have to be cut
for each band as the ground will detune them anyway.. I would just put out
16 cut for 40m if i could and put down another 16 in between cut for 20m. I
did this when I had my 4Btv ground mounted worked pretty good. You'll most
likely have to retune the antenna some after you install the radials.
Good Luck,
DAVE KC1DI

"Peter Bertini" <commquart@erols.com> wrote in message
news:91eppjcck1@bob.news.rcn.net...
>
> "Bill Turner" <w7ti@jps.net> wrote in message
> news:uaml3tclaknrvpdmk7l54lk463ljkp2obv@4ax.com...
> > On Fri, 15 Dec 2000 13:52:01 -0800, "Fred Ruckser"
<nospam@somewhere.com>
> wrote:
> >
> > >At this point I am using a 4BTV with a 6 ' grounding rod driven into
the
> > >ground. The performance is so, so. I am thinking of adding two radials
> for
> > >each band, can I use the radials together with the rod or should I
> > >disconnect the rod?
> > ____
> >
> > Disconnect the rod. You want as little as possible of your RF energy
> flowing
> > through dirt. If at all possible, move the whole thing up as high as
you
> can.
> > With only a couple of radials, you will still have a large portion of
the
> return
> > current flowing through the earth and the earth is very lossy for RF.
> Salt
> > water would be ok, but plain dirt just gets warmed up.
> >
> > w7ti
>
> If my thinking is wrong on this, someone please correct me.
>
> I'd leave the ground rod, just for lightning protection.
>

> If the gentleman has adequate radials, on the ground or elevated. I
would
> think there should be minimal RF current through the ground rod.
>
> Can a ground rod "steal" RF current from a vertical with an adequate
radial
> system? If there is RF current flowing into the rod, I would assume it
is
> contributing something to the antenna efficency, despite the inadequate
> number of radials.
>
> Cheers
>
> Peter
>
>

4314. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 12:35:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91fnmb$1m2$1@neptunium.btinternet.com>
Source record: 174462

There's far too much importance attached to the 'high' and
'low' angle radiation from simple horizontal dipoles and
simple verticals. There's no sharp beam from either of them
at any elevation angle or direction.

In fact, at the general purpose elevation angle of 45
degrees, they radiate with equal strengths and there's
nothing to choose between them at angles, say, between 25
and 65 degrees, where most of the contacts lie.

And if anyone should mention a difference in 'gain' of N
decibels I shall scream and scream and scream.

Reg.

4315. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 12:47:30 UTC
From: Nick Dunklee <SCSIGuy@onemain.com>
Message-ID: <B660CD90.4B0A%SCSIGuy@onemain.com>
Source record: 174463
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

I thought everyone did that! Come to find out it's just me?? Oh no!

So that's what that "flatulation activated dialing" was for.

How about a practical way of getting testicular cancer....like riding a
microwave on high like a horsey! (And even then it'd just bake 'em.)

Nick

> From: "Jeff Wilhelm" <jwil7090@postoffice.uri.edu>
> Organization: University of Rhode Island
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular
> Date: Sat, 16 Dec 2000 00:13:48 -0500
> Subject: Re: Sprint PCS antennas on schools!
>
> Is that how you keep warm at night? :)
>
>
> "Ken M." <poboxdc@ix.netcom.com> wrote in message
> news:3A3AF3B8.F2407A80@ix.netcom.com...
>> fff@yeahoo.com wrote:
>>>
>>> Give me a break. Why don't you go back to posting pictures of gas
>>> station price signs?
>>
>> The prices went down!
>>
>> Before you sign off in a huff, would you be willing to lay an
>> active cell phone near your testicles (while you sleep) for
>> eight hours a night -- for one month?
>>
>> If your answer is NO then shut the hell up!
>>
>>
>> --
>> (ken)
>>
>> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
>> http://www.zyworld.com/maryland/amazing.JPG
>> --
>>
>> To respond to this place (-) between x and d.
>>

>>
>> Because e-mail can be altered electronically,
>> the integrity of this communication cannot be guaranteed.
>
>

4316. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:01:47 UTC
From: burke_br@freemark.com
Message-ID: <3a3b6781.3383191@news.surfree.com>
Source record: 174464
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Fri, 15 Dec 2000 17:11:56 -0500, Bill Rubin <billrubin@prodigy.net>
wrote:

>Orac wrote:
>>
>> In article <3A3A200C.DC6D60BD@home.com>, James Knott
>> <the.lights.are.on.but.no.one.is@home.com> wrote:
>>
>> >"Don K." wrote:
>> >>
>> >> Bill Rubin wrote:
>>
>> >> > What I find amusing is that many of the people who protested this likely
>> >> > complain to their cellular company about poor coverage,
>> >>
>> >> Improbable. Did you just dreamed that up or what?
>> >
>> >Actually, it's a common problem. A while ago, I read an article about cell
>> >phones, and someone from one of the Canadian cell companies said there are
>> >people who want to use cell phones, so long as the base antenna is not near
>> >them. Something about property values. ;-)

No doubt these are the same people who whine about needed more jails,
homeless shelters, etc., until you try to build one.
Regards,

Bruce

"An elected despotism is not the government we fought for." --Thomas
Jefferson

4317. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:03:53 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3B6839.E95D5F6D@home.com>
Source record: 174465
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

jvhupf@telocity.com wrote:
>
> On Fri, 15 Dec 2000 13:57:23 GMT, Orac <Orac@mac.com> wrote:
>
> >
> >In New Jersey, I've suspected that this is the reason cell phone signals are so
> >terribly weak around Princeton, a town chock full of very rich people. The last
> >couple of times I was in Princeton on the University campus, the phone was all
> >but unusable.
>
> A more likely reason would be that there are no available sites in the
> immediate Princeton area to locate a tower - the immediate area around
> Princeton Borough is densely populated and I doubt if anyone would
> appreciate having a cellular tower in either their front yard or their
> neighbors!
>
> We have one cell tower in this area that is disguised (very badly) as
> a long leaf southern pine tree! (The nekked cell tower would look
> better!)

There are some antennas, that are quite inconspicuous, when
mounted on top of a street light pole. With the equipment
buried at the base, these installations are all but
invisible.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4318. need info on r6000 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:06:46 UTC
From: Mickey Cash <n4mec@arrl.net>
Message-ID: <GNJ_5.8837$UN1.894976@newsread2.prod.itd.earthlink.net>
Source record: 174466
Cross-posted to: in.ham-radio,japan.ham-radio,japan.ham-radio.dxcc,rec.radio.amateur.antenna,relcom.radio.ham

i was looking to buy a r6000 crushcraft antenna, and wanted some opions
about the antenna.
no one in my local area has one. Anybody have a R6000 and want to share
there results.

Many thanks
N4MEC Mickey Cash
n4mec@arrl.net

4319. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:08:12 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3B6936.D9D31EDC@home.com>
Source record: 174467
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

"R.Wilhelm" wrote:
>
> On Thu, 14 Dec 2000, Steve Punter wrote:
>
> > Well, if you live 1,500 feet from the antennas, you are exposed to 10,000
> > time less energy that someone standing 15 feet from the same antennas, and
> > 2.5 million times less than someone standing 1 foot from the antennas. This
> > is based on the distance-squared law that all radiating signals abide by in
> > open space. Your risks from the site are so marginal that you probably stand
> > a higher risk of being hit by a crashing 747 with Stephen Hawkings onboard.
> > --
> > Steve Punter
> > http://www.arcx.com/sites
> >
> >
> >
> >
> What is the probability for life to emerge on a 12000 km diameter planet
> 150 million km away from a 1.4 million km star having a surface
> temperature of around 6000 K and being located about 30000 lightyears away
> from the galactic center ?
> What it the propability that a species generated in this process will
> develop nuclear bombs and fly to the moon?
> The probability is low, but it happened anyway.

That's just an urban legend. ;-)

Actually, you should read some Carl Sagan books on the
probabilities of various things. He's quite good at
debunking a lot of things, while showing that others may
indeed be possible or even likely.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4320. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:09:57 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <FQJ_5.1015$GQ1.56452@bgtnsc06-news.ops.worldnet.att.net>
Source record: 174468

How much pine sap does it take to get a 40db F to B ratio?

--
Mike Knowlton
Panama City Fl.

Fred Hambrecht <Fred@w4jle.com> wrote in message
news:91f29snpt1@iac5.navix.net...
> Here is some interesting theory from the CB forum.
> --
--
> -----
> My antenna is in an old oak tree, if I were to put it in a pine tree I
think
> the pine sap would create a sort of capacitance with the ground and suck
off
> some of the signal.
> --
--
> ------
>
>

4321. Radio Works Carolina Windham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:10:41 UTC
From: Dodge Johnson <djohnson@voicenet.com>
Message-ID: <djohnson-B9FBA4.08102316122000@netnews.voicenet.com>
Source record: 174519

Has anybody used Radio Works' Carolina Windham 80 or 80 special (1/4 wave, so shorter?

Would you share your experience?

Thanks,

Dodge N3HUO

4322. MFJ-914 Auto-tuner Range Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:14:04 UTC
From: Dodge Johnson <djohnson@voicenet.com>
Message-ID: <djohnson-E12380.08134616122000@netnews.voicenet.com>
Source record: 174520

Radio Works is offering an MFJ-914 Auto-tuner Range Extender

Here's what they say:

"Now you can use your automatic tuner with most of our antennas. Previously we recommended using only manual tuners. Now, with the MFJ-914, you can extend the range of auto-tuner by a factor of up to 10:1. There is just one multi-position switch on the "914" that you set when you change bands. That's all there is to it. It's a wonderful solution to a real problem with auto-tuners. Best of all the price is only $57.95.

Has anybody used one. Sounds like a terrific solution if it works well.

Thanks,

Dodge N3HUO

4323. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 13:41:09 UTC
From: dcoffey@mindspring.com
Message-ID: <3a3b70b4.835408317@news.mindspring.com>
Source record: 174521

And what would you call such an antenna? A Single-wire,
signal-sucking sap sucker?

"AMDX" <AMDX@worldnet.att.net> wrote:

>How much pine sap does it take to get a 40db F to B ratio?
>
>--
>Mike Knowlton
>Panama City Fl.
>
>
>Fred Hambrecht <Fred@w4jle.com> wrote in message
>news:91f29snpt1@iac5.navix.net...
>> Here is some interesting theory from the CB forum.
>> ---
>--
>> -----
>> My antenna is in an old oak tree, if I were to put it in a pine tree I
>think
>> the pine sap would create a sort of capacitance with the ground and suck
>off
>> some of the signal.
>> ---
>--
>> ------
>>
>>
>
>

4324. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 14:04:02 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A3B7646.88E414F2@GTE.net>
Source record: 174522

Scott McClements wrote:

> From what I understand, the characteristic impedance of coax is
> determined by the distance of the inner conductor to the outer
> conductor. So, what is the impedance of the PL-259 and the "Barrel"
> connector (whatever the number is on that thing)? Are they suppose to
> have a characteristic impedance of 50 ohms? Something to ponder at 12:52
> am.
>
> Scott.

Depends on the type of dielectric- and because the transition is not a
smooth one, it varies. Pretty much a don't care situation up through 70cM.

Dale W4OP

4325. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 14:08:34 UTC
From: fractenna@aol.com
Message-ID: <20001216090834.05821.00000437@ng-cr1.aol.com>
Source record: 174523

>
>On 14 Dec 2000 22:06:06 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>Hi Jim!
>>
>>Phile here--
>>
>>Nice talkin at you--and go screw urself:-)
>hit a nerve did he?
>

I can't speak for him and his reaction, but its pretty easy to see that some people like to pick on others like healing scabs.

Why don't you all wise up and NOTICE that Chuck and I have stopped posting personal matters?

If that doesn't tell you that we want the NG to be sane and keep personal stuff off here, then what does?

So, to be pithy: be quiet and act like adults. Not anonymous children.

Thanks,

NC

4326. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 14:14:38 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <smM_5.59423$R77.4573102@nnrp4.clara.net>
Source record: 174533
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Why don't you do it and prove that your theory is right?

Ken M. <poboxdc@ix.netcom.com> wrote in message
news:3A3AF3B8.F2407A80@ix.netcom.com...
> fff@yeahoo.com wrote:
> >
> > Give me a break. Why don't you go back to posting pictures of gas
> > station price signs?
>
> The prices went down!
>
> Before you sign off in a huff, would you be willing to lay an
> active cell phone near your testicles (while you sleep) for
> eight hours a night -- for one month?
>
> If your answer is NO then shut the hell up!
>
>
> --
> (ken)
>
> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
> http://www.zyworld.com/maryland/amazing.JPG
> --
>
> To respond to this place (-) between x and d.
>
>
> Because e-mail can be altered electronically,
> the integrity of this communication cannot be guaranteed.

4327. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 14:21:56 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3B7A84.6545@wt.net>
Source record: 174525

Reg Edwards wrote:
>
> There's far too much importance attached to the 'high' and
> 'low' angle radiation from simple horizontal dipoles and
> simple verticals. There's no sharp beam from either of them
> at any elevation angle or direction.
>
> In fact, at the general purpose elevation angle of 45
> degrees, they radiate with equal strengths and there's
> nothing to choose between them at angles, say, between 25
> and 65 degrees, where most of the contacts lie.
>
> And if anyone should mention a difference in 'gain' of N
> decibels I shall scream and scream and scream.
> ---
> Reg.

Sure, I agree overall, but he wants to work dx. I would think the
average dx to be under 20-25 degrees on 80m.
Just out of curiosity I ran a dipole and a vertical with 32 radials thru
the puter mill. The dipole at 50 ft on 80m had a gain of 1 dbi at appx
19-20 degrees. Less than that angle , lower than 1.0 dbi. The vertical
with 32 radials over average ground gave 1 dbi at 14 degrees. At the
19-20 degree angle that the dipole gave 1 dbi, the vertical almost gives
2.0 dbi nearly. With maximum at 24 degrees, compared to the dipoles max
at 90 degrees. But, you may ask, does it really matter? After all 1 db
isn't much at all, less than an s unit. But it seems to here. All of my
best low band dx antennas have been a vertical or some form of vertical.
And the difference seen in reports is not small. I'll spare you the db
gain stories, but 2+ s units difference is about the norm in the real
world on average real world s meters. Dunno, but I think the
polarization itself has as much to do with it as any gain at certain
angles. With all the refraction and scattering of the signal, that
shouldn't really matter, but the verticals seem to do better overall to
dx. Even over a high dipole many times. MK
--
http://web.wt.net/~nm5k

4328. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 14:56:55 UTC
From: Orac <Orac@mac.com>
Message-ID: <Orac-350E53.09571116122000@news.earthlink.net>
Source record: 174526
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <3A3B6839.E95D5F6D@home.com>, James Knott
<the.lights.are.on.but.no.one.is@home.com> wrote:

>jvhupf@telocity.com wrote:

>> We have one cell tower in this area that is disguised (very badly) as
>> a long leaf southern pine tree! (The nekked cell tower would look
>> better!)
>
>There are some antennas, that are quite inconspicuous, when
>mounted on top of a street light pole. With the equipment
>buried at the base, these installations are all but
>invisible.

Wouldn't these have a very limited range, because most streetlight poles
are not as tall as a typical cell tower?

--
Orac |"A statement of fact cannot be insolent."
|
|"If you cannot listen to the answers, why do you
| inconvenience me with questions?"

4329. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:10:28 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <xBL_5.641$N84.2643@newsfeed.slurp.net>
Source record: 174527

The purveyor of this theory hasn't imbibed quite enough of the cup of
Socrates.
--

73, Dave, K3BHJ

4330. Hy Gain HA-4000 Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:17:57 UTC
From: cvfrayedknot@cs.com
Message-ID: <20001216101757.23891.00004900@ng-fs1.news.cs.com>
Source record: 174528

I live on a boat on
the ICW down in SC 90% of the year and have a terrible time with efficient HF
antennas. I have been looking for a Hy-Gain HA-4000 tape measure antenna
for years but have never even come close. Being on the boat limits my ability
to really look. Would you have ANY suggestions or leads that might help me in
this endeavor? I currently use a Hustler mobil system on the bow railing and
have
had a plate welded on so that I can put a screwdriver on, but when I am
anchored
in small creeks it would be SO EASY to put up a tape measure for a more
effective
antenna. I would really appreciate any help you could provide.

Mark Hilliard, N2HHR, CV "Frayed Knot"
Normal email to: CVFrayedKnot@cs.com
Text ONLY email to: n2hhr@winlink.org
"The Secret World Of Mushrooms" Gallery
http://www.orneveien.org/n2hhr/

4331. Re: MFJ-914 Auto-tuner Range Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:23:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91g1e7$i6g$1@neptunium.btinternet.com>
Source record: 174529

Smashing ! Indispensible ! Been using 'em for years !

All you need is a 300 pF capacitor, a selection of used
toilet roll tubes, some enamelled 18g wire, half-dozen
crocodile clips and an empty size 10 shoe box to hide the
bits in when not in use.

==========
Dodge Johnson wrote
> Radio Works is offering an MFJ-914 Auto-tuner Range
Extender
>
> Here's what they say:
>
> "Now you can use your automatic tuner with most of our
antennas.
> Previously we recommended using only manual tuners. Now,
with the
> MFJ-914, you can extend the range of auto-tuner by a
factor of up to
> 10:1. There is just one multi-position switch on the "914"
that you set
> when you change bands. That's all there is to it.
It's a wonderful
> solution to a real problem with auto-tuners. Best of all
the price is
> only $57.95.
>
> Has anybody used one. Sounds like a terrific solution if
it works well.
>
> Thanks,
>
> Dodge N3HUO

4332. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:35:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91gg50$21v$1@uranium.btinternet.com>
Source record: 174559

Eureka ! - throw up an inverted-L or a sloper. Get the
best of both worlds.

Reg

4333. Re: MFJ-914 Auto-tuner Range Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:42:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3B8D4E.F0660FB4@IEEE.org>
Source record: 174530

Reg Edwards wrote:
> All you need is a 300 pF capacitor, a selection of used
> toilet roll tubes, some enamelled 18g wire, half-dozen
> crocodile clips and an empty size 10 shoe box to hide the
> bits in when not in use.

Since toilet roll tubes are sometimes hard to come by in
Texas, will corn cobs do? :-)

Actually Reg, all one needs is five lengths of ladder-line.
Lengths of 2%, 4%, 8%, 16%, and 32% of a wavelength will
allow one to vary the feedline by 0-0.5WL thus making
one's autotuner happy and often not requiring an antenna
tuner at all.
--
http://www.mindspring.com/~w6rca

4334. Re: Hy Gain HA-4000 Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:52:17 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3B8FB1.D9BF9631@IEEE.org>
Source record: 174534

Mark Hilliard wrote:
> ... when I am anchored
> in small creeks it would be SO EASY to put up a tape measure for a more
> effective antenna. I would really appreciate any help you could provide.

The SGC-230 autotuner is designed for such a purpose. You could have
a 20ft whip which will work pretty well on 40m-10m. When you want a
better signal on 75m, attach a longer wire and throw it into a tree.
--
http://www.mindspring.com/~w6rca

4335. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:55:05 UTC
From: fff@yeahoo.com
Message-ID: <3a3b9017.8965687@news.jersey.net>
Source record: 174531
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Before I shut the hell up, why don't you provide some evidence for
your stupid, lame-ass remark about radar guns causing testicular
cancer?

On Fri, 15 Dec 2000 23:46:49 -0500, "Ken M." <poboxdc@ix.netcom.com>
wrote:

>fff@yeahoo.com wrote:
>>
>> Give me a break. Why don't you go back to posting pictures of gas
>> station price signs?
>
>The prices went down!
>
>Before you sign off in a huff, would you be willing to lay an
>active cell phone near your testicles (while you sleep) for
>eight hours a night -- for one month?
>
>If your answer is NO then shut the hell up!
>
>
>--
>(ken)
>
>IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
>http://www.zyworld.com/maryland/amazing.JPG
>--
>
>To respond to this place (-) between x and d.
>
>
> Because e-mail can be altered electronically,
> the integrity of this communication cannot be guaranteed.

4336. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 15:59:19 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a3b87a2.7765322@news.azstarnet.com>
Source record: 174532

On Sat, 16 Dec 2000 09:40:29 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.com>
wrote:

>>
>>R E Heath wrote:
[snip]

>> I spent a number of years working with UHF gear in the 450-470 mhz
>>region that all used UHF/PL259-SO239 style connectors of good quality,
>>installed at the General Electric factory. Never had a hint of a problem
>>from it and all equipment operated at rated output power an receiver
>>sensitivity. The impedence bump introduced by the connectors is
>>completely tolerable through 500mHz.
>
>That's almost true, except for one word: "completely". It isn't quite
>that clear-cut.
>
>The impedance bump from a single 'UHF' connector is almost always
>tolerable through 500MHz, except in special circumstances like test
>equipment.
>
>It becomes less tolerable if there are several of these connectors at
>various places along a transmission line, causing reflections at a
>variety of phase angles due to the lengths of the line segments.
>Murphy's Law says that those small, "completely tolerable" reflections
>are going to add rather than cancel. For example, you may find that the
>SWR has crept up to around 2, which will start to activate the SWR
>shutdown on some transmitters. This can be very difficult to trouble-
>shoot, because every line segment will test out OK. Since the only thing
>left untested is the antenna, the next thing is to climb the tower...
>only to discover there's nothing wrong up there either. Changing to
>constant impedance connectors such as N and BNC can be a complete cure.

Ian brings up a good point. Microwave designers are especially worried about
this because the phase angle is rotating so quickly that even just two
reflections separated by a short distance can cause wild VSWR ripple as the
frequency is swept. Add a couple of more reflections by inserting another
device in a cascade and you quickly have a mess.

The worst case VSWR (all reflections in phase) is the product of the individual
VSWRs. So even at VHF, there can be a problem, if for instance, you have a
system with an SWR bridge or power meter in the line, followed by a filter,
followed by a change-over relay.....

If each of these has a "UHF" connector or two with a 1.2:1 VSWR or worse, and
the cable lengths happen to be "wrong", you may have a problem.

>
>Unfortunately N and BNC fall short in power handling at UHF. BNC drops
>out of the race because it will only accept small cables which get hot,
>soften and break down. N connectors are limited by the small center pin
>and the possibilities for misalignment. Above 1kW on 432MHz, they are
>right on the edge - if they're not absolutely perfect, you find out very
>quickly! On the other hand, 'UHF' connectors are reported to be good for
>many kW up to at least 50MHz.

The key is proper alignment and pin depth setting. I once tested a couple of dozen cables for power handling capability at 10 GHz. These were flexible cables using SMA connectors and were for a space application. The requirements were 100W input with a 3:1 VSWR load for one hour at an ambient temperature of 90 deg. C. All of the cables survived without degradation.

What was remarkable was that to achieve the 3:1 VSWR load I used a length of 0.141" semi-rigid coax, with an SMA connector on one end and a short on the other. The majority of the length was coiled up and placed into a can of water outside the temperature chamber for cooling. The SMA connecter on this cable survived about thirty hours of abuse as did the isolator in the Watkins-Johnson 400 W TWTA.

Something to not be overlooked when using UHF connectors is the ghastly assembly problem. It is easy to melt the dielectric when soldering the braid, to the point that the power handling capability is reduced.

Wes N7WS

4337. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:06:26 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <1i4n3to8omklvu1q6r2fk4thed8pn73po9@4ax.com>
Source record: 174535

On Sat, 16 Dec 2000 05:05:02 -0600, Mark Keith <nm5k@wt.net> wrote:

>Hummm, this was the idea behind me trying slightly elevated radials on
>my 160 inv-L. But I also kept a rod connection and also a few shorter
>radials layed on the ground. I tried them first on the ground, and then
>about 2 ft off the ground, which they still are at this time.

At 160 meters, two feet off the ground is such a small fraction of a wavelength that it would make virtually no difference. May as well leave them directly on the ground. Please understand, when you have so many radials that the antenna does not "see" the actual earth, then leaving them on the ground is ok. It's only when you have just a few radials that elevating them up high would reduce ground losses. Something around ~120 radials qualifies as near-perfect.

w7ti

4338. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:14:23 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <vt4n3t89rh068locdjk8aguu62dvsl4lpf@4ax.com>
Source record: 174536

On Sat, 16 Dec 2000 07:10:41 GMT, R E Heath <re.heath@sympatico.ca> wrote:

>The PL-259 and other connectors of the "UHF" series are non-constant
>impedance connectors. The resulting mismatch is of negligible
>significance at the lower HF frequencies and they are even usable in
>many circumstances up to about 150 MHz. The manufacturers use them for
>the simplest reason -- they are CHEAP! I replace "UHF" connectors
>whenever conveniently possible with N, TNC or BNC connectors and always
>buy equipment with N connectors if there is the choice.

This subject comes up periodically and there are always differing opinions. The N, TNC and BNC connectors have their advantages, but they have one disadvantage too - they are mechanically weaker than the PL-259 type and have a lower power rating, especially at VHF. The N connector in particular has an annoying habit of having the center conductor pull out of it's mate at a most inopportune time. I understand there are versions available which do a better job of locking it in place, so be sure to get one of those if you think that's a concern.

PL-259s work fine for most applications and the low cost, simplicity and universality of them is good enough for me and lots of other folks.

w7ti

4339. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:16:04 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <695n3tggr7p36bodk74rvlel9mugsuija7@4ax.com>
Source record: 174537

On Sat, 16 Dec 2000 01:32:26 -0500, "Fred Hambrecht" <Fred@w4jle.com> wrote:

>Here is some interesting theory from the CB forum.
>--
>-----
>My antenna is in an old oak tree, if I were to put it in a pine tree I think
>the pine sap would create a sort of capacitance with the ground and suck off
>some of the signal.
_____

For CB'ers, this would be highly recommended. :-)

w7ti

4340. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:17:18 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A3B92B5.B336EFD7@home.com>
Source record: 174538
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Orac wrote:
> >jvhupf@telocity.com wrote:
> >There are some antennas, that are quite inconspicuous, when
> >mounted on top of a street light pole. With the equipment
> >buried at the base, these installations are all but
> >invisible.
>
> Wouldn't these have a very limited range, because most streetlight poles
> are not as tall as a typical cell tower?

The PCS cell range is very small anyway. In an urban area there are probably cases where they just need to fill in some gaps between tall buildings. In Baltimore, they have a small tower at each end of a tunnel with antennas pointing into the tunnel to get coverage inside.

Along Route 95 in Maryland there are some very tall light poles at some interchanges. They must be 150 feet tall! I've notice cell phone antennas there too. Offhand, I don't recall whether or not they're free-standing or on light poles.

Don

4341. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:25:44 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <0c5n3t89qjtfm3dedfeo0g792g69mfegd7@4ax.com>
Source record: 174539

On Sat, 16 Dec 2000 10:32:41 +0100, "Python" <python@interia.pl> wrote:

>Hello,
>I'd like to built an simple antenna but have following sentence:
>
>"Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
>formed from # 10 copper wire "
>
>Could you translate it for me into metric system?
>
>73!
>Tomek
>sp8ncg
>

Better yet, go to:

www.joshmadison.com/software

And download a free conversion program that will do it for you. This incredible little program converts practically anything - not just metric/English - and is totally free. Best bargain in town! Windows 32 bit only, sorry, (no Win 3.1).

w7ti

4342. Re: Hy Gain HA-4000 Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:29:26 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <526n3t4m14876lr9b5o10p7e76h24kmije@4ax.com>
Source record: 174540

On 16 Dec 2000 15:17:57 GMT, cvfrayedknot@cs.com (Mark Hilliard) wrote:

>I have been looking for a Hy-Gain HA-4000 tape measure antenna
>for years but have never even come close.

I did a search through rec.radio.swap and found nothing. Must be pretty rare indeed. Sorry.

w7ti

4343. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 16:37:34 UTC
From: CJ <cjr@visi.com>
Message-ID: <3A3B9A4E.1DC7FDC8@visi.com>
Source record: 174541

Korinna & Peter wrote:
>
> Hi Tomek,
>
> 1 " is about 2.54 cm

I can't help saying that in the States, 1" is exactly 2.54 cm because that is our legal definition of an inch. (Kinda makes me wonder why some Americans seem to have so much trouble with the Metric system.)

> #10 wire using american standards is about 2.59 mm in diameter
> using british standards it's about 3.40 mm in diameter
> using 'imperial standard' it's about 3,25mm in diameter
>
> Hope that helped,
>

Great work. I knew the various standards varied, but I didn't know that there was that much difference.

> 73,
> Peter
>
> --
> Korinna Imle & Peter Hovorka
> ICQ #74200239
> Peter: DG1GPQ
> http://WWW.CYBERCATS.DE

73, CJ K0CJ

4344. Re: Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:14:04 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <rh8n3tcg73fg4r0q77u5ca6iu70ha2rlsc@4ax.com>
Source record: 174542

paul@netburner.com (Paul Breed)
shared these priceless pearls of wisdom:

>I am working on a project to set the Solar powered radio controlled
->model altitude record. My airframe should be good for > 30K ft and I
->need to make sure that my radio liks will operate reliably to that
->altitude.
->
->My page of notes pictures electronics notes etc...:
->(Not well organized)
->http://www.rasdoc.com/splinter/

1. Put a text file with explanations of what the various files on this page do.

2. What is the weight budget?

3. What are the mechanical constraints?

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4345. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:14:40 UTC
From: Jeff Wilhelm <jwil7090@postoffice.uri.edu>
Message-ID: <91g7u3hlu1@clamcake.uri.edu>
Source record: 174543
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Yeah, some nice focus group testing should make everyone happy, right? :)

<fff@yeahoo.com> wrote in message news:3a3b9017.8965687@news.jersey.net...
> Before I shut the hell up, why don't you provide some evidence for
> your stupid, lame-ass remark about radar guns causing testicular
> cancer?
>
>
> On Fri, 15 Dec 2000 23:46:49 -0500, "Ken M." <poboxdc@ix.netcom.com>
> wrote:
>
> >fff@yeahoo.com wrote:
> >>
> >> Give me a break. Why don't you go back to posting pictures of gas
> >> station price signs?
> >
> >The prices went down!
> >
> >Before you sign off in a huff, would you be willing to lay an
> >active cell phone near your testicles (while you sleep) for
> >eight hours a night -- for one month?
> >
> >If your answer is NO then shut the hell up!
> >
> >
> >--
> >(ken)
> >
> >IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
> >http://www.zyworld.com/maryland/amazing.JPG
> >--
> >
> >To respond to this place (-) between x and d.
> >
> >
> > Because e-mail can be altered electronically,
> > the integrity of this communication cannot be guaranteed.
>

4346. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:25:51 UTC
From: rclark@epicedge.com
Message-ID: <3ac8a539.185437215@news.seanet.com>
Source record: 174551
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Fri, 15 Dec 2000 23:53:42 -0500, Bill Rubin <billrubin@prodigy.net>
wrote:

>
>
>"Don K." wrote:
>>
>> Bill Rubin wrote:
>> >
>> > "Don K." wrote:
>> > >
>> > > Bill Rubin wrote:
>> > > > What I find amusing is that many of the people who protested
>> > > > this likely complain to their cellular company about poor
>> > > > coverage,
>> > >
>> > > Improbable.
>> > > Did you just dreamed that up or what?
>> > >
>> > > Don
>> >
>> > Up where I am (suburban NYC), all companies have spots where
>> > they have poor coverage because they have trouble getting
>> > approval to put up more towers. I'm sure that people complain
>> > about this all the time, and I don't think it's unreasonable to
>> > think that some of them are the same ones protesting this new
>> > tower, which would improve their signal.
>> >
>> > Bill
>>
>> You've invented a scenario intended to discredit those who protest
>> the site. IMO it's unlikely anyone who actually complained to the
>> cellular company about poor coverage would also protest a new cell site.
>>
>> Not everyone benefits from cell phones. People have a right to try
>> to limit their exposure to unreasonable or unnecessary levels of
>> radiation. Safety standards change. What is considered safe today
>> might be considered unsafe tomorrow. Ask asbestos workers.
>
>Fine, so lets say that the high school students who helped
>organize the protect against the antenna have their own cell
>phones and put them up against their heads every day. Have you
>seen how many high school students have cell phones these days?

>
>Bill

Hi Bill,

According to the AARP, the grey-hairs outnumber the youngsters for
cellular phone connectivity - by a long shot.

73's
Richard Clark, KB7QHC

4347. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:39:02 UTC
From: rclark@epicedge.com
Message-ID: <3ac9a657.185722965@news.seanet.com>
Source record: 174552
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

On Fri, 15 Dec 2000 14:57:30 -0500, Nick Dunklee <SCSIGuy@onemain.com>
wrote:

>Oh! And how about all you who stay away from the cell phones AND the
>cordless phones, you must be using a computer to type messages to the
>newsgroup! What about the dangers of those 1 GHz processors? How come
>nobody's raised radiation issues about them? Oh, you may say "it's not
>enough radiation, and it's in a metal box anyway," but that'd be using the
>same excuse that cellular users work.
>

Hi Nick,

What you cite are reasons not excuses. CPUs are in metal boxes or in
FCC compliant designs that insure reduced emissions (telephones are in
plastic boxes optimized to emit - obviously). If there is any danger
it comes from fields coming from the computer boob tube - however
these frequencies (the base frequencies) are orders of magnitude (
1/10000th) below the lowest one you cite. And yes, frequency matters.
Higher frequency suggests shorter wavelength, a standing man is nearly
1/4 wavelength tall at 10M and is in danger of being a dummy load to
near fields. Higher frequencies lead to the obvious where fingers
become meaningfully sized in relation to wavelength.

The comparison between cellular and cordless phones omits discussion
of the range of either, and hence the power emitted to perform the
function. If one wishes to weigh risks, here too less power leads to
the obvious conclusion that there is correspondingly less risk of
injury.

73's
Richard Clark, KB7QHC

4348. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:40:15 UTC
From: richardharrison@webtv.net
Message-ID: <13599-3A3BA8FF-50@storefull-111.iap.bryant.webtv.net>
Source record: 174546

From page 817 of Terman`s "Electronic and Radio Engineering":

"With vertically polarized waves and earth having good conductivity, the height at which ground-wave action ceases to dominate and ray action begins to be most important is in the order of one or two wavelengths. ---"

"With horizontally polarized waves the critical height below which ground-wave action predominates and above which space-wave action takes over is less than a tenth of a wavelength for very poor conducting earth, and even less for good earth and sea water."

Ground-waves are useless for ionospheric propagation. Space-waves reach the ionosphere for reflection over long distances.

It is no wonder that the world`s shortwave broadcasters usually employ horizontal antennas for long distance propagation. Array drivepoints are usually located about 1/2-wavelength above ground.

Best regards, Richard Harrison, KB5WZI

4349. TUNE dipole with MFJ-249?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:43:36 UTC
From: ham_guy@webtv.net
Message-ID: <23599-3A3BA9C8-47@storefull-137.iap.bryant.webtv.net>
Source record: 174545

Hi.. I need to get some advice here. I'm going to put up a 20 meter dipole and feed it with ladder line. However, my MFJ-249 only has a connection for a coax coupler.

My plan (for the lack of a better one):
1. Pull the dipole partially up, so I can still reach the ends and middle feedpoint with a ladder.
2. Attach a temporary coax lead to the antenna feedpoint and check the resonant Q.
3. Trim the ends to get the desired resonant Q.
4. Remove the coax and the analyzer and attach the ladder line.
5. Pull the antenna to its full height and hope the difference in height and the difference in the antenna feed do not seriously degrade the tune up.

This seems to me that it has lots of room for error. Since people have been doing this for years, there must be some better method. Any tips, hints and kinks you know of? Thanks, JJ

4350. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 17:47:02 UTC
From: Pie`` <picaruso@dontwriteme.com>
Message-ID: <qUN_5.118664$hk4.4276484@news.infostrada.it>
Source record: 174544

What about systems with 75 Ohms impedance that use BNC connectors?
Are these the same 52 Ohms connectors we use for our purposes, or are
different
ones?
Thanks & 73' de IK2VTJ, Piero.

Merry Christmas & Happy new Year to everybody.

http://www.infinito.it/utenti/ardf.it
http://ardfitalia.supereva.it
http://www.qsl.net/ik2vtj

4351. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:15:44 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a3bb15d$0$90268$1dc6e903@news.corecomm.net>
Source record: 174547

Go to B&W's web page and they will tell you just exactly what the
numbers are and how much it will cost to but the balun and load for. I
have one of their folded dipoles and like it.
Dave Nagel
WD9BDZ

Cboone@Earthlink.net wrote:
>
> The balun is 16:1 according to the RF bridge KE5O and I used to
> measure mine with...the resistor is 800 Ohms NON inductive/100watt
>
> Chris
> WB5ITT
>
> Mike wrote:
> >
> > I came across one all tangled up. I am not interested in getting it back
> > like it should be.My question is what ratio is the large balun on it and
> > could this be of any use for making up another antenna. Also the large
> > resistor in the center of the antenna can it be of use other than a
> > dunny load.

4352. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:17:44 UTC
From: rclark@epicedge.com
Message-ID: <3acaa8d9.186365249@news.seanet.com>
Source record: 174558

On Fri, 15 Dec 2000 09:55:52 -0600, Mark Keith <nm5k@wt.net> wrote:

>>
>> I shall suppose that we will now see this NG degrade to pseudo-biometry and the
>> pernicious misinterpretations it engenders.
>
>Either that or a bunch of whiny lawyer threats. I think I prefer the
>pseudo-biometry and the
>pernicious misinterpretations they engender.
>>

Hi Mark,

You don't have to settle for a label libel when honest research is
already available.

Today's headline in Seattle papers (which broke this news nationwide):
"Asbestos death toll nation's worst"
which is responded to by the commercial interest (W.R. Grace) thusly:
"... some of these irresponsible numbers that were thrown
around last year were not correct."

What were those numbers?
"More than 6500 residents of Libby and nearby areas in Lincoln
County have completed medical screening by federal medical teams.
''There will be over 600 new cases added to the 400 people in
town already diagnosed." Scientists conclude the hazard added to the
inhabitants of Libby run 4000% to 6000% greater than the general
population.

Commercial interests are always ready to deny science by its not being
100% accurate. I am sure that W.R. Grace would allow that perhaps 599
will be added and science need only admit its error and retract its
faulty conclusions as science now shows it seeks to damage the
reputation of the commercial interest and destroy its trade. (Duh!!!)

It should be noted that this was a breaking story not because of the
general tragedy of certain death, but more for the greater tragedy of
commercial interest covering up scientific evidence through
stonewalling and collusion with government agencies' passivity.

Insofar as the argument for cellular exposure and injury, recent study
has shown the penetration depth of fields into the skull. For
children, teens and small adults, this is considerable filling nearly
half the brain pan. Obviously any commercial interest that draws the
emitting source closer to the skull is going to condemn this as
"pseudo-biometry."

For the general readership:
There has been discussion of these fields expressed in power per square area. This can be nearly as hard to follow as the discussions couched in mV/M. In other words, what does this mean to me? Consider the ultimate everyday radiation exposure - the Sun. At the equator, at noon, on a cloudless day, on the surface of the earth, the Sun applies roughly 1KW per square meter (the average adult has two square meters of surface area). This can also be expressed as 100 mW/cM^2. Up here in "Rain City" I can at best expect only 30mW/cM^2 on a summer's day, and yet 15 minutes exposure is certain to burn me (your mileage may vary). As this exposure is not direct, but oblique (through my movement during exposure) it suggests some lower figure can produce this damage (still more than 10mW/cM^2 certainly). Note that it is not necessary for my entire body to be exposed to suffer the burn of 1 cM^2 patch of skin (my ears - say) as the frequency of exposure has wavelengths so short that damage is measured in fractions of this same cM. Radio waves on the other hand have much less energy than sunlight with wavelengths measured in Meters to several cM's. The mechanisms of excitation and damage for light do not produce similar damage for equal power at vastly lower frequencies. As such, the sunlight-damage metaphor is lacking, but it still serves a useful touch stone of relating these units of measure.

73's
Richard Clark, KB7QHC

4353. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:21:18 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <MnO_5.1645$4Z5.185125@nntp0.chicago.il.ameritech.net>
Source record: 174548
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

It is funny how we are all upset about cell phone sites that *MAY* put out about 100w, but forget about their precious TV stations that out up to 5 MILLION watts.

"James Knott" <the.lights.are.on.but.no.one.is@home.com> wrote in message news:3A3A2137.69525D83@home.com...
> Paul k wrote:
> >
> > Robert Wallace <robertw@panix.com> wrote in
> > <91b89i$en0$2@news.panix.com>:
> >
> > >In misc.consumers Steve Punter <punter1445@home.com> wrote:
> > >> Well, if you live 1,500 feet from the antennas, you are exposed to
> > >> 10,000 time less energy that someone standing 15 feet from the same
> > >> antennas, and 2.5 million times less than someone standing 1 foot from
> > >> the antennas. This is based on the distance-squared law that all
> > >> radiating signals abide by in open space. Your risks from the site are
> > >> so marginal that you probably stand a higher risk of being hit by a
> > >> crashing 747 with Stephen Hawkings onboard.
> > >
> > >As the pilot!
> > >
> > >Robert Wallace
> > >robertw@panix.com
> > >
> > You can not argue with this type of thinking If they feel the radiation
> > will kill children NOTHING you can say will change their minds. It is a mob
> > mentality
>
> Well, we'd better ban aspirin, as it kills about 1000
> people/year in the U.S. Kids with meningitis are
> particularly vulnerable.
>
> --
> Replies sent via e-mail to this address will be promptly
> ignored.
> To reply, replace everything to the left of "@" with
> "james.knott".

4354. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:22:36 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A3BB2E1.15679D56@GTE.net>
Source record: 174549

"Pieï¿½ï¿½" wrote:

> What about systems with 75 Ohms impedance that use BNC connectors?
> Are these the same 52 Ohms connectors we use for our purposes, or are
> different
> ones?
> Thanks & 73' de IK2VTJ, Piero.

75 Ohm systems would purchase 75 Ohm BNC connectors- same with type N 75
Ohms.

Dale W4OP

4355. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:23:46 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <9qO_5.1646$4Z5.185715@nntp0.chicago.il.ameritech.net>
Source record: 174550
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

How about those AM broadcast stations in Russia that run up to 2 MILLION watts. Kind of blows the doors off of our so called "powerhouse" 50kW stations in the US.

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3A3AAF01.FAC307FD@eznec.com...
> I've seen these Russian standards quoted before. And I've always
> wondered if they were actually enforced, or just published for
> propaganda purposes ("Look what good care we take of our people!").
> Based on the record of Soviet environmental disasters, I strongly
> suspect the latter. Do you really suppose that Russian microwave ovens,
> for example, are much better shielded and sealed than ones sold in the
> U.S.? Or that the level of exposure of people living near the cold war
> jamming transmitters was really below these levels?
>
> Roy Lewallen, W7EL
>
> "Don K." wrote:
>
> > I remember reading the Russian standards back in the 70's and 80's
> > in IEEE Spectrum magazine when I was involved with microwave
> > transmitter design.
> >
> > I found a web reference to the Russian standard in the IEEE Antennas
> > and Propagation magazine at
> >
> > http://www.eecs.uic.edu/eecspeople/lin_ieee4.htm
> > It says:
> > Indeed, it has been known for years that the RF guidelines promulgated
> > for limiting human exposure vary from country to country. For example,
> > according to the Sanitary Regulations and Standards 2.2.4/2.1.8.055-96,
> > "Radiofrequency Electromagnetic Radiation under Occupational and Living
> > Conditions," the permissible exposure level for the general population
> > in the Russian Federation is 10 ï¿½W/cm2 or 0.1 W/m2 in the 300 MHz to
> > 300 GHz frequency range [3]. The American National Standards Institute
> > (ANSI) guidelines for the same frequency range are 1 to 10 mW/cm2 or
> > 10 to 100 W/m2, depending on frequency [4].
> >
> > Note that 10 uW/cm2 is .01 milliWatt/sq cm.
> >
> > Don

4356. Re: Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:42:26 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <91gd2pacm1@iac5.navix.net>
Source record: 174553

As 30K is about 5 miles, you should have no problem with a minimal system depending on the sensitivity of the receiver. I am wondering how you contend with the winds aloft that can reach 100Kts easily at these altitudes. A low mounted dipole or loop normally is a real cloud burner and should work well for your application. the over head pattern on a 1/4 wave vertical would not be to your advantage.

"Paul Breed" <paul@netburner.com> wrote in message
news:3a391ac6.861605@news.harvard.net...
>
>
> I am working on a project to set the Solar powered radio controlled
> model altitude record. My airframe should be good for > 30K ft and I
> need to make sure that my radio liks will operate reliably to that
> altitude.
>
> My page of notes pictures electronics notes etc...:
> (Not well organized)
> http://www.rasdoc.com/splinter/
>
>
> The FCC regs limit me to 1W maximum output on the uplink.
> At the present time the downlink is a 900Mhz 1/2W video transmitter.
>
> I am looking for an antenna guru to help me design the needed
> antennas.
>
> For the 900 Mhz downlink I am using a commercial loop yagi for the RX
> and need to develop a transmitter antenna with a hemispherical pattern
> for the plane.
>
>
> My current plans are for a homebuilt 1W 6M uplink, then using a
> normal RC receiver on the aircraft.
>
>
> My current thought on this is as follows:
>
> On the ground use a simple 1/4 wave steerable rigid dipole.
> This might be upgraded to a 2 or three element YAGI if I need the
> gain.
>
>
>

> On the plane I was goint to use a pair of 1/4 wave dipole's at 90
> degrees to each other, how can I combine these to provide a full
> hemisphere of coverage?
>
>
> Paul (Kl7JG)
>
>
>
>
>
>
>
>
>
> ---
> Paul Breed Chief Architect, NetBurner
> Networking in one day.
> http://www.netburner.com

4357. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:42:28 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <91gd32$851$1@bob.news.rcn.net>
Source record: 174554
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

Peak ERP on SYNC tips, from mountain tops, on very high towers, beaming to
the horizon with
maybe a slight downtilt... Next....

"KentWI" <kentwi@ameritech.net> wrote in message
news:MnO_5.1645$4Z5.185125@nntp0.chicago.il.ameritech.net...
> It is funny how we are all upset about cell phone sites that *MAY* put out
> about 100w, but forget about their precious TV stations that out up to 5
> MILLION watts.
>
>

4358. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:43:43 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <91gd5c$8j1$1@bob.news.rcn.net>
Source record: 174555
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

How about them? If shortwave or medium wave, probably not much effect
on humans.

"KentWI" <kentwi@ameritech.net> wrote in message
news:9qO_5.1646$4Z5.185715@nntp0.chicago.il.ameritech.net...
> How about those AM broadcast stations in Russia that run up to 2 MILLION
> watts. Kind of blows the doors off of our so called "powerhouse" 50kW
> stations in the US.
>
>

4359. WTB: small dual section variable caps

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 18:48:33 UTC
From: Jim Warner <jpwarner1@gte.net>
Message-ID: <01c06791$71cc30e0$e0de1b3f@jpwarner>
Source record: 174556

Looking for a couple of small dual section air variables. ~30-300pF
Used to be popular in 5 tube table radios from days gone by.
For QRP tuner project.
Jim WA9Z

4360. Military Bigstick Tuning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 19:00:20 UTC
From: n4cdg@aol.com
Message-ID: <20001216140020.01951.00009821@ng-ch1.aol.com>
Source record: 174557

Hi Folks,

Has anyone ever tried tuning this antenna for 10 meters?

Thanks,

Chris

4361. Re: TUNE dipole with MFJ-249?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 19:24:53 UTC
From: k6mhe@arrl.net
Message-ID: <3a3bc113.651930@news.mcn.org>
Source record: 174562

On Sat, 16 Dec 2000 11:43:36 -0600 (CST), ham_guy@webtv.net (JJ OKK)
wrote:

>Hi.. I need to get some advice here. I'm going to put up a 20 meter
>dipole and feed it with ladder line. However, my MFJ-249 only has a
>connection for a coax coupler.
>
>My plan (for the lack of a better one):
>1. Pull the dipole partially up, so I can still reach the ends and
>middle feedpoint with a ladder.
>2. Attach a temporary coax lead to the antenna feedpoint and check the
>resonant Q.
>3. Trim the ends to get the desired resonant Q.
>4. Remove the coax and the analyzer and attach the ladder line.
>5. Pull the antenna to its full height and hope the difference in
>height and the difference in the antenna feed do not seriously degrade
>the tune up.
>
>This seems to me that it has lots of room for error. Since people have
>been doing this for years, there must be some better method. Any tips,
>hints and kinks you know of? Thanks, JJ

I don't understand why you are concerned that the antenna be
physically resonate. Especially in the fact you are feeding it with
ladder line.

Danny, K6MHE

4362. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 19:33:29 UTC
From: k6mhe@arrl.net
Message-ID: <3a3cc345.1214534@news.mcn.org>
Source record: 174563

On Sat, 16 Dec 2000 08:25:44 -0800, Bill Turner <w7ti@jps.net> wrote:

>On Sat, 16 Dec 2000 10:32:41 +0100, "Python" <python@interia.pl> wrote:
>
>>Hello,
>>I'd like to built an simple antenna but have following sentence:
>>
>>"Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
>>formed from # 10 copper wire "
>>
>>Could you translate it for me into metric system?
>>
>>73!
>>Tomek
>>sp8ncg
>>
>____
>
>Better yet, go to:
>
>www.joshmadison.com/software
>
>And download a free conversion program that will do it for you. This incredible
>little program converts practically anything - not just metric/English - and is
>totally free. Best bargain in town! Windows 32 bit only, sorry, (no Win 3.1).
>
>w7ti

Tried to get it but couldn't get past the registration.. Got a null
response after submitting register info.

Danny, K6MHE

4363. Re: TUNE dipole with MFJ-249?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 19:45:34 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3BC65E.D2CBE3DE@oio.net>
Source record: 174560

JJ OKK,
One method would be to use multiples of an electrical
full wave length section of coax. Impedance at the
'bottom' should be the same as the 'top'.
Another method would be to just plug in the ladder-line.
'Doc

4364. Offsubject,could u help,thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:11:18 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <22jn3tkmhbb06f6897fnovgo7rv9i0cpjo@4ax.com>
Source record: 174566

I am looking for a newsgroups (one with an audiences) where I can ask some questions, (maybe dumb to some) about hard drives, inside the tower and those outside, and installations, and connections inside and outside. See, I told U some question would sound dumb. thanks in advance. Callie Lorentson kc5dyz "73"

4365. coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:15:22 UTC
From: wrightsaerials@aol.com
Message-ID: <20001216151522.22504.00004859@ng-bk1.aol.com>
Source record: 174561

Working on communal TV systems I often find 75ohm coax that loses five or more times more signal than it should. The losses are always greater at higher frequencies. The problem usually arises when the cable is old, and sometimes I have been able to track a gradual increase in loss over a period of years. Sometimes the explanation is obvious – the cable has taken up large amounts of moisture via unsealed ends. But often there is no obvious moisture in the cable. I wonder if cable takes up moisture through the outer sheath, because sometimes the dielectric is slightly discoloured. Any thoughts, ideas, suggestions?
Bill Wright

4366. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:32:06 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <RiQ_5.1191$65.1146842@newsfeed1.thebiz.net>
Source record: 174564

My fairly extensive experience from a NE QTH is that a 50ft dipole will beat
a full sized vertical with elevated radials about 90% of the time into
europe on 80m (I have both and A/B them often).

Many of the dx stations you readily hear on the low bands are running a kw,
and remember that you're 10dB down on their end if you're running 100watts.
Add QRN and european QRM into the mix, and they might not be able to pull
you out.

GL/73,
Barry N1EU
.
John Harper <ae5x@optonline.net> wrote in message
news:6Uu_5.455997$4d.59200909@news02.optonline.net...
> Hello amigos,
>
> I've recently moved to a hilltop in northwestern NJ and have been
> experimenting
> with DXing on 80m. I'd like to hear what types of antennas others in the
> area use on this band. My reason for asking concerns my own dilemma:
>
> The first antenna I tried on this band was a 67' wire vertical with 3
> 1/4-wave on-the-ground radials. Performance was terrible. I know 3 radials
> isn't enough, but I should have had some success. Couldn't cross the
> Atlantic. Then I put up a dipole at about 50 feet and now have almost a
> dozen European/African countries on the band. But there are still times
when
> I hear a DX station who is 57 or 579 calling CQ. I answer and get no
reply -
> he calls CQ again, never hearing me. I'm running 100 watts.
>
> I know verticals are favored for low angle radiation on the low bands and
> wonder if more radials would have helped? I also know that a verticals'
> performance is highly dependant on the conductivity of the ground several
> wavelengths beyond the length of the radials. Is the nature of the soil
> conductivity in this part of the state such that horizontally polarized
> antennas are a better choice? If so, my plans are to install another
dipole
> parallel to my current one to act as a parasitic reflector.
>
> Thanks for any help/suggestions/ideas or donations of 80m Yagis!
> 73 and happy holidays,
>
> John Harper AE5X
> Outdoor QRP: http://www.qsl.net/ae5x

>
>
>

4367. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:33:15 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <91gjiccjp1@bob.news.rcn.net>
Source record: 174565

could it be contamination of the braid from chemicals leaching out of the jacket?

Pete

"Wrightsaerials" <wrightsaerials@aol.com> wrote in message news:20001216151522.22504.00004859@ng-bk1.aol.com...
> Working on communal TV systems I often find 75ohm coax that loses five or more
> times more signal than it should. The losses are always greater at higher
> frequencies. The problem usually arises when the cable is old, and sometimes I
> have been able to track a gradual increase in loss over a period of years.
> Sometimes the explanation is obvious - the cable has taken up large amounts
> of moisture via unsealed ends. But often there is no obvious moisture in the
> cable. I wonder if cable takes up moisture through the outer sheath, because
> sometimes the dielectric is slightly discoloured. Any thoughts, ideas,
> suggestions?
> Bill Wright

4368. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:43:39 UTC
From: richardharrison@webtv.net
Message-ID: <25298-3A3BD3FB-25@storefull-115.iap.bryant.webtv.net>
Source record: 174472

Reg wrote:
"And if anyone should mention a difference in "gain" of N decibels I shall scream and scream and scream."

And we all shall scream for ice cream.

Someone perhaps well known in the U.K. said your knowledge was thin and tasteless unless quantified.

So, the U.S. Army found from careful measurements repeated over time to prove repeatability that a 1/2-wave dipole only 7 feet above good soil is 19 db better than a 15-foot tuned whip with a near perfect ground connection.

These tests were performed by transmissions between like antennas (the difference in transmission levels was 38 db for the two dipoles over two vertical whips) at 3 MHz via the F2 layer over a 75-mile path.

If the dipole were 20 db better than a whip, the power gain would be 100. 19 db is about 79 times the power from a 1/2-wave dipole over that obtained from the whip (in or out of the same field).

With dipoles on both path ends versus 15-foot whips on both ends, the power gain is 6310 times, approximately, (38 db).

Best regards, Richard Harrison, KB5WZI

4369. Re: 4BTV grounding.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:47:05 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bcfbd.33985429@news.akorn.net>
Source record: 174567

On Sat, 16 Dec 2000 08:06:26 -0800, Bill Turner <w7ti@jps.net> wrote:

>At 160 meters, two feet off the ground is such a small fraction of a wavelength
>that it would make virtually no difference.

A small move up away from earth does make a difference, but efficiency
will never be really high with only four radials until they are 1/4 wl
or more above earth. Even at 1/4 wl of height, the radials are still
coupling to the lossy dirt below the radials (even if at greatly
reduced coupling compared to wires near or in the dirt).

If you have a direct ground path to earth, and only a few elevated
radials, it actually hurts efficiency a measureable amount. That's
true even if the path is the shield of the coax. You always should
have a choke balun or other isolation on the coax at the feedpoint
when using a small elevated system.

>the ground. Please understand, when you have so many radials that the antenna
>does not "see" the actual earth, then leaving them on the ground is ok. It's
>only when you have just a few radials that elevating them up high would reduce
>ground losses. Something around ~120 radials qualifies as near-perfect.

Some actual 160 meter results here:

The actual point of equality, between elevated radials at 6-8 feet and
radials contacting the earth, was at about 15 -20 radials here at my
house. Once I had 25 radials or so, they could be laid on the ground
or elevated with no noticable change in FS.

4 elevated radials was about 4-6 dB less FS than 60 radials either
elevated or laid on the ground in all actual FS measurements I've
seen.

Once I get to about 40-60 radials, FS barely changes as I add more 1/4
wl long radials. On my omni-vertical, 100 two-hundred foot long
radials is only a fraction of a dB better than the same tower with
only 50 radials 100 feet long.

My 4-square for 160 meters has only about 50 radials per element.

A 1/4 wl or 3/8 wl long vertical with 50-60 radials or more always
ties and often beats a dipole at 300 feet on 160 meters in a direction
broadside to the dipole. Of course off the ends of the dipole, the
vertical smokes the dipole at any distance, time-of-day, or day.

A low dipole beats the vertical within 100-200 miles on skywave, but
almost never at any larger distance. W5TJ in Mississippi (300 miles
from me) is louder here with his 120 foot vertical with NO radials

than he is with a dipole at 100 feet. The same is true back from here to Frank (except my verticals have large ground systems so the difference is greater).

In contests, or in regular operation, the verticals work so well I have all but abandoned use of the high dipoles and a low dipole.

With a 4BTV, I'd either ground mount it in the clear with as many radials as long and straight as I could muster, or else roof or mast mount it. I'd still use a multitude of radials even if up in the air. Four for each band is NOT enough unless the antenna is near 1/4 wl above ground or higher.

73 Tom

4370. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:53:11 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bd4bb.35264137@news.akorn.net>
Source record: 174568
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Fri, 15 Dec 2000 23:46:49 -0500, "Ken M." <poboxdc@ix.netcom.com>
wrote:

>Before you sign off in a huff, would you be willing to lay an
>active cell phone near your testicles (while you sleep) for
>eight hours a night -- for one month?

It depends on what the cell-phone looked and smelled like, or who was
using it.

If Helen Hunt or even someone like Goldie Hawn was using the phone, it
could stay there for a year. If that icky fat girlfriend of Clinton's
(Monica) was using it, I'd want it gone every morning before I woke
up.

73 Tom

4371. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 20:58:10 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bd667.35692492@news.akorn.net>
Source record: 174469
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Fri, 15 Dec 2000 23:53:42 -0500, Bill Rubin <billrubin@prodigy.net>

>Fine, so lets say that the high school students who helped
>organize the protect against the antenna have their own cell
>phones and put them up against their heads every day. Have you
>seen how many high school students have cell phones these days?
>
>Bill

Hi Bill,

Ken has a perfect right to be paranoid about cell phones if he so
desires.

It's OK to not eat the green M&M candies, or step on cracks in the
sidewalk. It's also OK to avoid all other equally potentially
dangerous hazzards.

73 Tom

4372. Re: TUNE dipole with MFJ-249?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:08:12 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3BD9BC.48CA174@IEEE.org>
Source record: 174474

JJ OKK wrote:
> Hi.. I need to get some advice here. I'm going to put up a 20 meter
> dipole and feed it with ladder line. However, my MFJ-249 only has a
> connection for a coax coupler.

Use the MFJ-249 through a 50 ohm 1:1 choke/balun. That's what I do with
my MFJ-259B.
--
http://www.mindspring.com/~w6rca

4373. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:10:15 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bd7a1.36005727@news.akorn.net>
Source record: 174470

On Sat, 16 Dec 2000 00:53:46 -0500, Scott McClements
<yetbbwa@grove.iup.edu> wrote:

>From what I understand, the characteristic impedance of coax is
>determined by the distance of the inner conductor to the outer
>conductor. So, what is the impedance of the PL-259 and the "Barrel"
>connector (whatever the number is on that thing)? Are they suppose to
>have a characteristic impedance of 50 ohms? Something to ponder at 12:52
>am.
>
>Scott.

Scott,

Like many things in life, the real problem is with the female.

The male end of the UHF connector set is almost perfect. There is no
bump there.

At the female-end, a simple typical SO-239 has an impedance of 30 to
40 ohms. However, that "bump" is only 1/2 inch long, so it will NOT
caude a problem unless you have a lot of them spaced the wrong
distance apart at frequencies below 150 MHz or so.

Even at 450 MHz, the effect is often minor.

The pro's outweight the con's in my book, since a conventional good
quality UHF connector set will handle much higher line SWR and power
than a N connector. A regular UHF connector is much easier to assemble
also.

N connectors are fine below 1500 watts with low SWR, and constant
impedance connectors are needed for critical measurements or UHF and
higher work, but they are not needed below 200 MHz or so in almost any
application.

Barrel connectors are a slightly worse problem since the length is
longer. The general rule is if you keep the length of slight impedance
bumps below 1 electrical degree, they won't bother almost anything you
ever do.

That means on 160 meters you could have 1.5 FEET of total connector
"bump" area before before you could measure any difference. On six
meters, that would be only one connector....but remember this is the
WORSE situation where you could normally measure any change at all.

73 Tom

4374. Re: WTB: small dual section variable caps

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:12:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A3BDAB4.C84C6020@IEEE.org>
Source record: 174475

Jim Warner wrote:
>
> Looking for a couple of small dual section air variables. ~30-300pF
> Used to be popular in 5 tube table radios from days gone by.
> For QRP tuner project.
> Jim WA9Z

Try FairRadio.com. They have 3-gang and 5-gang caps with
maximums of 400pf to 540pf per section.
--
http://www.mindspring.com/~w6rca

4375. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:14:27 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bda34.36664922@news.akorn.net>
Source record: 174471

On Sat, 16 Dec 2000 00:25:50 -0600, 'Doc <w5lz@oio.net> wrote:

>John,
> There is no single antenna that will be the 'best' for
>DX'ing on 80 meters. By the very nature of propagation,
>at times, a vertical will perform 'better' than some type
>of horizontal antenna, and vis-a-versa. On the average,
>the old saying about having lots of metal, high in the air,
>is still true...
> 'Doc

Doc's statement is pretty much in agreement with what I have seen.

To Europe, a 35 foot tall top-loaded vertical with 60 radials pretty much always tied a 100 foot high dipole for me at my last QTH.

Not so at closer diastances, and not every night at longer distances.

Most people, if they can have them, have both. Listening on the low end of 80, some of the best European and Asian signals come from verticals.

73 Tom

4376. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:16:19 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3bdb2d.36914397@news.akorn.net>
Source record: 174473

On Sat, 16 Dec 2000 10:10:28 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>The purveyor of this theory hasn't imbibed quite enough of the cup of
>Socrates.
>--
>
>73, Dave, K3BHJ

It isn't just CBers who are silly at times.

N1IR wrote an article in 73 Magazine about using atree for an antenna,
because its "fractal shape" gave it desirable radiating properties.

73 Tom

4377. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:22:26 UTC
From: richardharrison@webtv.net
Message-ID: <25298-3A3BDD12-26@storefull-115.iap.bryant.webtv.net>
Source record: 174476

Reg wrote:
"Eureka! - throw up an inverted-L or a sloper. Get the best of both worlds."

The U.S. Army tried those antennas, too. With like antennas on both ends of the path, the inverted-L`s, with a 45-foot top and a 35-foot downlead, produced 2 db less than dipoles only 7 feet above the earth (at 3 MHz).

At 30 feet up, 1/2-wave dipoles produced 21 db more signal than at 7 feet up. A sloper from 30 feet up sloping down to 5 feet up (the sloper was also 1/2-wavelength long) produced 9 db less signal than the dipole up 30 feet at both ends.

Best regards, Richard Harrison, KB5WZI

4378. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:40:48 UTC
From: rclark@epicedge.com
Message-ID: <3acbe0fa.200734491@news.seanet.com>
Source record: 174482

On Sat, 16 Dec 2000 22:05:37 +0000, Ian Jackson
<ianjackson@g3ohx.demon.co.uk> wrote:

>
>IMPORTANT NOTE #2: NEVER, NEVER connect a 50 ohm male N to a 75 ohm
>female N. You will end up with a SERIOUSLY damaged female. If I had my
>way, this would deserve capital punishment for a second offence!!!
>
>73,
>Ian.
>

Hi Ian,

I've also observed this to be a problem with HV BNC connectors
connecting into standard BNC sockets. Here the problem is with
length.

73's
Richard Clark, KB7QHC

4379. Re: 1 mH RF choke needed for RF filtering.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:42:27 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <91gnq1$og4$1@slb7.atl.mindspring.net>
Source record: 174477
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I think the keyword here was "or".
"Kelly Bersch" <kbersch@not-sofast.net> wrote in message
news:cWSZ5.396$4y4.12041@e420r-atl1.usenetserver.com...
> Do you actually need two different values of chokes (1-mH and 100-uH) or
did
> you mean 1-mH or 1000-uH?
>
> 73 de AC7EW
> Kelly
>
> "Robert Fanfant" <fanfant@ix.netcom.com> wrote in message
> news:3a356651$1@news.microsoft.com...
> Am building a project out of a Sept 95 QST article (automatic remote
antenna
> tuner) requiring extensive RF filtering of every input/output lead. Each
PI
> section filter consists of two .01uF bypass caps and one 1-mH OR 100-uH RF
> choke.
>
> Can anyone recommend a part number/type and source for the inductors? What
> type of caps would be recommended?
>
> -rob
>
>
>
>
>
>
>

4380. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:49:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91go1nfmb1@uranium.btinternet.com>
Source record: 174478

Ric, I feel sorry for you. I'm still screaming for your
poor ill-educated brats who believe the Pentagon radio
engineering scripts are equivalent to the Bible and the
Koran.

I quantify and put numbers to my assertions. Where are your
numbers ? You don't have any.

What a great pity you and your silly friends have to resort
to political mud-slinging to obtain some imagined technical
advantage.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Richard Harrison <richardharrison@webtv.net> wrote in
message
news:25298-3A3BD3FB-25@storefull-115.iap.bryant.webtv.net...
> Reg wrote:
> "And if anyone should mention a difference in "gain" of N
decibels I
> shall scream and scream and scream."
>
> And we all shall scream for ice cream.
>
> Someone perhaps well known in the U.K. said your knowledge
was thin and
> tasteless unless quantified.
>
> So, the U.S. Army found from careful measurements repeated
over time to
> prove repeatability that a 1/2-wave dipole only 7 feet
above good soil
> is 19 db better than a 15-foot tuned whip with a near
perfect ground
> connection.
>
> These tests were performed by transmissions between like
antennas (the
> difference in transmission levels was 38 db for the two
dipoles over two
> vertical whips) at 3 MHz via the F2 layer over a 75-mile

path.
>
> If the dipole were 20 db better than a whip, the power
gain would be
> 100. 19 db is about 79 times the power from a 1/2-wave
dipole over that
> obtained from the whip (in or out of the same field).
>
> With dipoles on both path ends versus 15-foot whips on
both ends, the
> power gain is 6310 times, approximately, (38 db).
>
> Best regards, Richard Harrison, KB5WZI
>

4381. Re: Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 21:56:57 UTC
From: k1bqt@aol.com
Message-ID: <20001216165657.07617.00005742@ng-fy1.aol.com>
Source record: 174479

If you install a 900-MHz dipole or colinear horizontally beneath the aircraft body postioned 1/4 to 3/8-WL below the conductors and control rods inside, I would think it might yield a wide pattern with a little gain toward the ground, while providing some cancellation above. I might try a mylar-film groundplane spaced behind the radiating element for increased surface area and better uniformity.

Also, woudn't it be easier to manage signal diversity at the tracking site (where weight and drag aren't issues) than to install a turnstyle on the aircraft?

Finaly, check the airborn receiver, transmitter, and camera in a deep-freeze before flying them! It get's wicked cold at FL350 and strange things happen!!

Rick K1BQT

4382. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 22:05:37 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <ZNaGOAAxc+O6EwDi@g3ohx.demon.co.uk>
Source record: 174480

In article <3A3BB2E1.15679D56@GTE.net>, Dale Parfitt
<GTE/parinc@GTE.net> writes
>
>
>"Pieï¿½ï¿½" wrote:
>
>> What about systems with 75 Ohms impedance that use BNC connectors?
>> Are these the same 52 Ohms connectors we use for our purposes, or are
>> different
>> ones?
>> Thanks & 73' de IK2VTJ, Piero.
>
>75 Ohm systems would purchase 75 Ohm BNC connectors- same with type N 75
>Ohms.
>
>Dale W4OP
>

Yes, there are both 50 ohm and 75 ohm BNC connectors.
However, the main difference is not the diameter of the inner conductors
(essentially identical). It is the amount of dielectric which is
present. 50 ohm has more than 75 ohm.

Mechanically, 50 and 75 ohm connectors are totally 'inter-connectable'.
Also, electrically, I doubt if you will see any difference in amateur
use.

Also, the 'inner parts' of 50 ohm BNC and N connectors are essentially
identical. You can make an electrical connection between a male N and a
female BNC.

IMPORTANT NOTE #1: This is NOT true for 75 ohm N-connectors. The
diameters of the inner conductors of 75 ohm N-connectors are MUCH less
than for 50 ohms. You can NOT connect a male 75 ohm N to ANY BNC or N
female (the inner conductor simply does not make contact).

IMPORTANT NOTE #2: NEVER, NEVER connect a 50 ohm male N to a 75 ohm
female N. You will end up with a SERIOUSLY damaged female. If I had my
way, this would deserve capital punishment for a second offence!!!

73,
Ian.

4383. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 22:13:21 UTC
From: rwclark@seanet.com
Message-ID: <3acce53e.201825920@news.seanet.com>
Source record: 174486
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

On Sat, 16 Dec 2000 17:52:30 -0500, Nick Dunklee <SCSIGuy@onemain.com>
wrote:

>Hehe, of course, I was on a rant, heh. And what about laptops? Many don't
>have much shielding. (Although mine has large sheets of aluminum and such
>underneath for heat disspiation/shielding.)
>
>I was just exaggerating a bit...people like distorting things to make them
>sound bad. Yes, a cell phone could harm a person, if it had a transceiver in
>it that required it's own power generator.
>
>I'll leave my odds of getting harmed from cell fones in that same arena that
>contains the probability that I may get hit by a flying moo cow. (Watch a
>tornado hit me in the middle of winter ;))
>
>Nick

Hi Nick,

Yes I realize the jest here. However, the radiation from any consumer
device is regulated by the FCC for non-interference (which almost
always means too much power radiated). This is not a slack issue and
the industry learned how concerned they were some 10-12 years ago at
ComDex when the FCC walked the aisles with emission measuring
equipment and immediately confiscated any noisy "toys." A cold
shivver went through the exhibition hall with the dismal prospect of
salesmens' demo machines being snapped up and hauled away.

I like your analogy, again consider the quality of life if you were to
survive being hit with the weight of that cow in "cow-chips" when one
chip at a time hits you every 10 seconds you were on the phone. ;-)
Sure, the risk is spread and life goes on (no one is dead over this).
This says nothing of the risk of mad cow disease (which may be the
reason you are being hit once every 10 seconds - a very mad cow who is
annoyed by the ringer).

73's
Richard Clark, KB7QHC

4384. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 22:16:47 UTC
From: "Ken M." <poboxdc@ix.netcom.com>
Message-ID: <3A3BE9CF.5437FD32@ix.netcom.com>
Source record: 174481
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Tom W8JI wrote:
>
>
> Hi Bill,
>
> Ken has a perfect right to be paranoid about cell phones if he so
> desires.
>
>
> 73 Tom

Paranoid?

Go to your cell owner's manual and read the WARNING section.
--
(ken)

IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
http://www.zyworld.com/maryland/amazing.JPG

To respond to this place (-) between x and d.

Because e-mail can be altered electronically,
the integrity of this communication cannot be guaranteed.

4385. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 22:52:30 UTC
From: Nick Dunklee <SCSIGuy@onemain.com>
Message-ID: <B6615BDB.4B52%SCSIGuy@onemain.com>
Source record: 174483
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna

Hehe, of course, I was on a rant, heh. And what about laptops? Many don't have much shielding. (Although mine has large sheets of aluminum and such underneath for heat disspiation/shielding.)

I was just exaggerating a bit...people like distorting things to make them sound bad. Yes, a cell phone could harm a person, if it had a transceiver in it that required it's own power generator.

I'll leave my odds of getting harmed from cell fones in that same arena that contains the probability that I may get hit by a flying moo cow. (Watch a tornado hit me in the middle of winter ;))

Nick

> From: rclark@epicedge.com (Richard Clark)
> Organization: Posted via Supernews, http://www.supernews.com
> Newsgroups: alt.cellular.sprintpcs,rec.radio.amateur.antenna
> Date: Sat, 16 Dec 2000 17:39:02 GMT
> Subject: Re: Sprint PCS antennas on schools!
>
> On Fri, 15 Dec 2000 14:57:30 -0500, Nick Dunklee <SCSIGuy@onemain.com>
> wrote:
>
>> Oh! And how about all you who stay away from the cell phones AND the
>> cordless phones, you must be using a computer to type messages to the
>> newsgroup! What about the dangers of those 1 GHz processors? How come
>> nobody's raised radiation issues about them? Oh, you may say "it's not
>> enough radiation, and it's in a metal box anyway," but that'd be using the
>> same excuse that cellular users work.
>>
>
> Hi Nick,
>
> What you cite are reasons not excuses. CPUs are in metal boxes or in
> FCC compliant designs that insure reduced emissions (telephones are in
> plastic boxes optimized to emit - obviously). If there is any danger
> it comes from fields coming from the computer boob tube - however
> these frequencies (the base frequencies) are orders of magnitude (
> 1/10000th) below the lowest one you cite. And yes, frequency matters.
> Higher frequency suggests shorter wavelength, a standing man is nearly
> 1/4 wavelength tall at 10M and is in danger of being a dummy load to
> near fields. Higher frequencies lead to the obvious where fingers
> become meaningfully sized in relation to wavelength.
>

> The comparison between cellular and cordless phones omits discussion
> of the range of either, and hence the power emitted to perform the
> function. If one wishes to weigh risks, here too less power leads to
> the obvious conclusion that there is correspondingly less risk of
> injury.
>
> 73's
> Richard Clark, KB7QHC

4386. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:09:17 UTC
From: matjake@aol.comns
Message-ID: <20001216180917.03073.00005541@ng-fx1.aol.com>
Source record: 174485

Hi Bill,

As a lineman for CATV company. My knowledge has been moisture enters through the connectors. Failure to use silicone, bi-seal tape, shink boots around ETE and amplifier housings. This corrodes the center conductor, whereby different freqs. are effected (skin effect etc.). This is for hardline and is the same for subscriber drops. In a subscriber drop once water has a chance to get in the braid it acts like a wick and can draw water like a pipe if it has been up long enough.
Bill losses will always be greater the higher the frequency that is being utilized.
If you want to keep water out, Always use a silicone based non-hardening compound. Coat lightly on the threads of gorund block, splitter etc., never ever put silicone on the inside of the fitting as this compound is somewhat of an insulator and you could effectively null all signals out, by getting some on the center conductor. Never ever use RTV since it hardens and you may one day need to get to the fitting.
Keep splices to a minimum the less the better. If you have to always use bi-seal material to cover the splice, at the least use electrical tape- I always found electrical tape just allows the water to be held in to corrode the splice but if you use a silicone compound on the threads of the barrel connector and on the fittings themselves it should work ok.
Bill I don't know what climate you have to work with or if you are working with hardline or RG-11 or 6 but if you have any more questions feel free to email. I just gave a few suggestions off the top of my head but I could give more specific answers if you give me a better idea of what you are working with in the way of equipment etc.

Regards,

To reply remove the ns from address,

4387. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:11:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A3BF68C.AA35FFD6@eznec.com>
Source record: 174484

I recently came across some information indicating that 50 and 75 ohm BNC connectors have the same pin sizes. The different impedance is effected by removing some dielectric around the center pin in the 75 ohm version rather than changing the pin diameter. So they'll mate without damage. I don't recall where I saw this, but think it was in some literature from a connector manufacturer, and it sounded like this is standard for BNCs. Is this true only for BNC and not for N connectors? Or do only some manufacturers do it this way?

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Sat, 16 Dec 2000 22:05:37 +0000, Ian Jackson
> <ianjackson@g3ohx.demon.co.uk> wrote:
>
> >
> >IMPORTANT NOTE #2: NEVER, NEVER connect a 50 ohm male N to a 75 ohm
> >female N. You will end up with a SERIOUSLY damaged female. If I had my
> >way, this would deserve capital punishment for a second offence!!!
> >
> >73,
> >Ian.
> >
>
> Hi Ian,
>
> I've also observed this to be a problem with HV BNC connectors
> connecting into standard BNC sockets. Here the problem is with
> length.
>
> 73's
> Richard Clark, KB7QHC

4388. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:15:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A3BF79F.A0990E44@eznec.com>
Source record: 174487

It would be really interesting to see a plot of attenuation vs frequency over a fairly wide range, and one from a piece of new cable. This might give some clues as to whether the loss is due to corrosion of the conductors or contamination of the dielectric, and knowing that might help point to the mechanism.

Roy Lewallen, W7EL

Wrightsaerials wrote:
>
> Working on communal TV systems I often find 75ohm coax that loses five or more
> times more signal than it should. The losses are always greater at higher
> frequencies. The problem usually arises when the cable is old, and sometimes I
> have been able to track a gradual increase in loss over a period of years.
> Sometimes the explanation is obvious â□□ the cable has taken up large amounts
> of moisture via unsealed ends. But often there is no obvious moisture in the
> cable. I wonder if cable takes up moisture through the outer sheath, because
> sometimes the dielectric is slightly discoloured. Any thoughts, ideas,
> suggestions?
> Bill Wright

4389. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:22:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <91gtd4rol1@slb6.atl.mindspring.net>
Source record: 174488

Tom:

You mean Chip was claiming that Mother Nature's trees are fractals and thus intruding upon Chip's intellectual property!

Heck, now Mother Nature needs to find herself a counsellor as soon as possible. If she lives in heaven with the angels where will she find an attorney?

Mother Nature and trees! Is no one safe from Chip's intellectual property claims?

Next thing you know poor old Leonardo Da Vinci will lose his 1524 Italian patent on the parachute due to one of Chips law suits.

Peter K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message news:3a3bdb2d.36914397@news.akorn.net...
> On Sat, 16 Dec 2000 10:10:28 -0500, "David J. Windisch"
> <davidw@copper.net> wrote:
>
> >The purveyor of this theory hasn't imbibed quite enough of the cup of
> >Socrates.
> >--
> >
> >73, Dave, K3BHJ
>
> It isn't just CBers who are silly at times.
>
> N1IR wrote an article in 73 Magazine about using atree for an antenna,
> because its "fractal shape" gave it desirable radiating properties.
>
> 73 Tom

4390. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:48:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <2Wfv5gAS9$O6Ew3Z@ifwtech.plus.net>
Source record: 174490

Richard Clark wrote:
>On Sat, 16 Dec 2000 22:05:37 +0000, Ian Jackson
><ianjackson@g3ohx.demon.co.uk> wrote:
>
>>
>>IMPORTANT NOTE #2: NEVER, NEVER connect a 50 ohm male N to a 75 ohm
>>female N. You will end up with a SERIOUSLY damaged female. If I had my
>>way, this would deserve capital punishment for a second offence!!!
>>
>>73,
>>Ian.
>>
>
>Hi Ian,
>
>I've also observed this to be a problem with HV BNC connectors
>connecting into standard BNC sockets. Here the problem is with
>length.

Since the inner on those MHV connectors mates before the outer shield,
the punishment could indeed be capital.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4391. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:55:02 UTC
From: Nick Dunklee <SCSIGuy@onemain.com>
Message-ID: <B6616A98.4B55%SCSIGuy@onemain.com>
Source record: 174489
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Mine said "don't take this phone orally" Hmm....

Funny...the "warning" section says that it meets all federal guidelines, and not to export the phone (in my Moto's manual). It also says not to use it around blast sites as your phone could set off explosives...hrm...that worries me...not.

My Samsung SCH-2000 PCS fone's manual says...Hrm, the exact same thing....funny...

Scares me to death really...er...well...not really...

Nick

> From: "Ken M." <poboxdc@ix.netcom.com>
> Organization: http://www.MillenniumAdventures.com
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular
> Date: Sat, 16 Dec 2000 17:16:47 -0500
> Subject: Re: Sprint PCS antennas on schools!
>
> Tom W8JI wrote:
>>
>>
>> Hi Bill,
>>
>> Ken has a perfect right to be paranoid about cell phones if he so
>> desires.
>>
>>
>> 73 Tom
>
> Paranoid?
>
> Go to your cell owner's manual and read the WARNING section.
> --
> (ken)
>
> IF YOU VOTED -- DON'T FORGET THIS PHOTO IMAGE!:
> http://www.zyworld.com/maryland/amazing.JPG
> --
>
> To respond to this place (-) between x and d.
>
>

> Because e-mail can be altered electronically,
> the integrity of this communication cannot be guaranteed.

4392. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:55:56 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <MJ5RetAMEAP6Ewo4@ifwtech.plus.net>
Source record: 174492

Roy Lewallen wrote:
>I recently came across some information indicating that 50 and 75 ohm
>BNC connectors have the same pin sizes. The different impedance is
>effected by removing some dielectric around the center pin in the 75 ohm
>version rather than changing the pin diameter. So they'll mate without
>damage. I don't recall where I saw this, but think it was in some
>literature from a connector manufacturer, and it sounded like this is
>standard for BNCs. Is this true only for BNC and not for N connectors?
>Or do only some manufacturers do it this way?

The pin diameter is the same, in the parallel-sided part, but the end tends to be more pointed in the 75 ohm plugs. This means that a perfectly assembled 75 ohm plug may not mate reliably with a 50 ohm socket. With typical off-center amateur assembly, there's no problem.

>Richard Clark wrote:
>>
>> On Sat, 16 Dec 2000 22:05:37 +0000, Ian Jackson
>> <ianjackson@g3ohx.demon.co.uk> wrote:
>>
>> >
>> >IMPORTANT NOTE #2: NEVER, NEVER connect a 50 ohm male N to a 75 ohm
>> >female N. You will end up with a SERIOUSLY damaged female. If I had my
>> >way, this would deserve capital punishment for a second offence!!!
>> >
>> >73,
>> >Ian.
>> >
>>
>> Hi Ian,
>>
>> I've also observed this to be a problem with HV BNC connectors
>> connecting into standard BNC sockets. Here the problem is with
>> length.

The MHV connector is an accident waiting to happen. Not only is it designed so that it can be forced into a BNC socket, but also the HV center pin mates before the grounding shield. The SHV connector is far safer because it cannot mate with anything else, both center pins are deeply recessed and the shield connects first.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4393. Re: *** F_U_C_K___C_H_R_I_S_T_M_A_S *** KmFA7TkSJ0

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-16 23:56:52 UTC
From: ron260@aol.com
Message-ID: <20001216185652.25881.00002264@ng-mf1.aol.com>
Source record: 174491

shut up stupid!

4394. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <t60o3tgq1d1idrhuoecrb72tuo860e2ru5@4ax.com>
Source record: 174493

On Sat, 16 Dec 2000 15:22:26 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>The U.S. Army tried those antennas, too. With like antennas on both ends
>of the path, the inverted-L`s, with a 45-foot top and a 35-foot
>downlead, produced 2 db less than dipoles only 7 feet above the earth
>(at 3 MHz).
>
>At 30 feet up, 1/2-wave dipoles produced 21 db more signal than at 7
>feet up. A sloper from 30 feet up sloping down to 5 feet up (the sloper
>was also 1/2-wavelength long) produced 9 db less signal than the dipole
>up 30 feet at both ends.

This whole thread is comparing apples and oranges. At the low frequencies mentioned (3 MHz) a very low dipole will work fine for short distances during the daytime, since the signal travels essentially straight up and down. If you were ragchewing with your buddies on 75 meters within a 100-200 mile radius at high noon, a dipole seven feet off the ground would be great. Working 80 meter DX at night, however, the same antenna would be a total waste of time.

That's why there is no "best" antenna. Gotta be more specific as to use.

w7ti

4395. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 00:14:09 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <d61o3tcvi51ph8lq5a3rourljktfhbeahf@4ax.com>
Source record: 174494

On Sat, 16 Dec 2000 19:33:29 GMT, k6mhe@arrl.net (Dan Richardson) wrote:

>>And download a free conversion program that will do it for you. This incredible
>>little program converts practically anything - not just metric/English - and is
>>totally free. Best bargain in town! Windows 32 bit only, sorry, (no Win 3.1).
>>
>>w7ti
>
>Tried to get it but couldn't get past the registration.. Got a null
>response after submitting register info.
>
>Danny, K6MHE

Hmmmm... works for me, but then I'm registered already. Try emailing the author
at: josh@joshmadison.com

w7ti

4396. Aircraft cables for US Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 00:49:04 UTC
From: castles@jps.net
Message-ID: <44U_5.1872$1%2.84342@sjc-read.news.verio.net>
Source record: 174495

I am reinstalling my self supporting tubular US Tower and want to replace the lifting cables that are on the winches. I have e-mailed US Tower and may be able to buy replacement cables from them.

Are any of you aware where I can buy 3/16" aircraft cable with one end finished with a thimble and crimp clamp? I need a 20 foot length and a 50 foot length.

Thanks, Don W6QEY

4397. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 00:50:48 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <igw8Oq2Cy6D7QZP6=fcb60L83iCO@4ax.com>
Source record: 174496

On Sat, 16 Dec 2000 23:55:56 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>The MHV connector is an accident waiting to happen. Not only is it
>designed so that it can be forced into a BNC socket, but also the HV
>center pin mates before the grounding shield.

Hi Ian,

In the Navy, we used to call these suicide adapters. Another risk was
found at our RTTY patch panels that used phone plugs to carry the
juice in the loop. Which end to disconnect first?

Neither could hold a candle to the AC Mains to aligator clip leads we
called the KillsMeQuick.

73's
Richard Clark, KB7QHC

4398. Eave Mount Article

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 01:28:51 UTC
From: Grape <nomail@please.com>
Message-ID: <nFU_5.65593$I5.1604881@news1.rdc1.sdca.home.com>
Source record: 174497

After wracking my brain for a place to mount my new Diamond F22A 2m vertical, I designed an eave mount that worked out very well. If you have exposed rafters on your eave (pretty common here in San Diego), this might be a good alternative for you too. It is so much nicer than having to mount a push-up type mast, etc. The article is at http://www.eham.net/articles/1612

4399. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:07:08 UTC
From: richardharrison@webtv.net
Message-ID: <10539-3A3C1FCC-11@storefull-116.iap.bryant.webtv.net>
Source record: 174498

Bill Turner, W7TI wrote:
"At the low frequencies mentioned (3 MHz) a very low dipole will work fine for short distance during the daytime, since the signal travels essentially straight up and down."

Behold the radiation pattern of the dipole. It forms a doughnut around the wire. There are nulls off the ends of the wire. The pattern reflects at the surface of the earth, but except for cancellation of radiation towards the horizon, there is plenty of radiation over a wide range of elevation angles. It does well towards the zenith, at most antenna heights, but it also does well at much lower elevation angles. How low an angle depends on how high the antenna. Plenty of power can be radiated at a low enough angle to cover great distances in just one hop.

From the War Department`s "ELectrical Communication Systems Engineering":
"Figure 6-130 gives some quantitative comparisons for several types of antennas tested over a 75-mile course in southern Florida using sky-wave transmission at 3 mc. Data for this table were obtained by comparison of pairs of antennas on dfferent nights, (Note: NIGHTS) togeher with cross comparisons made in order to reduce data on all the antennas to a common basis."---
"Figure 6-130. Sky-wave transmission between like antennas, 75 miles, 3 megacycles, F2-layer."

These tests were night tests when attenuation at 3 MHz is lower than during the day. Propagation near and far is usually better during the night.

The point was made by Terman. Vertical antennas can radiate well towards the horizon. Horizontal antennas radiate well at angles other than towards the horizon, and radiate well at higher angles even when the antenna is low. The army proved Terman`s story with tests.

As I previously said, the world`s shortwave broadcasters would be using vertical antennas for distant targets if they were economical and effective by comparison with horizontal antennas. They rarely use vertical antennas for shortwave broadcasting.

Best regards, Richard Harrison, KB5WZI

4400. Re: Aircraft cables for US Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:15:44 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A3C21E3.804A7AA2@worldnet.att.net>
Source record: 174499

Don:
Many of the larger hardware stores and industrial supply houses carry cable. If you live near the ocean I would recommend stainless steel cable although it is harder to find. You can buy crimp ferrels and make your own loops. You just insert the cable into them and smash them down with a hammer.

Good luck Dick K7RNZ

Donald Campbell wrote:

> I am reinstalling my self supporting tubular US Tower and want to replace the
> lifting cables that are on the winches. I have e-mailed US Tower and may be
> able to buy replacement cables from them.
>
> Are any of you aware where I can buy 3/16" aircraft cable with one end finished
> with a thimble and crimp clamp? I need a 20 foot length and a 50 foot length.
>
> Thanks, Don W6QEY

4401. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:32:33 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3C25C1.5985@wt.net>
Source record: 174501

Reg Edwards wrote:
>
> Eureka ! - throw up an inverted-L or a sloper. Get the
> best of both worlds.
> ----
> Reg

Thats what I did on 160. I have a dipole and inv L both. The inv L only 40-45 feet tall, but still beats the dipole at any great distance. But the dipole much better around the state. Usually anyway.. MK
--
http://web.wt.net/~nm5k

4402. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:35:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3C2661.7781@wt.net>
Source record: 174500

BarryG wrote:
>
> My fairly extensive experience from a NE QTH is that a 50ft dipole will beat
> a full sized vertical with elevated radials about 90% of the time into
> europe on 80m (I have both and A/B them often).
>
> Many of the dx stations you readily hear on the low bands are running a kw,
> and remember that you're 10dB down on their end if you're running 100watts.
> Add QRN and european QRM into the mix, and they might not be able to pull
> you out.
>
> GL/73,
> Barry N1EU

I'm curious, how high is the vertical and how many radials? MK
--
http://web.wt.net/~nm5k

4403. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:48:43 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <30ao3toqf9lc934ietusukiidpgjijenmt@4ax.com>
Source record: 174502

On Sat, 16 Dec 2000 20:07:08 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>As I previously said, the world`s shortwave broadcasters would be using
>vertical antennas for distant targets if they were economical and
>effective by comparison with horizontal antennas. They rarely use
>vertical antennas for shortwave broadcasting.

A key word there, I believe, is "economical". A good vertical with its attendant radial system could easily be more expensive than the usual horizontal dipole. Many hams believe that verticals are simple, take up little space and are desirable because they consist of only one element. When all the factors are accounted for, horizontal antennas are often less expensive and better performers than verticals, dollar for dollar.

One exception to this is AM broadcasting, where verticals are nearly universal. This is done for one reason: They want groundwave coverage, which horizontal polarization does very poorly.

w7ti

4404. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:49:00 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <wQV_5.38369$M5.1446687@news1.frmt1.sfba.home.com>
Source record: 174503

The trouble with the horizontal vs vertical question, is there are too many extraneous variables,
especially with verticals. From my QTH in Silicon Valley, a full sized 80M dipole at 55 feet was
virtually interchangeable with a full size (1/4 wave) vertical (ground mounted) with 2 elevated 1/4 wave radials.
Running a KW, I couldn't even get a QRZ out of JA stations calling CQ contest. This QTH
is near a rock quarry, and probably has lousy ground conductivity. It is also hemmed in by mountains.

From my weekend QTH in the Sacramento river delta area, I also have a 1/4 wave vertical, but
I easily work JA's with 10 watts and even work 75 meter long path QSO's to Europe. The
difference is that the ground is high conductivity (15mS) and I have 360 radials 1 wavelength
long on this vertical. It is also out in the clear away from bldgs. So the answer is probably that
under ideal conditions the vertical is better, but under typical conditions, the dipole is as good or better.

Rick Karlquist N6RK

Tom W8JI <2w8ji@contesting.com> wrote in message
news:3a3bda34.36664922@news.akorn.net...
> On Sat, 16 Dec 2000 00:25:50 -0600, 'Doc <w5lz@oio.net> wrote:
>
> >John,
> > There is no single antenna that will be the 'best' for
> >DX'ing on 80 meters. By the very nature of propagation,
> >at times, a vertical will perform 'better' than some type
> >of horizontal antenna, and vis-a-versa. On the average,
> >the old saying about having lots of metal, high in the air,
> >is still true...
> > 'Doc
>
> Doc's statement is pretty much in agreement with what I have seen.
>
> To Europe, a 35 foot tall top-loaded vertical with 60 radials pretty
> much always tied a 100 foot high dipole for me at my last QTH.
>
> Not so at closer diastances, and not every night at longer distances.
>
> Most people, if they can have them, have both. Listening on the low

> end of 80, some of the best European and Asian signals come from
> verticals.
>
> 73 Tom

4405. Re: Aircraft cables for US Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:50:26 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <geao3tc3uchgba0f9ksu1lan6eg5nnpm8d@4ax.com>
Source record: 174504

On Sun, 17 Dec 2000 00:49:04 GMT, castles@jps.net (Donald Campbell) wrote:

>Are any of you aware where I can buy 3/16" aircraft cable with one end finished
>with a thimble and crimp clamp? I need a 20 foot length and a 50 foot length.

A sailboat rigging shop can do this for you.

w7ti

4406. Re: Aircraft cables for US Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:52:42 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <_TV_5.38410$M5.1446731@news1.frmt1.sfba.home.com>
Source record: 174505

I talked to the president of US tower recently, and asked him about tube towers, and he said
they will be happy to sell you a set of replacement cables assuming they can identify the model
of tower OK. He will even support Wilson and Tristao towers where possible. One thing though,
they can't give you any written documentation due to liability problems. Don't forget to check
your pulleys. They can help you with those too if they need replacement.

Rick Karlquist N6RK

Donald Campbell <castles@jps.net> wrote in message
news:44U_5.1872$1%2.84342@sjc-read.news.verio.net...
> I am reinstalling my self supporting tubular US Tower and want to replace the
> lifting cables that are on the winches. I have e-mailed US Tower and may be
> able to buy replacement cables from them.
>
> Are any of you aware where I can buy 3/16" aircraft cable with one end finished
> with a thimble and crimp clamp? I need a 20 foot length and a 50 foot length.
>
> Thanks, Don W6QEY
>

4407. Re: Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 02:53:19 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3C2A9F.66D0@wt.net>
Source record: 174506

Fred Hambrecht wrote:

> >
> >
> > On the plane I was goint to use a pair of 1/4 wave dipole's at 90
> > degrees to each other, how can I combine these to provide a full
> > hemisphere of coverage?

Run a 90 degree phase line between the two. You will then have a
turnstile. MK

--
http://web.wt.net/~nm5k

4408. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 03:07:49 UTC
From: Courtney <vein@nospamfront242.net>
Message-ID: <MPG.14a5f810cb1b2af49896ef@news.chi.ameritech.net>
Source record: 174507
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

In article <B6616A98.4B55%SCSIGuy@onemain.com>, SCSIGuy@onemain.com
says...
> Mine said "don't take this phone orally" Hmm....

Considering I've seen everything from *oral* contraceptives to *nasal*
inhalents telling you not to put it in your eyes/ass/etc I'm not really
surprised by that...

> Funny...the "warning" section says that it meets all federal guidelines, and
> not to export the phone (in my Moto's manual). It also says not to use it
> around blast sites as your phone could set off explosives...hrm...that
> worries me...not.

This message (actually telling you to turn OFF your phone) is also
usually on a highway costruction sign when you go through blast zones.
Travelling (by car) on i40 in the mountains and up 75 through either
Kentucky or Tenn. (can't remember which at the moment) it was extremely
common when any road work was going on to see these signs.

I've never turned mine off going through these areas, and so far, so
good... I'd rather leave the phone on and take my chances than search
for the phone in my purse and crash while dealing with heavy
construction traffic and idiots who slow down to see what is going on.

Courtney

4409. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 03:08:07 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <76W_5.1199$65.1155668@newsfeed1.thebiz.net>
Source record: 174508

1/4 wave (66ft) with feedpoint and radials 10ft off the ground (4 @ 1/4 wave radials).

Mark Keith <nm5k@wt.net> wrote in message news:3A3C2661.7781@wt.net...
> BarryG wrote:
> >
> > My fairly extensive experience from a NE QTH is that a 50ft dipole will beat
> > a full sized vertical with elevated radials about 90% of the time into
> > europe on 80m (I have both and A/B them often).
> >
> > Many of the dx stations you readily hear on the low bands are running a kw,
> > and remember that you're 10dB down on their end if you're running 100watts.
> > Add QRN and european QRM into the mix, and they might not be able to pull
> > you out.
> >
> > GL/73,
> > Barry N1EU
>
> I'm curious, how high is the vertical and how many radials? MK
> --
> http://web.wt.net/~nm5k

4410. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 03:10:12 UTC
From: rsmits@home.com
Message-ID: <3a3c2eb7$2$efzvgf$mr2ice@news>
Source record: 174509

In <3a3bd7a1.36005727@news.akorn.net>, on 12/16/2000
at 09:10 PM, 2w8ji@contesting.com (Tom W8JI) said:

>Like many things in life, the real problem is with the female.

>The male end of the UHF connector set is almost perfect. There is no bump
>there.

>At the female-end, a simple typical SO-239 has an impedance of 30 to 40
>ohms. However, that "bump" is only 1/2 inch long, so it will NOT caude a
>problem unless you have a lot of them spaced the wrong distance apart at
>frequencies below 150 MHz or so.

>Even at 450 MHz, the effect is often minor.

>The pro's outweight the con's in my book, since a conventional good
>quality UHF connector set will handle much higher line SWR and power than
>a N connector. A regular UHF connector is much easier to assemble also.

>N connectors are fine below 1500 watts with low SWR, and constant
>impedance connectors are needed for critical measurements or UHF and
>higher work, but they are not needed below 200 MHz or so in almost any
>application.

>Barrel connectors are a slightly worse problem since the length is
>longer. The general rule is if you keep the length of slight impedance
>bumps below 1 electrical degree, they won't bother almost anything you
>ever do.

>That means on 160 meters you could have 1.5 FEET of total connector
>"bump" area before before you could measure any difference. On six
>meters, that would be only one connector....but remember this is the
>WORSE situation where you could normally measure any change at all.

It also depends on what you mean by "barrel" connectors. I have known both
the short uhf female to uhf female connectors and the uhf female-uhf
female bulkhead connectors described this way. (The bulkhead connectors
are about 2 inches long (5cm) whereas the others are about 3/4 of an inch
(2 cm) long. The bulkhead connectors have horrible effects even at VHF
frequencies and shouldn't ever be used for anything above 30 MHz in my
view.

Bob, VE7HS

Speak softly and carry a cellular phone.

--
---

rsmits@home.com

4411. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 03:34:06 UTC
From: richardharrison@webtv.net
Message-ID: <25681-3A3C342E-10@storefull-117.iap.bryant.webtv.net>
Source record: 174510

The exchange with Reg about vertical versus horizontal antennas reminds me of the old story of bird collisions damaging the windscreens of British aircraft.

The British asked NASA about a rumored NASA chicken corpse cannon used to test windscreens.

It exists and the Brits are welcome to borrow the cannon.

The Brits reported back that the chicken corpse completely removed the windscreen, the pilot headrest, and penetrated the bulkhead behind the cockpit. Was some adjustment necessary?

NASA replied with three words: "Thaw the chicken."

Best regards, Richard Harrison, KB5WZI

4412. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 04:11:59 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A3C3D0F.9050107@hiwaay.net>
Source record: 174511

Bob- I have some so-called 'barrel' connectors of 4 inches, and have seen longer. They are used to go through walls and window frames, as well as bulkheads. I wonder at your statement of 'horrible effects'. Have you had direct experience with them at ham frequencies such as 50 and 144 mHz? What level of attenuation did they cause?

This is not an idle question. I currently have a 3" barrel feeding the line for a tri-bander through a window frame, and am about to add one for a 6M yagi. It, and a 2M line now run through 1" PVC.

Bill-W4BSG

rsmits@home.com wrote:

>
>
> It also depends on what you mean by "barrel" connectors. I have known both
> the short uhf female to uhf female connectors and the uhf female-uhf
> female bulkhead connectors described this way. (The bulkhead connectors
> are about 2 inches long (5cm) whereas the others are about 3/4 of an inch
> (2 cm) long. The bulkhead connectors have horrible effects even at VHF
> frequencies and shouldn't ever be used for anything above 30 MHz in my
> view.
>
> Bob, VE7HS
>

4413. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 04:35:03 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A3C4277.1040109@hiwaay.net>
Source record: 174512

THe 'convert' program is excellent, and, when kept on the desktop as a shortcut, can be used easily. However, it does not (at least the version I have) give sizes for number designated stuff like '#10' and '6-32'. If Tomek needs these, he will have to go elsewhere.

The #10 wire size is 2.588mm diameter- the other scales are not used for copper wire, so dont count. The #6 machine screw size is nominally 0.138 inches in diameter, which is 3.505mm. the '-32' is threads per inch and is about .79 threads per mm.

Hope this helps- Bill-W4BSG

Bill Turner wrote:

> On Sat, 16 Dec 2000 10:32:41 +0100, "Python" <python@interia.pl> wrote:
>
>
>> Hello,
>> I'd like to built an simple antenna but have following sentence:
>>
>> "Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
>> formed from # 10 copper wire "
>>
>> Could you translate it for me into metric system?
>>
>> 73!
>> Tomek
>> sp8ncg
>>
>
> ____
>
> Better yet, go to:
>
> www.joshmadison.com/software
>
> And download a free conversion program that will do it for you. This incredible
> little program converts practically anything - not just metric/English - and is
> totally free. Best bargain in town! Windows 32 bit only, sorry, (no Win 3.1).
>
> w7ti

4414. Re: MFJ-914 Auto-tuner Range Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 04:49:48 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3C45EB.9CE877A5@dvol.com>
Source record: 174513

Reg Edwards wrote:

> Smashing ! Indispensible ! Been using 'em for years !
>
> All you need is a 300 pF capacitor, a selection of used
> toilet roll tubes, some enamelled 18g wire, half-dozen
> crocodile clips and an empty size 10 shoe box to hide the
> bits in when not in use.

>
In these parts we nuke the tubes in the microwave thing for five minutes
or so to drive out the H2O then quick dunk 'em in spar varnish or epoxy
or whatever is handy before we wind. Seem to be a bit more stable
formers mechanically & electrically.
>
w3rv

4415. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 05:24:20 UTC
From: Keith Jack <kjack@video-demystified.com>
Message-ID: <91hif3gjn1@slb6.atl.mindspring.net>
Source record: 174514
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

> I've never turned mine off going through these areas, and so far, so
> good... I'd rather leave the phone on and take my chances than search
> for the phone in my purse and crash while dealing with heavy
> construction traffic and idiots who slow down to see what is going on.

Actually, you're not the one taking the chance -- it's the workers
near the explosives... :-)

4416. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 05:26:05 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A3C4E6D.1978F95@dvol.com>
Source record: 174515

Python wrote:

> Hello,
> I'd like to built an simple antenna but have following sentence:
>
> "Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
> formed from # 10 copper wire "
>
> Could you translate it for me into metric system?

>
One U.S. inch = 25.400mm exactly.
>
Bare copper U.S. #10 wire diameter is 0.1019 inches = 2.565mm
>
The major diameter of a a U.S. 6-32 screw is 0.138 inches and the pitch is 32
threads per inch. The exact conversion is an M3.5 x 0.79 screw. Any M4 will
obviously work OK.
>
See http://members.execulink.com/~pjones/ for the best units converter out
there.
>

> 73!
> Tomek
> sp8ncg

>
Good to see Poland here.
>
w3rv

4417. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 05:35:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91hjb6$h5h$0@208.206.142.77>
Source record: 174516

Richard Harrison wrote:
>
> Bill Turner, W7TI wrote:
> "At the low frequencies mentioned (3 MHz) a very low dipole will work
> fine for short distance during the daytime, since the signal travels
> essentially straight up and down."
>
> Behold the radiation pattern of the dipole. It forms a doughnut around
> the wire. There are nulls off the ends of the wire. The pattern reflects
> at the surface of the earth, but except for cancellation of radiation
> towards the horizon, there is plenty of radiation over a wide range of
> elevation angles. It does well towards the zenith, at most antenna
> heights, but it also does well at much lower elevation angles. How low
> an angle depends on how high the antenna. Plenty of power can be
> radiated at a low enough angle to cover great distances in just one hop.
>
> From the War Department`s "ELectrical Communication Systems
> Engineering":
> "Figure 6-130 gives some quantitative comparisons for several types of
> antennas tested over a 75-mile course in southern Florida using sky-wave
> transmission at 3 mc. Data for this table were obtained by comparison of
> pairs of antennas on dfferent nights, (Note: NIGHTS) togeher with cross
> comparisons made in order to reduce data on all the antennas to a common
> basis."---
> "Figure 6-130. Sky-wave transmission between like antennas, 75 miles, 3
> megacycles, F2-layer."
>
> These tests were night tests when attenuation at 3 MHz is lower than
> during the day. Propagation near and far is usually better during the
> night.
>
> The point was made by Terman. Vertical antennas can radiate well towards
> the horizon. Horizontal antennas radiate well at angles other than
> towards the horizon, and radiate well at higher angles even when the
> antenna is low. The army proved Terman`s story with tests.
>
> As I previously said, the world`s shortwave broadcasters would be using
> vertical antennas for distant targets if they were economical and
> effective by comparison with horizontal antennas. They rarely use
> vertical antennas for shortwave broadcasting.

That confirms my experience with low dipoles and random wires over ~45
years. I certainly wouldn't argue that there is not a diminished low
angle component at low heights but it still can be very effective for

distance communications.

Dick

> Best regards, Richard Harrison, KB5WZI

4418. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 06:12:56 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <91hlls$4lm$1@slb6.atl.mindspring.net>
Source record: 174517
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

The danger is that an inadvertent transmission from your cell phone will set off the explosives. So you would rather take the chance of killing people than be bothered turning that thing off? What a fine human being.
"Courtney" <vein@nospamfront242.net> wrote in message > I've never turned mine off going through these areas, and so far, so
> good... I'd rather leave the phone on and take my chances than search
> for the phone in my purse and crash while dealing with heavy
> construction traffic and idiots who slow down to see what is going on.
>
>
>
> Courtney
>

4419. Re: Using 2 paralell 50ohm coax's instead of 1 for 25

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 06:55:17 UTC
From: w1lus <w1lus@att.net>
Message-ID: <3A3C626F.9E7E55D@att.net>
Source record: 174518
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Yes you can parallel two 50 Ohm coax cables to get an effective 25 Ohm cable. For one work project we needed a ten Ohm cable so we used five 50 Ohm cables in parallel. It worked great.

73
Bruce

Ash wrote:

> This isn't really an amateur radio question but almost :) ,
> at work we have a standard industrial rf generator for 13.56MHz,
> operates at powers from 5W to ~800W.
> This macine produces a gas plasma inside a vacuum chamber.
> This plasma is closer to 25ohms and the manual recommends using 25ohm
> cabling instead of 50.
> At this point we have a little mismach resulting in some reflected
> power.
> Someone suggested using two paralell 50ohm cables but I am somewhat
> sceptical.
> Still, it's pretty low frequency (not exactly microwave :) and the cable
> isn't taller than
> say 50cm so cutting two identical lengths should pose no problem.
> But will it help? Connectors must still be 50ohms since that's all we
> can find,
> at least for RG-217 cable with hv-N connectors, and the plasma chamber
> is still matched
> for 50...
> The question is would we gain anything from doing this if it's even
> possible?
> Would appreciate a reply,
>
> Regards //Anders

4420. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 07:51:17 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3c6ffe.9837565@news.akorn.net>
Source record: 174369

On Sun, 17 Dec 2000 02:49:00 GMT, "Richard Karlquist" <rick@area.com>
wrote:

>The trouble with the horizontal vs vertical question, is there are too many
>extraneous variables,
>especially with verticals. From my QTH in Silicon Valley, a full sized 80M
>dipole at 55 feet was
>virtually interchangeable with a full size (1/4 wave) vertical (ground
>mounted) with 2 elevated 1/4 wave radials.
>Running a KW, I couldn't even get a QRZ out of JA stations calling CQ
>contest. This QTH
>is near a rock quarry, and probably has lousy ground conductivity. It is
>also hemmed in by mountains.

With two elevated radials, you had a six to ten dB attenuator on your
vertical.

It doesn't suprise me it didn't work.

73 Tom

4421. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 07:57:42 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3c7079.9960314@news.akorn.net>
Source record: 174370

On Sat, 16 Dec 2000 20:07:08 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Bill Turner, W7TI wrote:
>"At the low frequencies mentioned (3 MHz) a very low dipole will work
>fine for short distance during the daytime, since the signal travels
>essentially straight up and down."
>
>Behold the radiation pattern of the dipole. It forms a doughnut around
>the wire. There are nulls off the ends of the wire. The pattern reflects
>at the surface of the earth, but except for cancellation of radiation
>towards the horizon, there is plenty of radiation over a wide range of
>elevation angles. It does well towards the zenith, at most antenna
>heights, but it also does well at much lower elevation angles. How low
>an angle depends on how high the antenna. Plenty of power can be
>radiated at a low enough angle to cover great distances in just one hop.

Nonsense.

Wave angle at long distances can be a few degrees, and the low horizontal has almost no radiation at that angle.

I have both low and high dipoles, and GOOD verticals with real ground systems.

Despite being in Georgia, where conductivity is generally low, 1/4 wl verticals are about equal to 5/8th wl high dipole for longer distances at best.

Compared to a 1/4 wl high dipole, the vertical often beats it by several "S" units.

If you doubt this, open a copy of ON4UN's low band DXing book and look at what people are using. Virtually ALL sucessful low-band DXers use verticals unless they can get a dipole WAY up in the air. You will hardly find a sucessful 160 DXer using a dipole for that reason. Even as close as a few hundred miles on 160, the vertical will whip a low dipole.

73 Tom

4422. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 08:00:03 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3c71ea.10329715@news.akorn.net>
Source record: 174371

On Sat, 16 Dec 2000 20:32:33 -0600, Mark Keith <nm5k@wt.net> wrote:

>Reg Edwards wrote:
>>
>> Eureka ! - throw up an inverted-L or a sloper. Get the
>> best of both worlds.
>> ----
>> Reg
>
>Thats what I did on 160. I have a dipole and inv L both. The inv L only
>40-45 feet tall, but still beats the dipole at any great distance. But
>the dipole much better around the state. Usually anyway.. MK
>--
>http://web.wt.net/~nm5k

Your experience agrees with mine Mark, and with hundreds of other
operators who actually compare both antennas. Obviously the army books
are wrong, or the information does not apply to this case.

73 Tom

4423. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 08:01:00 UTC
From: Tyler Hunt <tyler_13@nospam.com>
Message-ID: <3A3C72BC.653CA10F@nospam.com>
Source record: 174375
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Tom W8JI wrote:
>

>
> Hi Bill,
>
> Ken has a perfect right to be paranoid about cell phones if he so
> desires.
>

Should we ignore all warnings because YOU say so? The authorities
in the UK are asking parents NOT to buy their children cell
phones due to possible radiation/health effects.

Safer Calls, or Selling Fear?
by Elisa Batista

To the dismay of the cellular phone industry, a company recently
introduced a device that it says would shield the human body
from the "biological effects" from cell phones.

EMX Corporation, a developer of technology that mitigates the
effects of exposure to electromagnetic fields, unveiled this
week a microchip that -- inserted in a cell phone's battery --
protects the caller's body cells from the electromagnetic fields
emitted by the cell phone.

The introduction of this new product underscores the ongoing question
as to whether radiation emitted from cell phones is a health hazard.
The cellular phone industry -- backed by the opinions of researchers
who don't believe it's so -- maintains that no evidence has been
provided to conclude that cell phone use has deleterious effects.

Similar to the "scrambling of a television signal," the EMF
BioChip emits a random electrical impulse or "noise" to overpower
the electromagnetic signal emitted by the cell phone and reduce
the effect on the caller's body.

EMX Corporation won't go so far as to say unequivocally that signals
emitted by cell phones could harm the body, but it touts research from
European and North American universities backing its technology.

Researchers from Catholic University of America, University of
Western Ontario, Columbia University, Aalborg University in
Denmark and the University of Washington in Seattle found that
cell phone EMF signals "bring the cells of the brain or other

parts of the body ... into a state of stress or shock," according to EMX Corporation founder and CEO Dr. Thomas Magnussen.

"You could see cells changing its (sic) metabolism and release stress proteins, which is a protective mechanism," Dr. Magnussen said. "So the cells are truly bothered by this electromagnetic radiation from cell phones."

However, members of the cellular phone industry and other scientists are incredulous, saying the amount of radioactive frequency signals emitted by cell phones is too weak to have any effect on the body.
****
This news clip is continued at:
http://www.wired.com/news/technology/0,1282,40660,00.html

4424. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 08:12:32 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3c72b5.10532879@news.akorn.net>
Source record: 174373

On Sat, 16 Dec 2000 15:33:15 -0500, "Peter Bertini"
<commquart@erols.com> wrote:

>could it be contamination of the braid from chemicals leaching out of the
>jacket?
>
>Pete

Hi Pete,

I called Belden about that, because a popular ham-myth is that
non-contaminating cables slowly increase loss from chemicals leaching
out of the jacket.

After transferring me to several people, I reached a "real" engineer.
She said non-contaminating means the cable jacket is stabilized and
remains flexible and intact over a period of years.

She said as far as she has ever seen ALL loss is due to corrosion of
the conductors, unless the cable is physically damaged. She also said
all corrosion was due to external contaminants getting into the cable,
with water being a major problem. She said they don't put "nasty
chemicals" inside the cable since the chemicals would have the
greatest effect when the cable was actually being produced and
everything was hot.

I recently measured some 20 year old RG-17 that I bought surplus. The
ends were well sealed, and the cable was stored indoors. The loss
actually measures slightly below factory spec for that cable, despite
warnings from people that the cable would be "junk" because of it's
age.

Everything I've been able to see or learn from reliable sources seems
to indicate moisture ingress in improperly sealed cables is the major
problem.

73 Tom

4425. Re: MFJ-914 Auto-tuner Range Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 08:12:59 UTC
From: Fenmahl Drenichmalschinstienne <frolbo@drivos.net>
Message-ID: <fA__5.569$s3.69148@news7.onvoy.net>
Source record: 174372

Found a used one for $25, bought it and now wouldn't part with it. My auto tuner had probs on 10 and 160 meters, but no more. This thing allows my auto tuner in the FT-990 to tune anything.

Dodge Johnson wrote in message ...
>Radio Works is offering an MFJ-914 Auto-tuner Range Extender
>
>Here's what they say:
>
> "Now you can use your automatic tuner with most of our antennas.
>Previously we recommended using only manual tuners. Now, with the
>MFJ-914, you can extend the range of auto-tuner by a factor of up to
>10:1. There is just one multi-position switch on the "914" that you set
>when you change bands. That's all there is to it. It's a wonderful
>solution to a real problem with auto-tuners. Best of all the price is
>only $57.95.
>
>Has anybody used one. Sounds like a terrific solution if it works well.
>
>Thanks,
>
>Dodge N3HUO

4426. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 08:22:38 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3c7608.11384152@news.akorn.net>
Source record: 174374
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Sat, 16 Dec 2000 22:12:56 -0800, "CW" <cmagers@sprynet.com> wrote:

>The danger is that an inadvertent transmission from your cell phone will set
>off the explosives. So you would rather take the chance of killing people
>than be bothered turning that thing off? What a fine human being.

I've made dozens of test transmissions over the years as I drive
through construction sites, and I've never been able to set off any
explosions! But I've heard that a cop in New Mexico had a stick of
dynamite in his pocket, and laid his dash-mounted RADAR gun in his lap
which then set the dynamite off.

I also leave my motor running while I fuel my car, so I can use my
cell phone. But I've heard of a cop in Arizona who exploded when he
aimed his dash-mouned RADAR at the gas nozzel he was using.

Have a nice Christmas!

73 Tom

4427. B'Nut Hf9VX Ground radial question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 09:40:19 UTC
From: ve7wvg@Rac.Ca
Message-ID: <3a3c88e4.129443270@news.crdva1.bc.wave.home.com>
Source record: 174376

I have heard many people talking about the amount of ground radials
they run with their 1/4 wave virticals, Butternuts in specific.

My question is, how do people go about making the connections of the
ground radials to the actual antenna's?

Is there a special coupler for the Butternut HF9VX or are people just
using a hose clamp or whatever kind of clamp they have lying around to
make the connection.

Any reponses would be useful

73

Derek (ve7wvg@rac.ca)

4428. Re: Aircraft cables for US Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 10:18:51 UTC
From: Bob <bob@atl.org>
Message-ID: <3A3C930B.248E@atl.org>
Source record: 174393

Visit your local rigging shop.
Bring the old cables.
They will be able to copy exactly.
Make sure they know what it is being used for.

4429. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 10:27:29 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <bQOEowARUJP6Ew6b@ifwtech.plus.net>
Source record: 174377

Brian Kelly wrote:
>
>Python wrote:
>
>> Hello,
>> I'd like to built an simple antenna but have following sentence:
>>
>> "Common 1" PVC couplings and 6-32 stainless hardware are used. The loops are
>> formed from # 10 copper wire "
>>
>> Could you translate it for me into metric system?
>
>>
>One U.S. inch = 25.400mm exactly.
>>
>Bare copper U.S. #10 wire diameter is 0.1019 inches = 2.565mm
>>
>The major diameter of a a U.S. 6-32 screw is 0.138 inches and the pitch is 32
>threads per inch. The exact conversion is an M3.5 x 0.79 screw. Any M4 will
>obviously work OK.

OK guys, now how about the difficult one: "Common 1 PVC couplings"?

Outside of the USA, we can look up #10 in tables, we can look up 6-32
and get to M4 as the closest equivalent (as Brian kindly did)... but
"Common 1" completely defeats us.

There is a serious point here, which the QST editors ought to have
picked up: the assumption that "everybody knows what these are".
You can't assume that any more, as I've found out from writing my
magazine column.

It isn't only an international issue, or one of metrication. Even in
your own country, there will be significant numbers of people who don't
know what that "Common something" component is - especially when the
reference is to some other non-electronic area... like plumbing.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4430. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 11:19:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91i8u1$3c8$1@neptunium.btinternet.com>
Source record: 174378

Yes Roy, attenuation versus frequency over a wide frequency range, 50 kHz to 100 Mhz, is the ONLY way of separating copper from dielectric losses.

Plot the results on graph paper as attenuation versus attenuation divided by squareroot of frequency. Accurate measurements are needed. Power-out versus power-in using your so-called SWR meter or Bird wattmeter is a waste of time.

Comparisons with manufacturers' spec figures mean nothing until a cable can already be seen to be dropping to pieces. Comparison with a known good length offers greater reliability.

However, strange as it may seem, measurement of attenuation is the most insensitive method of looking for defects in cables. Copper oxide has hardly any electrical skin effect on copper. It just reduces the effective diameter of the conductor. Loss noticeably increases only when the braid is severely corroded and is about to fall apart.

Cutting 95% of the wires in the braid, even all at one point, has no measureable effect on attenuation of a long length.

Polyethylene is a very inert substance. Underground and undersea polyethylene insulated telephone cables laid in the 1940's and 50's are still as good as new except where chewed by rats.

Faults are 99% due to physical damage to the sheath and at the terminations. And of course, due to defective workmanship at joints.

The foregoing remarks do NOT apply to the RG-58 junk sold to amateurs which has aluminised cigarette paper purporting to be an outer conductor.

Reg, G4FGQ

****

Roy Lewallen <w7el@eznec.com> wrote in message news:3A3BF79F.A0990E44@eznec.com...
> It would be really interesting to see a plot of attenuation vs frequency

> over a fairly wide range, and one from a piece of new
cable. This might
> give some clues as to whether the loss is due to corrosion
of the
> conductors or contamination of the dielectric, and knowing
that might
> help point to the mechanism.
>
> Roy Lewallen, W7EL
>
> Wrightsaerials wrote:
> >
> > Working on communal TV systems I often find 75ohm coax
that loses five or more
> > times more signal than it should. The losses are always
greater at higher
> > frequencies. The problem usually arises when the cable
is old, and sometimes I
> > have been able to track a gradual increase in loss over
a period of years.
> > Sometimes the explanation is obvious ?" the cable has
taken up large amounts
> > of moisture via unsealed ends. But often there is no
obvious moisture in the
> > cable. I wonder if cable takes up moisture through the
outer sheath, because
> > sometimes the dielectric is slightly discoloured. Any
thoughts, ideas,
> > suggestions?
> > Bill Wright

4431. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 11:43:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91i8u2$3c8$2@neptunium.btinternet.com>
Source record: 174379

After 5 minutes I stopped laughing long enough to send this
reply.

Regards from Reg, G4FGQ

****
Richard wrote -.
> The exchange with Reg about vertical versus horizontal
antennas reminds
> me of the old story of bird collisions damaging the
windscreens of
> British aircraft.
>
> The British asked NASA about a rumored NASA chicken corpse
cannon used
> to test windscreens.
>
> It exists and the Brits are welcome to borrow the cannon.
>
> The Brits reported back that the chicken corpse completely
removed the
> windscreen, the pilot headrest, and penetrated the
bulkhead behind the
> cockpit. Was some adjustment necessary?
>
> NASA replied with three words: "Thaw the chicken."
>

4432. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 12:00:54 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <3d3%5.65326$R77.4912613@nnrp4.clara.net>
Source record: 174381

Mat,

A few years ago I had to fit an antenna system with Andrews Heliax feeders to some equipment we had constructed . I seem to recall a warning in the 'assembly instructions' for the N type fittings regarding use of silicon grease on the threads. I cannot now remember the details but I guess there must have been a sound reason behind this. The grease is ok for use inside the plug or socket but must presumably have some detrimental effect when it gets between two connectors.
Can someone check this out - and if I'm right perhaps somebody can explain the reasoning behind it. After all it seems sensible to spread the stuff everywhere to try and waterproof joints but perhaps it has an insulating effect also?

73, John, G8OZH

MatJake <matjake@aol.comns> wrote in message
news:20001216180917.03073.00005541@ng-fx1.aol.com...
> Hi Bill,
>
> As a lineman for CATV company. My knowledge has been moisture enters
through
> the connectors. Failure to use silicone, bi-seal tape, shink boots around
ETE
> and amplifier housings. This corrodes the center conductor, whereby
different
> freqs. are effected (skin effect etc.). This is for hardline and is the
same
> for subscriber drops. In a subscriber drop once water has a chance to get
in
> the braid it acts like a wick and can draw water like a pipe if it has
been up
> long enough.
> Bill losses will always be greater the higher the frequency that is being
> utilized.
> If you want to keep water out, Always use a silicone based non-hardening
> compound. Coat lightly on the threads of gorund block, splitter etc.,
never
> ever put silicone on the inside of the fitting as this compound is
somewhat of
> an insulator and you could effectively null all signals out, by getting
some on
> the center conductor. Never ever use RTV since it hardens and you may one
day
> need to get to the fitting.

> Keep splices to a minimum the less the better. If you have to always use
> bi-seal material to cover the splice, at the least use electrical tape- I
> always found electrical tape just allows the water to be held in to
corrode the
> splice but if you use a silicone compound on the threads of the barrel
> connector and on the fittings themselves it should work ok.
> Bill I don't know what climate you have to work with or if you are working
with
> hardline or RG-11 or 6 but if you have any more questions feel free to
email. I
> just gave a few suggestions off the top of my head but I could give more
> specific answers if you give me a better idea of what you are working with
in
> the way of equipment etc.
>
> Regards,
>
> To reply remove the ns from address,

4433. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 12:20:09 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <3d3%5.65327$R77.4912680@nnrp4.clara.net>
Source record: 174382
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Tom,

At least the large wooden spoon you use for keeping this pot well stirred is intrinsically safe, although it's apparent size may be a physical hazard to the unwary user.....

73, John, G8OZH

Tom W8JI <2w8ji@contesting.com> wrote in message news:3a3c7608.11384152@news.akorn.net...
> On Sat, 16 Dec 2000 22:12:56 -0800, "CW" <cmagers@sprynet.com> wrote:
>
> >The danger is that an inadvertent transmission from your cell phone will set
> >off the explosives. So you would rather take the chance of killing people
> >than be bothered turning that thing off? What a fine human being.
>
> I've made dozens of test transmissions over the years as I drive
> through construction sites, and I've never been able to set off any
> explosions! But I've heard that a cop in New Mexico had a stick of
> dynamite in his pocket, and laid his dash-mounted RADAR gun in his lap
> which then set the dynamite off.
>
> I also leave my motor running while I fuel my car, so I can use my
> cell phone. But I've heard of a cop in Arizona who exploded when he
> aimed his dash-mouned RADAR at the gas nozzel he was using.
>
> Have a nice Christmas!
>
> 73 Tom

4434. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 13:25:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3CBEB9.3D4E@wt.net>
Source record: 174380

BarryG wrote:
>
> 1/4 wave (66ft) with feedpoint and radials 10ft off the ground (4 @ 1/4 wave
> radials).

Ok, that explains why the dipole is winning. At that low height, you have the same problem I do. Not really enough radials to make the antenna really work well. At that height about 60 or so would be close to 4 at a 1/2 wl up. Too bad you can't raise the antenna up to the 1/4 wl height. It would really sing. I used a full sized 40 gp at 36 ft with 4 radials and compared to a dipole at 36 ft. To dx the GP always won. Usually 2-4 s units depending on the distance. If only 1500 miles away, about 2 s units. If 5000 miles away, about 4 s units.
"no particular db gain claimed". I'm fairly sure if you raised yours to that height it would do the same. Or you could add more radials, but I know how that can go...Not always easy. A dipole does work dx ok. I've worked lots on 75m, but I would prefer a good vertical anyday if dx was the goal. But it needs lots of radials close to the ground, or be elevated preferably a 1/4 wl or more up and then you can get by with 4 radials."and have near 120 radial on the ground performance". MK

--
http://web.wt.net/~nm5k

4435. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 13:40:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3CC233.C09@wt.net>
Source record: 174383

Richard Harrison wrote:

>
> As I previously said, the world`s shortwave broadcasters would be using
> vertical antennas for distant targets if they were economical and
> effective by comparison with horizontal antennas. They rarely use
> vertical antennas for shortwave broadcasting.

I'm wondering if the need for gain effects that decision though. I'm not sure the latest and greatest in SW BC antennas, but I assume curtains, rhombics, etc, etc. Seems if they wanted to point to a certain area it may well be easier with the horizontal setups they use. Also as one pointed out, no radials required either. They would need quite an array of verticals to equal I would think. I've been thinking about something I've never tried. Which would be better to dx, a 3 el yagi horizontally mounted, or vertically mounted? Both at the same 1/2 wl height I might add. The noise reception might be a tad higher on the vertical yagi, but just as a hunch, I would wager the vertical yagi would slightly outdo the horizonatal yagi to far off dx. And the lower the freq the better the vertical yagi. Anyone ever tried this ? Am I all wet in this thinking? MK

--
http://web.wt.net/~nm5k

4436. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 13:46:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3CC3CA.2AE9@wt.net>
Source record: 174384

Richard Karlquist wrote:
>
> The trouble with the horizontal vs vertical question, is there are too many
> extraneous variables,
> especially with verticals. From my QTH in Silicon Valley, a full sized 80M
> dipole at 55 feet was
> virtually interchangeable with a full size (1/4 wave) vertical (ground
> mounted) with 2 elevated 1/4 wave radials.
> Running a KW, I couldn't even get a QRZ out of JA stations calling CQ
> contest. This QTH
> is near a rock quarry, and probably has lousy ground conductivity. It is
> also hemmed in by mountains.
>
> From my weekend QTH in the Sacramento river delta area, I also have a 1/4
> wave vertical, but
> I easily work JA's with 10 watts and even work 75 meter long path QSO's to
> Europe. The
> difference is that the ground is high conductivity (15mS) and I have 360
> radials 1 wavelength
> long on this vertical.

Bullseye. This goes along with my thoughts about the elevated 80m GP one other poster is using. If he added the radials to bring it up to an equivilant of 60-120 or so on the ground, he would see the same good results. At 1/8 wl up , you will need appx 60 radials to equal 120 on the ground. At 1/4 wl up, you need about 10-15, at 1/2 wl up only 4 is needed for the same appx performance. MK
--
http://web.wt.net/~nm5k

4437. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 13:54:02 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A3CC57A.9050501@hiwaay.net>
Source record: 174385

Ian- we have a translation problem here, and it isn't metrication, or even British-American English. The original said 'common 1" ', which should be read as ' ordinary one inch ' and refers to the coupling size for one inch pipe, made of PVC, in this case. Both 'common' and ' 1" ' refer to 'coupling'

Bill-W4BSG

Ian White, G3SEK wrote:

> OK guys, now how about the difficult one: "Common 1 PVC couplings"?
>
> Outside of the USA, we can look up #10 in tables, we can look up 6-32
> and get to M4 as the closest equivalent (as Brian kindly did)... but
> "Common 1" completely defeats us.
>
> There is a serious point here, which the QST editors ought to have
> picked up: the assumption that "everybody knows what these are".
> You can't assume that any more, as I've found out from writing my
> magazine column.
>
> It isn't only an international issue, or one of metrication. Even in
> your own country, there will be significant numbers of people who don't
> know what that "Common something" component is - especially when the
> reference is to some other non-electronic area... like plumbing.
>
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

4438. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 13:59:06 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <EE3%5.1525$N84.6993@newsfeed.slurp.net>
Source record: 174386

Richard wrote, in part:

Neither could hold a candle to the AC Mains to aligator clip leads we
called the KillsMeQuick.

73's
Richard Clark, KB7QHC

That's (more properly) a 'suicide cord'.
--

73, Dave, K3BHJ

4439. Re: B'Nut Hf9VX Ground radial question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:04:58 UTC
From: "Bob M." <kcxxxxxx@snet.net>
Message-ID: <ZJ3%5.7523$OD.3445270@typhoon.snet.net>
Source record: 174387

That's what I did with my HF9V. Ran 12 wires across the property, intersecting at the antenna. Cut them, stripped one inch, and slid the bare wire between a hose clamp and the ground section of the base of the antenna. Tightened the whole thing when I was done. I also buried an 8 foot copper-clad ground rod about 4 inches from the antenna and ran several wires between that and the antenna ground clamp. I want to change that connection to a single piece of something like 4 gauge wire, and use a separate clamp on the antenna. This will just make it appear a bit neater, IMHO.

BTW, I could not get 17m to tune no matter what I did. It really wants to resonate at about 20 MHz. Either I assembled the antenna wrong, or used the wrong coils in two spots. I also need to lower the antenna and adjust the 15, 10, and 6m bands. Other than that, the lower bands are working fine and within spec.

Bob WA1MIK

<ve7wvg@Rac.Ca> wrote in message
news:3a3c88e4.129443270@news.crdva1.bc.wave.home.com...
> I have heard many people talking about the amount of ground radials
> they run with their 1/4 wave virticals, Butternuts in specific.
>
> My question is, how do people go about making the connections of the
> ground radials to the actual antenna's?
>
> Is there a special coupler for the Butternut HF9VX or are people just
> using a hose clamp or whatever kind of clamp they have lying around to
> make the connection.
>
> Any reponses would be useful
>
> 73
>
> Derek (ve7wvg@rac.ca)

4440. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:16:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <mlabl5ACrMP6EwOq@ifwtech.plus.net>
Source record: 174388

Bill Aycock wrote:
>Ian- we have a translation problem here, and it isn't metrication, or
>even British-American English. The original said 'common 1" ', which
>should be read as ' ordinary one inch ' and refers to the coupling size
>for one inch pipe, made of PVC, in this case. Both 'common' and ' 1" '
>refer to 'coupling'
>
Duhh... you're absolutely right! If I'd read what Tomek had actually
written, he even had all the quotation marks in the right places.

We have those PVC tubes and couplers over here too, only they're called
"25mm".

(Qoutation from the early days of UK metrication: "Sorry, now we've gone
metric we don't sell 1-inch any more. Nearest we can do is 25.4
millimetres.")

>Ian White, G3SEK wrote:
>
>
>> OK guys, now how about the difficult one: "Common 1 PVC couplings"?
>>
>> Outside of the USA, we can look up #10 in tables, we can look up 6-32
>> and get to M4 as the closest equivalent (as Brian kindly did)... but
>> "Common 1" completely defeats us.
>>
>> There is a serious point here, which the QST editors ought to have
>> picked up: the assumption that "everybody knows what these are".
>> You can't assume that any more, as I've found out from writing my
>> magazine column.
>>
>> It isn't only an international issue, or one of metrication. Even in
>> your own country, there will be significant numbers of people who don't
>> know what that "Common something" component is - especially when the
>> reference is to some other non-electronic area... like plumbing.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4441. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:37:32 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <rc4%5.1214$65.1166913@newsfeed1.thebiz.net>
Source record: 174389

Not sure you should conclude so quickly that the dipole is winning because of an insufficient ground screen. My experience at this QTH is that 4-5 elevated 1/4 wave radials 10ft off the ground work quite well on 80M and 160M.

I suggest that the arrival angle on 80M from europe is quite a bit higher than you might imagine up here (Albany, NY) and that's why the dipole usually wins. FYI, both antennas in the clear with gently sloping downward terrain.

The original poster was in NJ, and asked specifically about working into EU on 80M from our neck of the woods.

I have a similar dipole NW/SE at 50ft and the vertical usually beats that one into the pacific on 80M, also indicating that the vertical with elevated radials is doing its job.

73,
Barry N1EU

Mark Keith <nm5k@wt.net> wrote in message news:3A3CBEB9.3D4E@wt.net...
> BarryG wrote:
> >
> > 1/4 wave (66ft) with feedpoint and radials 10ft off the ground (4 @ 1/4
wave
> > radials).
>
> Ok, that explains why the dipole is winning. At that low height, you
> have the same problem I do. Not really enough radials to make the
> antenna really work well. At that height about 60 or so would be close
> to 4 at a 1/2 wl up. Too bad you can't raise the antenna up to the 1/4
> wl height. It would really sing. I used a full sized 40 gp at 36 ft with
> 4 radials and compared to a dipole at 36 ft. To dx the GP always won.
> Usually 2-4 s units depending on the distance. If only 1500 miles away,
> about 2 s units. If 5000 miles away, about 4 s units.
> "no particular db gain claimed". I'm fairly sure if you raised yours to
> that height it would do the same. Or you could add more radials, but I
> know how that can go...Not always easy. A dipole does work dx ok. I've
> worked lots on 75m, but I would prefer a good vertical anyday if dx was
> the goal. But it needs lots of radials close to the ground, or be
> elevated preferably a 1/4 wl or more up and then you can get by with 4
> radials."and have near 120 radial on the ground performance". MK
>
> --
> http://web.wt.net/~nm5k

4442. TA-33 MOSLEY BEAM

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:41:38 UTC
From: Matt <ke5ol@flash.net>
Message-ID: <Cg4%5.10579$bw.964706@news.flash.net>
Source record: 174390
Cross-posted to: rec.radio.amateur.antenna,radio.amateur.swap

FS TA-33 Mosley three element beam with 40 meter add on...40-20-15-10 Meters
all traps good, with manuls, pick up only. FT WORTH, TEXAS.--- NO SHIPPING.
$125.00 or do some trading for mobil 2m 440 duel bander
ke5ol@flash.net

4443. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:50:31 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3cd13f.34738214@news.akorn.net>
Source record: 174391

On Sun, 17 Dec 2000 11:19:46 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>However, strange as it may seem, measurement of attenuation
>is the most insensitive method of looking for defects in
>cables. Copper oxide has hardly any electrical skin effect
>on copper. It just reduces the effective diameter of the
>conductor. Loss noticeably increases only when the braid is
>severely corroded and is about to fall apart.

The problem isn't cutting the wires, the problem is when they corode
or oxidize at the overlays where the braid weaves in and out.

Skin effect forces the current near the inside of the braid, and every
time a braid wire exits the current tries to flow through the lossy
poor connection to the next weave that is the inside.

>Cutting 95% of the wires in the braid, even all at one
>point, has no measureable effect on attenuation of a long
>length.

Yes, but tarnishing the braid a slight amount, or removing the
pressure on the weaves greatly increases loss. Fresh braid from RG-8
cable has more loss than a solid #14 wire at 30 Mhz when the pressure
is removed, such as when the braid is used in a tank circuit as a
connection.

PA's will typically melt the braid of RG-8 cable when used as a tank
lead, while #14 wire in the same spot will run cool.
73 Tom

4444. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 14:55:16 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3cd2a0.35091124@news.akorn.net>
Source record: 174392
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

On Sun, 17 Dec 2000 03:01:00 -0500, Tyler Hunt <tyler_13@nospam.com>
wrote:

>Tom W8JI wrote:
>>
>
>>
>> Hi Bill,
>>
>> Ken has a perfect right to be paranoid about cell phones if he so
>> desires.
>>
>
>Should we ignore all warnings because YOU say so? The authorities
>in the UK are asking parents NOT to buy their children cell
>phones due to possible radiation/health effects.

Tyler has a perfect right to be paranoid also.

_____
>Safer Calls, or Selling Fear?
>by Elisa Batista
>
>To the dismay of the cellular phone industry, a company recently
>introduced a device that it says would shield the human body
>from the "biological effects" from cell phones.
>
>EMX Corporation, a developer of technology that mitigates the
>effects of exposure to electromagnetic fields, unveiled this
>week a microchip that -- inserted in a cell phone's battery --
>protects the caller's body cells from the electromagnetic fields
>emitted by the cell phone.

Boy, we know right away that is bullshit! People will try to sell
anyone anything.

Can you imagine a device in series with a battery that stops EM
radiation, other than a off-on switch that cuts the phone totally off?

>The introduction of this new product underscores the ongoing question
>as to whether radiation emitted from cell phones is a health hazard.
>The cellular phone industry -- backed by the opinions of researchers
>who don't believe it's so -- maintains that no evidence has been
>provided to conclude that cell phone use has deleterious effects.

Amen. That agrees with the medical professions tests.

>Similar to the "scrambling of a television signal," the EMF
>BioChip emits a random electrical impulse or "noise" to overpower
>the electromagnetic signal emitted by the cell phone and reduce
>the effect on the caller's body.

Snicker!!! Only an idiot would swallow that sales hype. What a story,
they belong in jail.

>EMX Corporation won't go so far as to say unequivocally that signals
>emitted by cell phones could harm the body, but it touts research from
>European and North American universities backing its technology.
>
>Researchers from Catholic University of America, University of
>Western Ontario, Columbia University, Aalborg University in
>Denmark and the University of Washington in Seattle found that
>cell phone EMF signals "bring the cells of the brain or other
>parts of the body ... into a state of stress or shock," according
>to EMX Corporation founder and CEO Dr. Thomas Magnussen.
>
>"You could see cells changing its (sic) metabolism and release stress
>proteins, which is a protective mechanism," Dr. Magnussen said. "So
>the cells are truly bothered by this electromagnetic radiation from
>cell phones."
>
>However, members of the cellular phone industry and other scientists
>are incredulous, saying the amount of radioactive frequency signals
>emitted by cell phones is too weak to have any effect on the body.
>**********
>This news clip is continued at:
>http://www.wired.com/news/technology/0,1282,40660,00.html

See the pure pathological crap that gets put on Intenet, the MIS
information highway?

73 Tom

4445. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:27:57 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CDB7A.3CC4B7F4@home.com>
Source record: 174394
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Richard Clark wrote:
>

> >Fine, so lets say that the high school students who helped
> >organize the protect against the antenna have their own cell
> >phones and put them up against their heads every day. Have you
> >seen how many high school students have cell phones these days?
> >
> >Bill
>
> Hi Bill,
>
> According to the AARP, the grey-hairs outnumber the youngsters for
> cellular phone connectivity - by a long shot.

Geezz!!! Now someone's going to start claiming cell phones
cause grey hair! ;-)

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4446. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:32:27 UTC
From: Nick Dunklee <scsiguy03@yahoo.com>
Message-ID: <B66245F6.4BD7%scsiguy03@yahoo.com>
Source record: 174395
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Hehe, lucky for me I don't live near any blast zones...and even if I did I wouldn't really care. I just find it funny, right up there with Verizon's CellGuard insurance...stating that phone damage due to war or nuclear incident does not count, LOL.

Everyone go get a CellGuard pamphlet and read the fine print ;) It's rather humorous.

Nick

> From: Courtney <vein@nospamfront242.net>
> Organization: Ameritech.Net www.ameritech.net Complaints: abuse@ameritech.net
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular
> Date: Sat, 16 Dec 2000 22:07:49 -0500
> Subject: Re: Sprint PCS antennas on schools!
>
> In article <B6616A98.4B55%SCSIGuy@onemain.com>, SCSIGuy@onemain.com
> says...
>> Mine said "don't take this phone orally" Hmm....
>
> Considering I've seen everything from *oral* contraceptives to *nasal*
> inhalents telling you not to put it in your eyes/ass/etc I'm not really
> surprised by that...
>
>> Funny...the "warning" section says that it meets all federal guidelines, and
>> not to export the phone (in my Moto's manual). It also says not to use it
>> around blast sites as your phone could set off explosives...hrm...that
>> worries me...not.
>
> This message (actually telling you to turn OFF your phone) is also
> usually on a highway costruction sign when you go through blast zones.
> Travelling (by car) on i40 in the mountains and up 75 through either
> Kentucky or Tenn. (can't remember which at the moment) it was extremely
> common when any road work was going on to see these signs.
>
> I've never turned mine off going through these areas, and so far, so
> good... I'd rather leave the phone on and take my chances than search
> for the phone in my purse and crash while dealing with heavy
> construction traffic and idiots who slow down to see what is going on.
>
>
>
> Courtney

>

4447. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:32:27 UTC
From: Nick Dunklee <scsiguy03@yahoo.com>
Message-ID: <B66246AB.4BD9%scsiguy03@yahoo.com>
Source record: 174396
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

I tore that little "do not remove" tag off my matress!

> From: 2w8ji@contesting.com (Tom W8JI)
> Organization: Akorn Access (akorn.net)
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular
> Date: Sun, 17 Dec 2000 08:22:38 GMT
> Subject: Re: Sprint PCS antennas on schools!
>
> On Sat, 16 Dec 2000 22:12:56 -0800, "CW" <cmagers@sprynet.com> wrote:
>
>> The danger is that an inadvertent transmission from your cell phone will set
>> off the explosives. So you would rather take the chance of killing people
>> than be bothered turning that thing off? What a fine human being.
>
> I've made dozens of test transmissions over the years as I drive
> through construction sites, and I've never been able to set off any
> explosions! But I've heard that a cop in New Mexico had a stick of
> dynamite in his pocket, and laid his dash-mounted RADAR gun in his lap
> which then set the dynamite off.
>
> I also leave my motor running while I fuel my car, so I can use my
> cell phone. But I've heard of a cop in Arizona who exploded when he
> aimed his dash-mouned RADAR at the gas nozzel he was using.
>
> Have a nice Christmas!
>
> 73 Tom

4448. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:33:56 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CDCDC.2C7FF13F@home.com>
Source record: 174397
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Tom W8JI wrote:
>
> On Sat, 16 Dec 2000 22:12:56 -0800, "CW" <cmagers@sprynet.com> wrote:
>
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> >off the explosives. So you would rather take the chance of killing people
> >than be bothered turning that thing off? What a fine human being.
>
> I've made dozens of test transmissions over the years as I drive
> through construction sites, and I've never been able to set off any
> explosions! But I've heard that a cop in New Mexico had a stick of
> dynamite in his pocket, and laid his dash-mounted RADAR gun in his lap
> which then set the dynamite off.

It's the electrically detonated blasting caps that may be
sensitive to radio transmissions. A stick of dynamite,
without a blasting cap wouldn't go off. One of the main
features of dynamite, is it's safety. You could even toss a
stick into a fire without worry of an explosion.

>
> I also leave my motor running while I fuel my car, so I can use my
> cell phone. But I've heard of a cop in Arizona who exploded when he
> aimed his dash-mouned RADAR at the gas nozzel he was using.

There may be a remote chance of that, but according to what
I've read, there's never been a documented case of that
happening with a cell phone. Also bear in mind, that the
radar transmitter will be running more power than a cell
phone.
--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4449. Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:35:09 UTC
From: 2w8ji@contesting.com
Message-ID: <3a3cd3ea.35421847@news.akorn.net>
Source record: 174398
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

On Sun, 17 Dec 2000 03:01:00 -0500, Tyler Hunt <tyler_13@nospam.com>
wrote:

_____
>Safer Calls, or Selling Fear?
>by Elisa Batista
>
>To the dismay of the cellular phone industry, a company recently
>introduced a device that it says would shield the human body
>from the "biological effects" from cell phones.

To the dismay of anyone who understands electronics, or EM radiation,
read on!

>EMX Corporation, a developer of technology that mitigates the
>effects of exposure to electromagnetic fields, unveiled this
>week a microchip that -- inserted in a cell phone's battery --
>protects the caller's body cells from the electromagnetic fields
>emitted by the cell phone.

The battery is only a direct current source powering the phone.
Radiation comes from a time-varying current. There is nothing a
microchip inserted near or in a cell phone's battery could do, except
turn all the power off like a switch.

>The introduction of this new product underscores the ongoing question
>as to whether radiation emitted from cell phones is a health hazard.
>The cellular phone industry -- backed by the opinions of researchers
>who don't believe it's so -- maintains that no evidence has been
>provided to conclude that cell phone use has deleterious effects.

The introduction of this product underscores the need to protect
people from companies that pray on people's undue fears. Anyone who
understands electronics would know right off this is a rip-off.

If it is indeed a real news story, the reporter should be fired. A
responsible reporter would never publish something so obviously false
and easy to check out, especially something that just rips people off
by playing on their ignorance about a subject.

>Similar to the "scrambling of a television signal," the EMF
>BioChip emits a random electrical impulse or "noise" to overpower
>the electromagnetic signal emitted by the cell phone and reduce
>the effect on the caller's body.

A TV "scrambling chip" doesn't reduce the emission of a signal at all.
Actually, scrambling can typically add more energy and almost never

can reduce it.

The TV "scrambling" also is done at video or radio frequencies, it can not be done at "the battery" or dc power source. Even an electronics layman would know that.

>EMX Corporation won't go so far as to say unequivocally that signals
>emitted by cell phones could harm the body, but it touts research from
>European and North American universities backing its technology.

I'll bet. If they released obvious bolognia about how their system works, they probably have no qualms about releasing other false information they dream up.

>Researchers from Catholic University of America, University of
>Western Ontario, Columbia University, Aalborg University in
>Denmark and the University of Washington in Seattle found that
>cell phone EMF signals "bring the cells of the brain or other
>parts of the body ... into a state of stress or shock," according
>to EMX Corporation founder and CEO Dr. Thomas Magnussen.

Dr. Magnussen, if he is responsible for the technical misinformation laced through this story, obviously can't be trusted to provide reliable technical information.

I've designed equipment used in research at medical facilities studying biohazards of electromagnics, including for Dr. Art Pilla at Mt Sinai school of medicine, and met with researchers all over the world in this field. To this date, despite years and years of research, there has never been a link between cell damage and non-ionizing EM radiation (radio waves or power line radiation) unless the energy levels are high enough to produce measureable cell heating.

As a matter of fact, this research has led to devices which actually are theraputic...promoting healing.

>"You could see cells changing its (sic) metabolism and release stress
>proteins, which is a protective mechanism," Dr. Magnussen said. "So
>the cells are truly bothered by this electromagnetic radiation from
>cell phones."

Again, if this fellow is responsible for the technical content of this article, he can't be trusted.

>However, members of the cellular phone industry and other scientists
>are incredulous, saying the amount of radioactive frequency signals
>emitted by cell phones is too weak to have any effect on the body.
>**********
>This news clip is continued at:
>http://www.wired.com/news/technology/0,1282,40660,00.html

Now if you want to read a real news clip, read this one. It is from the SF Chronicle, and was even a blurb on national TV news. Since it doesn't support fear and paranoia, they only ran it once or twice on

national news. This is the study that kicked-off all this paranoia!

Here's the unedited text:

A Lawrence Berkeley National Laboratory researcher fabricated data in 1992 studies that were considered tantalizing evidence that electric and magnetic radiation could cause cancer, a federal watchdog agency has found.
The dangers of exposure to electromagnetic fields generated by power lines, home wiring and household appliances have been hotly debated. A recent congressional report found that evidence of a link is weak.
But the studies by Robert P. Liburdy, reported in scientific journals, were significant at the time because they purported to show the first plausible biological mechanism linking electromagnetic fields exposure to cancer and other diseases including childhood leukemia.
In a recently released report, the federal Office of Research Integrity said Liburdy committed ``scientific misconduct'' by ``intentionally falsifying and fabricating'' his data to support assertions of cellular effects from electric and magnetic fields.
Liburdy, 51, resigned his 15-year position in March after the lab yanked his funding and agreed in May with the federal Office of Research Integrity to retract three data graphs he used to back up his conclusions in two 1992 journal articles.
The Tiburon resident, who received $3.3 million in federal grants for the research, also agreed to a three-year ban on receiving federal funds.
Liburdy denies any wrongdoing and said he agreed to the sanctions imposed by the Office of Research Integrity only because he could not afford a lengthy legal battle. He insists that the overall conclusions of the articles remain valid and will not be withdrawn.
Liburdy's studies purported to link electric and magnetic radiation and calcium signaling, a process governing many important cellular functions, including turning genes on and off and cell division.
He published the results in two 1992 journal reports, the Annals of the New York Academy of Sciences and FEBS Letters -- a publication of the Federation of European Biochemical Societies. He also presented it at several medical conferences.
He also used the papers to advance a research proposal and to get federal funding.
Liburdy's findings prompted many more studies. Since 1992, at least 20 scientific papers have discussed the connection to calcium signaling but have failed to find a conclusive link, said Chris Portier, an associate director of the National Institute of Environmental Health Sciences.
Cases of scientific misconduct are rare. Lawrence Berkeley Lab officials said there have been only two or three charges of wrongdoing by its researchers in the past 10 years, but they were not proved.
The Office of Research Integrity, charged with protecting federal health research funds, reviews only 12 to 15 cases of scientific fraud a year, said Chris Pascal, the agency's director. But he said many cases probably go unreported because people are afraid of

repercussions.
Arthur Caplan, director of the Center for Bioethics at the University of Pennsylvania Health System, said that when fraud does take place, it is usually because of pressures on researchers to capture grants, publish papers and get tenure.
Most scientists realize that such allegations can be the death knell for a research career, and it is rare that a scientist gets caught in outright fraud, Caplan said. ``It is a field that depends on trust,'' he said.
Scientists caught engaging in misconduct have been barred from federal funds for up to 10 years and sometimes face civil suits if their sponsoring institutions are forced to pay back grant funds. That is not the case with the Liburdy investigation.
Lawrence Berkeley Lab undertook its investigation of Liburdy after an unidentified whistle-blower challenged his results in 1994. In July 1995, the lab concluded that Liburdy had deliberately falsified data. The lab alerted the Office of Research Integrity, an arm of the U.S. Department of Health and Human Services. The federal agency's own review, which lasted two years, showed that the deception went deeper, said Chris Pascal, the office's director.
Using Liburdy's raw data, the agency found that in one graph he had used only 7.1 percent of the data points from his experiment and discarded the rest that did not agree with his hypothesis that the electric and magnetic fields affected living cells.
``In contrast to the data shown in the figure, the full set of primary data does not show that exposure to low strength electromagnetic fields results in an inhibition or in a lower level of calcium ions in the cells,'' the Office of Research Integrity's analysis says.
The report also said he magnified the response in his data and fabricated data to cover up his original deception. ``The evidence demonstrates Liburdy knew his data manipulations were significant to the conclusions of the paper,'' the analysis says.
Liburdy, who disputed the allegations of wrongdoing in a letter to the journal Science, said this week that he graphed the data by accepted methods and that all he would do in recanting his figures would be to clarify his technical procedures that were not detailed in the reports.
``The scientific findings are not wrong. They criticized me for how I graphed the data,'' Liburdy said. ``It is a matter of scientific opinion. They are not talking about the data being invalid. They are talking about the interpretation of the data.''
Three independent scientists who evaluated the facts at Liburdy's request criticized him for not explaining his graphing procedures but determined that he did not engage in scientific misconduct. The scientific conclusions are valid, they said.
One of the scientists, Richard Nuccitelli, a professor of molecular and cellular biology at the University of California at Davis, this week called the controversy ``crazy.''
``In a sense, it really is splitting hairs,'' he said. ``If you take the definition very strictly, he was guilty of presenting misleading

data. But if you look at the overall result -- is this a valid conclusion or not -- it is.''
But he and the other two scientists did not see the entire collection of data, said Stephen Godek, an attorney with the Office of Research Integrity.
The agency's report states that Liburdy's actions ``were significant misrepresentations that were intentional and not due to honest error or judgments about the interpretation of the data.''
As part of the negotiations with Liburdy, federal investigators agreed not to force Liburdy to retract the articles in their entirety because ``any scientist who would read those papers would know that without the falsified figures, the conclusions are meaningless,'' Godek said.

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Read it weep. It's a real shame the frauds don't attract the same attention when they get caught as their fradulent stories do!

Tom

4450. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:37:37 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CDDB8.576FEBA4@home.com>
Source record: 174399
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

And when they released that warning, they also said that
there was no proof of a problem, but it was better to be
safe than sorry. This is particularly applicable to
children, as they are often more sensitve than adults, to
harmful influences. Now, if we could get parents to do more
about keeping their kids away from tobacco smoke, household
chemicals etc.

Tyler Hunt wrote:
>
> Tom W8JI wrote:
> >
>
> >
> > Hi Bill,
> >
> > Ken has a perfect right to be paranoid about cell phones if he so
> > desires.
> >
>
> Should we ignore all warnings because YOU say so? The authorities
> in the UK are asking parents NOT to buy their children cell
> phones due to possible radiation/health effects.
> --
> Safer Calls, or Selling Fear?
> by Elisa Batista
>
> To the dismay of the cellular phone industry, a company recently
> introduced a device that it says would shield the human body
> from the "biological effects" from cell phones.
>
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> effects of exposure to electromagnetic fields, unveiled this
> week a microchip that -- inserted in a cell phone's battery --
> protects the caller's body cells from the electromagnetic fields
> emitted by the cell phone.
>
> The introduction of this new product underscores the ongoing question
> as to whether radiation emitted from cell phones is a health hazard.
> The cellular phone industry -- backed by the opinions of researchers
> who don't believe it's so -- maintains that no evidence has been
> provided to conclude that cell phone use has deleterious effects.
>

> Similar to the "scrambling of a television signal," the EMF
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> the electromagnetic signal emitted by the cell phone and reduce
> the effect on the caller's body.
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> emitted by cell phones could harm the body, but it touts research from
> European and North American universities backing its technology.
>
> Researchers from Catholic University of America, University of
> Western Ontario, Columbia University, Aalborg University in
> Denmark and the University of Washington in Seattle found that
> cell phone EMF signals "bring the cells of the brain or other
> parts of the body ... into a state of stress or shock," according
> to EMX Corporation founder and CEO Dr. Thomas Magnussen.
>
> "You could see cells changing its (sic) metabolism and release stress
> proteins, which is a protective mechanism," Dr. Magnussen said. "So
> the cells are truly bothered by this electromagnetic radiation from
> cell phones."
>
> However, members of the cellular phone industry and other scientists
> are incredulous, saying the amount of radioactive frequency signals
> emitted by cell phones is too weak to have any effect on the body.
> **********
> This news clip is continued at:
> http://www.wired.com/news/technology/0,1282,40660,00.html

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4451. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:43:09 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CDF05.FC40969C@home.com>
Source record: 174400
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Tyler Hunt wrote:
>
> Tom W8JI wrote:
> >
>
> >
> > Hi Bill,
> >
> > Ken has a perfect right to be paranoid about cell phones if he so
> > desires.
> >
>
> Should we ignore all warnings because YOU say so? The authorities
> in the UK are asking parents NOT to buy their children cell
> phones due to possible radiation/health effects.
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> emitted by cell phones could harm the body, but it touts research from
> European and North American universities backing its technology.

>
> Researchers from Catholic University of America, University of
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> Denmark and the University of Washington in Seattle found that
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> the cells are truly bothered by this electromagnetic radiation from
> cell phones."
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> However, members of the cellular phone industry and other scientists
> are incredulous, saying the amount of radioactive frequency signals
> emitted by cell phones is too weak to have any effect on the body.
> **********
> This news clip is continued at:
> http://www.wired.com/news/technology/0,1282,40660,00.html

Talk about a load of BS. How is this "device" supposed to
work, without interfering with the operation of the phone?
If it "scrambled" the signal, the phone would be useless for
making calls. Also, if it "emits a random electrical
impulse or "noise" to overpower the electromagnetic signal",
it would be generating more RF enery than the phone and as a
result cause even more of the presumed damage.
--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4452. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:50:45 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CE0CF.B3FA6BE5@home.com>
Source record: 174401
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Orac wrote:
>
> In article <3A3B6839.E95D5F6D@home.com>, James Knott
> <the.lights.are.on.but.no.one.is@home.com> wrote:
>
> >jvhupf@telocity.com wrote:
>
> >> We have one cell tower in this area that is disguised (very badly) as
> >> a long leaf southern pine tree! (The nekked cell tower would look
> >> better!)
> >
> >There are some antennas, that are quite inconspicuous, when
> >mounted on top of a street light pole. With the equipment
> >buried at the base, these installations are all but
> >invisible.
>
> Wouldn't these have a very limited range, because most streetlight poles
> are not as tall as a typical cell tower?

Quite so, but if it comes down to having a decent signal or
not, there may be no alternative.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4453. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:51:15 UTC
From: Jeff Wilhelm <jwil7090@postoffice.uri.edu>
Message-ID: <91indltns1@clamcake.uri.edu>
Source record: 174406
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Nah, it's whining and bithcing about cell phones and SprintPCS reps and getting pissed after being on hold for an hour to dispute a 37-cent charge that give people grey hair :) So see, it is Sprints fault :)

-Jeff

4454. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:53:35 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A3CDEA3.B1B3ED57@home.com>
Source record: 174402
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Tom W8JI wrote:
> I've made dozens of test transmissions over the years as I drive
> through construction sites, and I've never been able to set off

How responsible of you. Keep up your quest until you kill somebody.
Maybe you could try getting closer or running more power.

Don

4455. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:57:08 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A3CE24E.AAB0E61C@home.com>
Source record: 174403
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

jvhupf@telocity.com wrote:
>
> On Sat, 16 Dec 2000 13:03:53 GMT, James Knott
> <the.lights.are.on.but.no.one.is@home.com> wrote:
>
> >There are some antennas, that are quite inconspicuous, when
> >mounted on top of a street light pole. With the equipment
> >buried at the base, these installations are all but
> >invisible.
>
> I have never seen a "street light pole" tall enough to be effective as
> a location for one of these antennas, anyone that would be that high
> would also be not only an eyesore, but the light distribution from it
> would be equally as unpleasant as the antenna!

As I mentioned in another reply, there may be no alternative
to providing coverage to an area. Also, I have seen some
cell or PCS antennas mounted on poles, not much bigger than
a light pole. And of course the light poles along major
roads tend to be taller than those on residential streets.
Many utilitities do rent space on their poles to whoever
will pay.

In addition, with the creative use of plastic or fibreglass,
it's entirely possible to hide an antenna within a pole.

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4456. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:57:22 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <fkop3tkuoot1mhprld33ifof3gsb8kknpd@4ax.com>
Source record: 174404

On Sun, 17 Dec 2000 15:35:09 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Sun, 17 Dec 2000 03:01:00 -0500, Tyler Hunt <tyler_13@nospam.com>
>wrote:
>_____
>>Safer Calls, or Selling Fear?
>>by Elisa Batista
>>
>>To the dismay of the cellular phone industry, a company recently
>>introduced a device that it says would shield the human body
>>from the "biological effects" from cell phones.
>
>To the dismay of anyone who understands electronics, or EM radiation,
>read on!

Is this anything like the "Cool-side" antenna?

4457. Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 15:58:20 UTC
From: Allen Emer <aemer@monmouth.com>
Message-ID: <3A3CE29C.8869EFF7@monmouth.com>
Source record: 174405

Any one know of a modeling program that allows calculating elements
using flat (& slightly curved) metal tape measure ruler material?
Or doesn't it critically matter that it is not a radial element?

Allen Emer, N2YAC

4458. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 16:05:12 UTC
From: "Don K." <dk@home.com>
Message-ID: <3A3CE156.882B0D75@home.com>
Source record: 174407
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Tyler Hunt wrote:
> Similar to the "scrambling of a television signal," the EMF
> BioChip emits a random electrical impulse or "noise" to overpower
> the electromagnetic signal emitted by the cell phone and reduce
> the effect on the caller's body.

Anyone who understands electronics will tell you that is ridiculous.

While people can have legitimate concerns about radiation hazards, they should be aware that there are plenty of charlatans, con artists, and kooks more than willing to mislead them and prey on their fears.

Don

4459. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 16:46:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A3CEDC8.685A74FC@oio.net>
Source record: 174408

Allen,
I really doubt if the 'shape' of the radiating elements
make any difference at HF, or VHF. Once into UHF and
above, the 'shape' might affect the radiated signl...(?)
'Doc

4460. Re: Radio Works Carolina Windham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:01:36 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <91irhj$4b31e$1@ID-52642.news.dfncis.de>
Source record: 174409

Three of us in the central Iowa area are using the CW-80's. Put it up in flat top configuration, at least 35' and you will have a nice performer with good match on 80-10. You will need a tuner on some bands (particularly 30m), but not on most. It is a good antenna, but not magic. It's basically an off-center-fed dipole that tends to present a good match across most of the bands 80-10. It is narrow on 80m, in the same sense that any standard dipole is.

It may have some common mode currents in the vertical coax section that may or may not enhance the antenna's performance.

In short, it works well, outperforms the so-called "ground independent, electrical half wave, radial-less" verticals by a substantial margin.

Keep it away from towers (the center vertical coax section) and minimize any 'droop" away from the feed. It can V a little, but not a lot.

I'm quite pleased with it as a multi-bander that is easy to match and makes contacts without difficulty. Just think of it as a multi-band dipole that's easy to feed. If that is what you are expecting, you will be quite pleased.
73

--

hasan schiers
schiers@netins.net
N0AN

"Dodge Johnson" <djohnson@voicenet.com> wrote in message
news:djohnson-B9FBA4.08102316122000@netnews.voicenet.com...
> Has anybody used Radio Works' Carolina Windham 80 or 80 special (1/4
> wave, so shorter?
>
> Would you share your experience?
>
> Thanks,
>
> Dodge N3HUO

4461. Re: TUNE dipole with MFJ-249?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:06:05 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <91irq0$4b1jr$1@ID-52642.news.dfncis.de>
Source record: 174410

As I recall you can plug ladder line directly into the coax connector AS
LONG AS YOU ARE RUNNING IT ON BATTERY POWER ONLY!

Don't have it plugged into the AC adapater for this kind of measurement. I'm
just sure this is in the manual somewhere. I was surprised myself that you
could do it this way and have it work, but that is my recollection.

Just put one wire to the center connector of the so-239 and the other wire
(of the ladder line) to ground.

(Look in the manual to be sure...I don't think I hallucinated this, but
anything is possible during the month of Ramadan.)

73

--

hasan schiers
schiers@netins.net
N0AN

"JJ OKK" <ham_guy@webtv.net> wrote in message
news:23599-3A3BA9C8-47@storefull-137.iap.bryant.webtv.net...
> Hi.. I need to get some advice here. I'm going to put up a 20 meter
> dipole and feed it with ladder line. However, my MFJ-249 only has a
> connection for a coax coupler.
>
> My plan (for the lack of a better one):
> 1. Pull the dipole partially up, so I can still reach the ends and
> middle feedpoint with a ladder.
> 2. Attach a temporary coax lead to the antenna feedpoint and check the
> resonant Q.
> 3. Trim the ends to get the desired resonant Q.
> 4. Remove the coax and the analyzer and attach the ladder line.
> 5. Pull the antenna to its full height and hope the difference in
> height and the difference in the antenna feed do not seriously degrade
> the tune up.
>
> This seems to me that it has lots of room for error. Since people have
> been doing this for years, there must be some better method. Any tips,
> hints and kinks you know of? Thanks, JJ
>

4462. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:07:15 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A3CF2C3.4B41@wt.net>
Source record: 174412

BarryG wrote:
>
> Not sure you should conclude so quickly that the dipole is winning because
> of an insufficient ground screen. My experience at this QTH is that 4-5
> elevated 1/4 wave radials 10ft off the ground work quite well on 80M and
> 160M.
>
> I suggest that the arrival angle on 80M from europe is quite a bit higher
> than you might imagine up here (Albany, NY) and that's why the dipole
> usually wins. FYI, both antennas in the clear with gently sloping downward
> terrain.
>
> The original poster was in NJ, and asked specifically about working into EU
> on 80M from our neck of the woods.
>
> I have a similar dipole NW/SE at 50ft and the vertical usually beats that
> one into the pacific on 80M, also indicating that the vertical with elevated
> radials is doing its job.
>
> 73,
> Barry N1EU

I would the the angle still fairly low even from the east coast to EU. I see a good increase when using a vertical many times on stateside signals. The amount depending on how good the vertical is. 4-5 radials at 10 ft is just not enough to cut the ground losses at that height. Sure, the antenna works pretty well, but it's not up to it's peak efficiency by any stretch. I remember one guy in particular on this NG that tried the same exact thing on 80m. And elevated at appx 10 ft with 4 radials or so, and then decided to ground mount and lay out 60 radials. The 60 radial version proved to be much better. He found the elevated one fairly lousy. And I still contend it's because it's not high enough for that number of radials. Now if you were to mount the antenna at a 1/4 wl up with the same 4 radials you will have a smoking antenna. At 1/2 wl up even better, although from my experience on 40m with a full size GP , 1/4 wl up will work very well. You need 60 radials at 1/8 wl up to equal 120 on the ground. At 1/2 wl up, you only need 4. My estimate is at 1/4 wl up, 4 radials appx equal 60 on the ground. So it's doing fairly well at that height with 4. If you use a normal elevated ground plane, I think you need it a min of 1/4 wl up to really work to it's potential with a small amount of radials. My 40m full size GP made my dipole at the same height"1/4 wl up" look fairly pathetic at night at any distance over 1500 miles. And I would think this would hold true for any band lower than 40 too. Actually, the lower the freq, the

more pronounced the vertical advantage I think. MK
--
http://web.wt.net/~nm5k

4463. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:09:41 UTC
From: Allen Emer <aemer@monmouth.com>
Message-ID: <3A3CF355.4DC78012@monmouth.com>
Source record: 174411

Doc,

Good point, I should have mentioned I was looking for cutting it for a
VHF & UHF yagi.

Al Emer
N2YAC

'Doc wrote:
>
> Allen,
> I really doubt if the 'shape' of the radiating elements
> make any difference at HF, or VHF. Once into UHF and
> above, the 'shape' might affect the radiated signl...(?)
> 'Doc

4464. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:10:03 UTC
From: k1bqt@aol.com
Message-ID: <20001217121003.07653.00005310@ng-fy1.aol.com>
Source record: 174413

...authorities in the UK are asking parents NOT to buy their children cell phones due to possible radiation/health effects.

Here in the US, where popular culture breeds depression, alienation, and school violence among teens, at least one celluar company has proposed mounting PCS antennas on schools specifically to empower America's youth to "think warmer thoughts".

It's further reported that, had Al Gore won the Presidency, a USDE Federal mandate would have forced all US teenagers to carry cellphones provided at local community expense in order to "foster communication and facilitate the thinking of even warmer thoughts".

Thankfully, Bush prevailed, bi-partisanship rules the day, and in a rare moment of cooperation and reconciliation, it's reported the NEA and NRA have hammered out a plan permitting teachers to carry sidearms in the classroom to enforce discipline!

Rick K1BQT

4465. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:12:27 UTC
From: Kevin Alfred Strom <kevin.strom@innocent.com>
Message-ID: <3A3CF3FB.A29BFF85@innocent.com>
Source record: 174414

I'd like to read a copy of that study, Richard. Is it available on
the Internet?

With all good wishes,

--

Kevin Alfred Strom.

News, links, and pictures: http://www.kevin-strom.com

4466. What is this HF Mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:25:24 UTC
From: dangling_reference@my-deja.com
Message-ID: <91isu1aj1@nnrp1.deja.com>
Source record: 174416

I have been using an htx-10 mobile rig as a base station for a little while now, and have been trying to find an antenna for my car.

I came across a "secret sam" "hidden antenna" for CB that was manufactured by gold-line.

It can be viewed here: http://www.crbbooks.com/catalog_2_item/hid.htm

I can't make out fromt he picture what this thing is.. Does anyone have any ideas? Would this work on my 10M rig?

Here's the description:
This unit turns your vehicle into a full-performance mobile CB antenna.
AM/SSB operation on all channels. Easy installation,
shipped with instructions, 18' cable, all wire,
connectors &
hardware needed. Won't interfere with AM/FM radio reception. Everything's inside the vehicle.

Sent via Deja.com
http://www.deja.com/

4467. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:27:02 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <cMOXORAmdPP6Ew7t@g3ohx.demon.co.uk>
Source record: 174415

In article <23024-3A3A6259-5@storefull-115.iap.bryant.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>Yri, K3BU wrote:
>"...and that`s why broadcast stations use verticals to get local
>coverage on AM."
>
>Yes, the AM broadcast station reaches listeners by the ground wave
>signal. Horizontal antennas see reversed image reflections which produce
>cancellation of the wave traveling along the earth`s surface.
>
>Vertical grounded antennas produce cancellation at the zenith and
>maximum radiation along the earth`s surface, at least at the tower
>heights used for AM broadcasting.
>
>An HF surface wave is attenuated in such a short travel distance along
>the earth`s surface that it is soon useless. It is absorbed before it
>can reach the ionosphere for reflection. Only radiation elevated at
>several degrees above the horizon is useful for ionospheric reflection.
>
>The 3 MHz tests conducted by the U.S. Army depended on ionospheric
>reflection between path ends. These were "near vertical incidence" tests
>over path lengths of 75 miles and 150 miles.
>
>Best regards, Richard Harrison, KB5WZI
>

Isn't around 3MHz used for broadcasting in the tropics (too much QRN on
the 'medium wave'?).

I seem to recall reading (was it in the 'Wireless World', circa 1990?)
that Sri Lanka was using very low, horizontal dipoles in order to get
pretty solid coverage of the whole island. There was (of course) very
local coverage (up to a few miles from the TX), then a dead area, then a
reasonable signal out to about 300 miles. The principal was, of course,
propagation 'straight up - straight down', as described above.

I expect that there was deep fading on the odd occasion, but it did
enable most of the island to be covered by a single transmitter. I think
that the system was operated by the Rediffusion company.

Ian.

4468. Re: B'Nut Hf9VX Ground radial question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:36:20 UTC
From: n4zou@my-deja.com
Message-ID: <91itik$o4$1@nnrp1.deja.com>
Source record: 174418

In article <3a3c88e4.129443270@news.crdva1.bc.wave.home.com>,
Ve7wVg@Rac.Ca wrote:
> I have heard many people talking about the amount of ground radials
> they run with their 1/4 wave virticals, Butternuts in specific.
>
> My question is, how do people go about making the connections of the
> ground radials to the actual antenna's?
>
> Is there a special coupler for the Butternut HF9VX or are people just
> using a hose clamp or whatever kind of clamp they have lying around to
> make the connection.
>
> Any reponses would be useful
>
> 73

I cut some 1/4 inch aluminum plate material 12 inches by 12 inches and cut a slot up the middle 1 1/2 inches wide and mounted a small aluminum angle on it 2 inches long with holes for a standard u clamp from radio shack to clamp the plate to the aluminum tubeing just below the insulator. All around the edge of this plate I have 10/24 stanless screws and double nuts. One of the nuts holds the screw to the plate and the other nut is for clamping down the wire radial. You can see a picture of it at
http://n4zou.homestead.com/files/butternut.htm

>
> Derek (ve7wvg@rac.ca)
>

Sent via Deja.com
http://www.deja.com/

4469. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-17 17:46:13 UTC
From: matjake@aol.comns
Message-ID: <20001217124613.19735.00000940@ng-fx1.aol.com>
Source record: 174417

Mat,

A few years ago I had to fit an antenna system with Andrews Heliax feeders to some equipment we had constructed . I seem to recall a warning in the 'assembly instructions' for the N type fittings regarding use of silicon grease on the threads. I cannot now remember the details but I guess there must have been a sound reason behind this. The grease is ok for use inside the plug or socket but must presumably have some detrimental effect when it gets between two connectors.
Can someone check this out - and if I'm right perhaps somebody can explain the reasoning behind it. After all it seems sensible to spread the stuff everywhere to try and waterproof joints but perhaps it has an insulating effect also?

73, John, G8OZH

Hi John,

You are correct the silicone compound does have an insulating effect. That is why you do not want to get it on the center conductors or any thing that requires an electrical connection. I quite honestly do not know the exact specifics for the N type connectors but I would gather it to be the same. However someone may have the exact answer. I do know on Cable TV hardline connectors you need to coat the threads of the female connector which you are mating. Basically all mechanical connections should have silicon compound, but a little goes a long way so no need to trowl it on the connectors.

I hope this helps. I do not really post that much but usually take in all the good info I have received and quite honestly have received some great information.
I am by no means the guru on this subject but I do hope I have been of some help.

Regards,
Matt

4470. Re: Need Airborne Antenna help...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 15:32:12 UTC
From: paul@netburner.com
Message-ID: <3a40cf95.523701@news.harvard.net>
Source record: 174322

There is a lot I have not said here, because this started as a
discussion of antenna problems.......

The system as build has GPS, airspeed and altitude telemetry.
This data is sent over the audio portion of the video TX.

I have already talked to the FAA and started learning what will be
necessary wrt permits, permission etc... to fly in the airspace above
18K ft.

I plan to do a test flight of all the airborne radio etc..... on a
balloon. I've already built a chamber for low pressure testing out of
big PVC pipe, and an automotive vaccume tester.

I've done some low temperature testing with a styrofoam cooler
and Dry Ice.

Back to antennas....
How can I build a an accurate 90 deg phase delay line at 900Mhz
with minimal test equipment?
Anyone in the Boston , or southern New Hampshire area that has the
proper network test equipment and would be willing to halp me test
/setup the antennas and matching networks?

Paul (Kl7JG)

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

4471. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 15:49:56 UTC
From: richardharrison@webtv.net
Message-ID: <6980-3A40D524-17@storefull-116.iap.bryant.webtv.net>
Source record: 174321

Mark Keith wrote:
"My 8 ft. mobile on my car outdoes my dipole at 36 feet on 40m at night at 1500 miles."

That might be expected from the characteristics of Mark`s antennas as shown in figures from the ARRL antenna book, if losses are ignored.

In my 14th edition, Fig. 12 shows F2-layer propagation requiring elevation angles from the horizon of 10 to 25 degrees to reach 1500 miles.

Mark`s 36 foot high dipole is barely more than 1/4-wave high at 40m. It thus does best straight up. Fig. 25 shows radiation from 1/4-wave high horizontal antennas. At 10 degrees, there is very little radiation, and at 25 degrees, radiation is several db down from the maximum aimed at the zenith. At 1500 miles and more, you are unlikely to rattle their cans with a dipole only 1/4-wave above ground.

Fig. 48 shows radiation from vertical antennas. It makes a half-doughnut lying on its sliced side and encircling the antenna for short antennas. At elevation angles of 10 to 25 degrees, radiation is almost the same as the maximum value aimed at the horizon.

Figures 27 and 28 show a need to get a horizontal antenna up between 1/2 and 5/8 wavelength, or more, to get the most radiation at angles suitable for F2 propagation at 1500 miles, or more.

Cecil, W6RCA, had a nice comparison of vertical and horizontal antennas on his web pages, if I recall correctly. Hopefully, he still shows that comparison there.

Best regards, Richard Harrison, KB5WZI

4472. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 16:08:10 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <crl14tg291esj90lfrs7k0e81cv6lh5vad@4ax.com>
Source record: 174319

On Wed, 20 Dec 2000 03:06:02 GMT, "Alan Biocca" <Alan.Biocca@usa.net> wrote:

>So, the antenna clearly can work, the problem is matching 0.29 ohms
>while cancelling 2k ohms of reactance. Almost all the energy will end up
>dissipated in the tuner.

You say "almost all the energy will end up being dissipated in the tuner". That depends on where the tuner is located in the system. If you have the tuner installed directly at the base of the antenna with no coax at all, it will probably do ok, but if it is connected even a few feet away the loss in the coax will be quite large.

With the example above, the best way to match the antenna is the old fashioned way that's been done for 50 years or more: Cancel the 2000 ohms with a coil of that reactance and use an L network to match the .29 ohms to the 50 ohms of the line. Works great, is much cheaper than a tuner and you'll learn some interesting things about matching and resonating antennas. Perhaps the most interesting thing is that you don't even need part of the L network - the antenna itself can be detuned to provide the missing part. Details are in any ARRL handbook.

w7ti

4473. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 16:08:19 UTC
From: fractenna@aol.com
Message-ID: <20001220110819.17393.00008397@ng-cg1.aol.com>
Source record: 174320

>What does this signify? If I remember, you issued a challenge that no
>one took you up on. All this proves is that you apparently did a pretty
>good job in the contest. Fine. But where does that apply to Cellphones
>and Cancer?
>
>an inquiring mind is bored with you.
>
>Bill-W4BSG
>
>Fractenna wrote:
>
>>> freaktenna will sue your butt, etc....
>>>
>>> Now you can take your lead suits off!
>>>
>>> 73 & MX
>>> Yuri, K3BU/m
>>
>>
>> The fact of the matter is 'freaktenna' beat the pants off you in the 10M
>> contest Yuri.
>>
>> Try beating my score. See the 3830 archive.
>>
>> I said I would do it and I did.
>>
>> Now: what is it exactly you can 'claim'?
>>
>> 73
>> Chip N1IR
>
>

Ask Yuri.
He was the one who put it in this thread.

Yours,
NC

4474. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 16:54:11 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3A40E433.2D965F0@uci.edu>
Source record: 174323

Fractenna wrote:
> >Fractenna wrote:
> >
> >> Your continued, unwelcome statements go against my wishes.
> >
> >Ever heard of a wish sandwich? A wish sandwich is the kind of a
> >sandwich where you've got two slices of bread, and you WISH you had some
> >meat. :-)

> Ever hear of "malicious libel?"

Wow that's a good point. Yes, I have. I believe it's something that
you write about in almost every post on this newsgroup.

> Here's betting on a huge retainer that I have...

Sorry to hear about it. Never had to wear one myself, but good luck
with the orthodontics.

So, have you ever heard of a wish sandwich?

ac6xg

4475. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 17:07:56 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <91qpb2$e1s$1@slb7.atl.mindspring.net>
Source record: 174324

"Fractenna" <fractenna@aol.com> wrote in message
news:20001220065752.01690.00001866@ng-mb1.aol.com...
> >Fractenna wrote:
> >
> >> Your continued, unwelcome statements go against my wishes.
> >
> >Ever heard of a wish sandwich? A wish sandwich is the kind of a
> >sandwich where you've got two slices of bread, and you WISH you had some
> >meat. :-)
>
>
> Ever hear of "malicious libel?"
>
> Here's betting on a huge retainer that I have...
>
> 73
> Chip n1IR
>

Ever heard of a kill filter? Meet mine.
Plonk~flush

--
Why is it that the world never remembers the name of Johann Gambolputty de
von Ausfern- schplenden
- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
burstein- von- knacker- thrasher-
apple- banger- horowitz- ticolensic- grander- knotty- spelltinkle-
grandlich- grumblemeyer- spelterwasser
- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n rnburger-
bratwustle- gerspurten- mitz
- weimache- luber- hundsfut- gumberaber- sh nendanker- kalbsfleisch-
mittler- aucher von Hautkopft of Ulm?

4476. Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 17:21:34 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <yU506.57474$x6.25162629@news2.rdc2.tx.home.com>
Source record: 174325

I have a 20m, homebrew vertical, a ground plane, mounted on the peak of my roof. It is a bit over 16 feet tall with its base about 0.38 wavelengths above the ground. I have five radials radiating out from its base, each the length of the antenna. The worst SWR I get is 1.2:1 and the antenna seems to work just fine. I guess I should be satisfied.

But, due to the arrangement of my roof, the radials are radiating out over a partial circle (maybe 200 degrees). The open part (no radials) of the radial circle points northwest.

My question is, does this make my antenna somewhat directional? Is there any problem with not having the radials evenly divided?

Thanks, Pete KA0TZK

4477. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 17:25:05 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A40EB71.3000106@hiwaay.net>
Source record: 174327

Yuri put in a post that was (mostly) on subject, with a little humor
added- your contribution has to do only with boasting about an operating
'challenge' that no one cared about enough to participate.

WE all admit that you won- but -- so what?

Bill-W4BSG

Fractenna wrote:

>> What does this signify? If I remember, you issued a challenge that no
>> one took you up on. All this proves is that you apparently did a pretty
>> good job in the contest. Fine. But where does that apply to Cellphones
>> and Cancer?
>>
>> an inquiring mind is bored with you.
>>
>> Bill-W4BSG
>>
>> Fractenna wrote:
>>
>>
>>>> freaktenna will sue your butt, etc....
>>>>
>>>> Now you can take your lead suits off!
>>>>
>>>> 73 & MX
>>>> Yuri, K3BU/m
>>>
>>>
>>> The fact of the matter is 'freaktenna' beat the pants off you in the 10M
>>> contest Yuri.
>>>
>>> Try beating my score. See the 3830 archive.
>>>
>>> I said I would do it and I did.
>>>
>>> Now: what is it exactly you can 'claim'?
>>>
>>> 73
>>> Chip N1IR
>>
>>
>
> Ask Yuri.

> He was the one who put it in this thread.
>
> Yours,
> NC

4478. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 17:25:57 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <sqq14t8tchn9hs1fi9cuac4cmnnm6691io@4ax.com>
Source record: 174326

"Reg Edwards" <g4fgq.regp@btinternet.com>
shared these priceless pearls of wisdom:

->Shape of antenna conductor cross-section is a very
->uncritical matter.

Reg --

I've never seen the equation for percentage shrink as a function of the ratio of fatness to wavelength. Thanks for the rule of thumb.

Do you have another rule of thumb for some particular VSWR bandwidth as a function of the same ratio?

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4479. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 17:48:41 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91qrdprlu0@208.207.71.138>
Source record: 174328

David wrote:
>
> Well just my 2 cents, I would use a N style connector where ever possible!
> The PL-259 is a bit lossy .25-.50 db loss depending how you install & solider.
>
> A RCA connector has better loss properties than a PL-259 hi hi.
>

David your two cents is worth as much as anyone else's. But are your figures the result of numerous repeated accurate measurements, or something you read, from whatever source? I had an engineer friend (now SK) who wouldn't use a PL259 for ANYTHING. I didn't argue it with him, but I've used both 259's and N's extensively on the job, and have had far more operational problems with the N's-mostly those installed by someone besides me at some earlier time.
A properly installed PL259 (many people do a terrible job installing them, unfortunately) has done everything it was asked on all the gear I've been around up thru UHF with no problems. N's have been more troublesome and fragile, often after being in service for some time.
Of course the thread about 'too many of them in a feedline causing a high SWR' is a factor to keep in mind. One on each end of the feedline will be a more reliable installation than N's on each end, from what I've seen.
For sure RCA's are something less than most reliable, whatever their loss.

Dick

4480. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 18:30:13 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <91qtrndrk1@nnrp1.deja.com>
Source record: 174329

In article <3A401D10.FFDE942@att.net>,
Joe Leggio <no_spam_jleggio@att.net> wrote:
> Randy,
>
> Thanks for the plug for my web-page...
>

Joe, thank you for providing such a great web page. I really enjoyed
it. Keep it on the web for future amateur radio antenna designers!

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

4481. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 18:41:26 UTC
From: n4jzh@knology.net
Message-ID: <3a40fcea.329769170@news.knology.net>
Source record: 174330

On Mon, 18 Dec 2000 07:54:02 -0700, wboas <wboas@chisp.net> wrote:

>
>Would anyone using the Outbacker brand `Perth' `Outbacker' or `Outreach'
>HF mobile antennas care to comment on their performance?
>
>I am a newly-minted HAM, and need a multiband HF, mobile, portable
>antenna. One user showed me his, liked it, but other opinions would be
>helpful before I spend money.
>
>Thanks,
>Bill
>KC0IZI/AG ;-)
>
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 80,000 Newsgroups - 16 Different Servers! =-----

Every heard of a Dummy Load?
Spend your hard earned Ham dollars on a Screwdriver.
www.hsantennas.com

4482. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 18:41:26 UTC
From: fractenna@aol.com
Message-ID: <20001220134126.18042.00017118@ng-fi1.aol.com>
Source record: 174331

>I have a 20m, homebrew vertical, a ground plane, mounted on the peak of my
>roof. It is a bit over 16 feet tall with its base about 0.38 wavelengths
>above the ground. I have five radials radiating out from its base, each the
>length of the antenna. The worst SWR I get is 1.2:1 and the antenna seems
>to work just fine. I guess I should be satisfied.
>
>But, due to the arrangement of my roof, the radials are radiating out over a
>partial circle (maybe 200 degrees). The open part (no radials) of the
>radial circle points northwest.
>
>My question is, does this make my antenna somewhat directional?

Yes.

Is there
>any problem with not having the radials evenly divided?

You will need to choke the coax.

73
Chip N1IR

>Thanks, Pete KA0TZK
>
>
>
>
>
>
>
>
>
>

4483. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 18:43:03 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A40FDB7.452FCB0E@oio.net>
Source record: 174332

Pete Holden wrote:
>
>------clipped-------
>
> My question is, does this make my antenna somewhat directional? Is there
> any problem with not having the radials evenly divided?
>
> Thanks, Pete KA0TZK

Pete,
Yes, your antenna radiates in a somewhat directional pattern. But!
The degree of directional pattern shift is so slight, it just isn't
worth worrying about. If the small difference in radiation pattern
shift that is present stops you from hearing a station, more than
likely,
you wouldn't have heard them anyway.
'Doc

4484. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 19:44:20 UTC
From: kleinNO@SPAMgilhousen.net
Message-ID: <3a4107c2.76297079@news>
Source record: 174333

On 20 Dec 2000 05:48:32 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>Here is the fresh one for all those scaremongers like FCC, ARRL, N6NB and all
>those who came up with RF safety "standards":
>
>http://www.washingtonpost.com/wp-srv/aponline/20001219/aponline160124_000.htm
>
>Kepp making them up, starve the children, eat your grand parrents, RF kills,
>freaktenna will sue your butt, etc....
>
>Now you can take your lead suits off!
>
>73 & MX
>Yuri, K3BU/m

Last week here in our town, the scare mongers prevailed on the school board to decline Qwest's proposal for a PCS tower built onto an increased height parking lot light standard at a local elementary school. In so doing, they turned their backs on maybe $400/month income and the promise of a high bandwidth internet connection (they're making do with dial up now.) I had explained to the principal about pattern nulls under vertical collinear antennas, etc, etc. I wish I could have attended the board meeting but had to be out of town on business. Oh well. I'd be happy to have the thing on my property.

Off topic (sort of): check me out on the 3830 list for the 10m contest. Roughly 1.6 million points. But I wasn't handicapped in the antenna department. There was a picture of my antenna in a recent QST article by Tom Schiller relating the FQ (fun quotient) to the antenna gain.

Klein Gilhousen, WT6G
Bozeman, MT

4485. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 19:44:50 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <i72r19.3k5.ln@mail.specsol.com>
Source record: 174334

Pete Holden <peholden@home.com> wrote:
> I have a 20m, homebrew vertical, a ground plane, mounted on the peak of my
> roof. It is a bit over 16 feet tall with its base about 0.38 wavelengths
> above the ground. I have five radials radiating out from its base, each the
> length of the antenna. The worst SWR I get is 1.2:1 and the antenna seems
> to work just fine. I guess I should be satisfied.

> But, due to the arrangement of my roof, the radials are radiating out over a
> partial circle (maybe 200 degrees). The open part (no radials) of the
> radial circle points northwest.

> My question is, does this make my antenna somewhat directional? Is there
> any problem with not having the radials evenly divided?

> Thanks, Pete KA0TZK

Yes, a little.

If you download the demo version of EZNEC from www.eznec.com and
model your antenna, you will see exactly what happens to the pattern.

Jim Pennino

4486. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 20:25:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91r4qp$dh5$1@neptunium.btinternet.com>
Source record: 174335

Jim Weir wrote
> Do you have another rule of thumb for some
> particular VSWR bandwidth as a
> function of the same ratio?
==========
Download program SWR_FREQ

Takes only a few seconds.
Not zipped up.
Run immediately.

Enter feedline impedance equal to antenna input resistance
when at 1/2-wave resonance.

As frequency deviates from resonance the swr increases above
1 to 1. The program user sets the swr value to which the
bandwidth is to apply.

A folded dipole has slightly wider bandwidth for a given swr
but not as much as often claimed by those who have only
heard of the effect.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

4487. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 20:29:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91r4qq$dh5$2@neptunium.btinternet.com>
Source record: 174336

> My question is, does this make my antenna somewhat
directional? Is there
> any problem with not having the radials evenly divided?
===============
No and No.

Reg.

4488. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 20:41:14 UTC
From: bucek@some.net
Message-ID: <3a41193e.1680479@news.vif.com>
Source record: 174337

On Wed, 20 Dec 2000 19:44:20 GMT, kleinNO@SPAMgilhousen.net (Klein Gilhousen) wrote:

>On 20 Dec 2000 05:48:32 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
>
>>Here is the fresh one for all those scaremongers like FCC, ARRL, N6NB and all
>>those who came up with RF safety "standards":
>>
>>http://www.washingtonpost.com/wp-srv/aponline/20001219/aponline160124_000.htm
>>
>>Kepp making them up, starve the children, eat your grand parrents, RF kills,
>>freaktenna will sue your butt, etc....
>>
>>Now you can take your lead suits off!
>>
>>73 & MX
>>Yuri, K3BU/m
>
>Last week here in our town, the scare mongers prevailed on the school
>board to decline Qwest's proposal for a PCS tower built onto an
>increased height parking lot light standard at a local elementary
>school. In so doing, they turned their backs on maybe $400/month
>income and the promise of a high bandwidth internet connection
>(they're making do with dial up now.) I had explained to the
>principal about pattern nulls under vertical collinear antennas, etc,
>etc. I wish I could have attended the board meeting but had to be out
>of town on business. Oh well. I'd be happy to have the thing on my
>property.
>
>Off topic (sort of): check me out on the 3830 list for the 10m
>contest. Roughly 1.6 million points. But I wasn't handicapped in the
>antenna department. There was a picture of my antenna in a recent QST
>article by Tom Schiller relating the FQ (fun quotient) to the antenna
>gain.
>
>Klein Gilhousen, WT6G
>Bozeman, MT
>
just scum....

4489. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 20:44:45 UTC
From: tom_bruhns@agilent.com
Message-ID: <91r5nr$l8p$1@nnrp1.deja.com>
Source record: 174339

In article <3a3f7ae4.7198289@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:

> Better look again Tom. Inside the PL-259 the cable dimensions are
> exactly the same as the cable you have installed. That's true right up
> to the start of the pin.
>
> The entire problem is in the female connector, were at the mating
> female section it is a larger dimension. Zo there is typically in the
> 30-35 ohm range, but if the dielectric is removed (some connectors
> have a mostly air dielectric) impedance moves up close to 50 ohms.

(A bit wary of a virtual tar-baby here...) OK, so is that ever an issue until the pair is mated? I never did disagree that the mated pair has a problem with respect to impedance, and I'm well aware of the impedance as a function of distance along a typical mated pair. But I'd for sure say it's a _system_ design problem, not the "fault" of the female half of the system. If there's blame to be laid, I'd lay it at the foot of the system designer; but the fact that UHF connectors are STILL in very common use after well over half a century says there must be something right about them: inexpensive, reasonably rugged, ... As with nearly everything, there are compromises in connectors. One size does not fit all. I suspect we're in good agreement on that.

And as I wrote before, IF the designer of a transmitter/transceiver and the designer of an antenna properly took the effects into account (as noted before, they are the ones that have control over the female ends that are part of their pieces of equipment), the performance of UHF connector systems at 440MHz can be just fine for ham applications, SO LONG AS the ham that uses them doesn't screw things up by putting a bunch of barrel connectors along the line. But a single line with connector at the transmitter and another connector at the antenna and nothing but low loss line between will be fine for most ham applications. Now if you think I use UHF connectors on my spectrum or network analyzers...

BTW, I had previously written something about "two 1-inch-long 25 ohm segments" potentially causing greater than 2:1 SWR at 450MHz. The example I ran that gave the 2+:1 SWR was with two half-inch-long segments, more like just a single mated pair at each of two locations along the line.

Cheers,
Tom

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

4490. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 20:48:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A411B33.1B8334E9@eznec.com>
Source record: 174338

The analysis you cite is the basis for a widespread misconception about verticals and the comparative performance between verticals and dipoles. I was really saddened to see it repeated.

The problem is that loss CAN'T be ignored when dealing with vertical antennas. The pattern you see from a vertical will only vaguely resemble the half-donut pattern unless salt water surrounds the antenna for a distance of at least several wavelengths. If you mount your vertical over real ground, even with a radial system that has essentially zero ground loss, the pattern won't look much like the donut. The wonderful lower angle radiation is virtually gone, and the signal strength is much less than the perfect-ground case. The net result is that quarter wave high dipoles compare reasonably well with verticals even at fairly low angles. (The verticals do increasingly better at lower frequencies, very low angles, and regions with higher ground conductivity.) In contrast, ground loss hardly affects the signal from a horizontal antenna except at very high elevation angles.

You'd do yourself a favor by getting a later version of the Antenna Book. I believe it was the 15th Edition (which is about twice as thick as previous ones) that Jerry Hall completely re-edited and largely re-wrote. He got rid of a whole lot of mythology which had crept in over the years and replaced it with good information.

You might also consider downloading the free EZNEC demo program from http://eznec.com. It clearly shows the profound affect that ground conductivity has on the signal from vertical antennas, and makes it easy to directly compare the field strength between a vertical and a dipole at any height, at any elevation angle.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Mark Keith wrote:
> "My 8 ft. mobile on my car outdoes my dipole at 36 feet on 40m at night
> at 1500 miles."
>
> That might be expected from the characteristics of Mark`s antennas as
> shown in figures from the ARRL antenna book, if losses are ignored.
>
> In my 14th edition, Fig. 12 shows F2-layer propagation requiring
> elevation angles from the horizon of 10 to 25 degrees to reach 1500
> miles.
>
> Mark`s 36 foot high dipole is barely more than 1/4-wave high at 40m. It

> thus does best straight up. Fig. 25 shows radiation from 1/4-wave high
> horizontal antennas. At 10 degrees, there is very little radiation, and
> at 25 degrees, radiation is several db down from the maximum aimed at
> the zenith. At 1500 miles and more, you are unlikely to rattle their
> cans with a dipole only 1/4-wave above ground.
>
> Fig. 48 shows radiation from vertical antennas. It makes a half-doughnut
> lying on its sliced side and encircling the antenna for short antennas.
> At elevation angles of 10 to 25 degrees, radiation is almost the same as
> the maximum value aimed at the horizon.
>
> Figures 27 and 28 show a need to get a horizontal antenna up between
> 1/2 and 5/8 wavelength, or more, to get the most radiation at angles
> suitable for F2 propagation at 1500 miles, or more.
>
> Cecil, W6RCA, had a nice comparison of vertical and horizontal antennas
> on his web pages, if I recall correctly. Hopefully, he still shows that
> comparison there.
>
> Best regards, Richard Harrison, KB5WZI

4491. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 21:26:07 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4123EF.744C@wt.net>
Source record: 174340

Fractenna wrote:

>
> Am I the ONLY one here who notices that W8JI insists on weaving a web of
> fractal insuation and false information?

I guess.
>
> Ask why he is doing this.
>
> NC

Why is he doing this? MK
--
http://web.wt.net/~nm5k

4492. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 21:29:09 UTC
From: Wayne Farmer <WayneOHere@compuserve.com>
Message-ID: <91r8gm$kv4$1@sshuraaa-i-1.production.compuserve.com>
Source record: 174341
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

"Jim Dompier" <planet_paradise@hotmail.com> wrote in message
news:MPG.14a9e3934d10e099989899@news.lava.net...
> In article <oe7%5.1823$zA6.150796@news-east.usenetserver.com>,
> bogus@ddress.com says...
> > As soon as I saw "Bolognia" in the title, I knew that this posting
would
> > indeed be a "prime example of bullcrap". Buy a spelling checker and
get a
> > clue.
>
> what is it with you spelling cops anyway? Can't you sleep at night if
> someone misspells?
>

U tel em i doen c whut there so upcet abou speling is not impotent i
nevur lurned to spel an i cann stil get a rum at the shelltur

<G>

4493. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 21:34:35 UTC
From: rwclark@seanet.com
Message-ID: <3a43256d.162623930@news.seanet.com>
Source record: 174342

On Wed, 20 Dec 2000 11:07:56 -0600, "KB9WFK" <KB9WFK@mindspring.com>
wrote:

>Why is it that the world never remembers the name of Johann Gambolputty de
>von Ausfern- schplenden
>- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
>burstein- von- knacker- thrasher-
> apple- banger- horowitz- ticolensic- grander- knotty- spelltinkle-
>grandlich- grumblemeyer- spelterwasser
>- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- nï¿½rnburger-
>bratwustle- gerspurten- mitz
>- weimache- luber- hundsfut- gumberaber- shï¿½nendanker- kalbsfleisch-
>mittler- aucher von Hautkopft of Ulm?
>

Hi OM,

I lived in Ulm, what was he known for?

73's
Richard Clark, KB7QHC

4494. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 21:41:14 UTC
From: rwclark@seanet.com
Message-ID: <3a442620.162802077@news.seanet.com>
Source record: 174343

On Wed, 20 Dec 2000 11:25:05 -0600, Bill Aycock <baycock@hiwaay.net>
wrote:

>WE all admit that you won- but -- so what?
>
>Bill-W4BSG

Hi Bill,

Obviously some "winning" relation to either cell phones or cancer (as
no link was provided, missed, nor responded to). I can see how cell
phones and "winning" (sp?) could be mutually beneficial (given the
off-topic divergence) but hardly as a boasting point.

73's
Richard Clark, KB7QHC

4495. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 22:05:27 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <45b24tg2fu1p83tvq22g70koaaqn8umlqf@4ax.com>
Source record: 174344

"Reg Edwards" <g4fgq.regp@btinternet.com>
shared these priceless pearls of wisdom:

->Jim Weir wrote
->> Do you have another rule of thumb for some
->> particular VSWR bandwidth as a
->> function of the same ratio?
->=======================
->Download program SWR_FREQ

I've run this program, Reg, and it doesn't sweep out far enough for me to see the bandwidth edges. Is there a fairly simple approximation? I've used one for some years with my copper tape antennas that was derived experimentally, but I'm interested to see how it compares with your algorithm.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4496. Re: More GAP antenna guestions.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 22:25:27 UTC
From: Tim Taylor <tim-taylor@home.com>
Message-ID: <rla06.127693$65.1073173@news1.rdc1.fl.home.com>
Source record: 174345

I second what Gary said. My Challenger is great on 40 and 20 but does a
nice simulation of a dummy load at 3.8 MHz. My Voyager is great on 80 but
again acts as a dummy load on 160.
-Tim

"Gary Danaher" <gdanaher@home.com> wrote in message
news:3A3FF30F.E95D0E4F@home.com...
> I've used verticals for years and currently have a Gap Challenger mounted
> at the corner of the house. The Titan is not very different in design.
> They all are going to be more noisy than a beam, have a lower angle of
> radiation for DX, and require a ground system of some sort to radiate
> properly. Gap states that they require little ground work which is true,
> but you still need some copper in the ground. A multi band vertical will
> work reasonably well on all the resonant bands down to the lowest
> advertised band, at which point it begins to resemble a dummy load. If you
> want to work 40 meters, get an antenna advertised for resonance down to
> 80. If you want to operate on 80 meters, get a vertical rated for
> resonance down to 160.
> Gary
> AB5RM
>
>
> Bill Russell wrote:
>
> > I've seen a few GAP antenna postings in this group but I would like to
> > hear from a few more ppl concerning GAP products. I am interested in
> > the Titan DX and have read a few reviews. I know this is a compromise
> > antenna. That said and sticking with verticals, what do u folks think
> > of it compared to other brands? I also know that there are a lot of
> > variables with any antenna installation so Im trying to average out
> > the responses. It would be nice to be able to compare antennas that
> > are all installed at the same site but that is not likley unless
> > someone out there has done that.....Any advice will be helpful.
> >
> > Thx, Bill
>

4497. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 22:37:36 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <91rcn2$9c1$1@slb1.atl.mindspring.net>
Source record: 174346

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a43256d.162623930@news.seanet.com...
> On Wed, 20 Dec 2000 11:07:56 -0600, "KB9WFK" <KB9WFK@mindspring.com>
> wrote:
>
> >Why is it that the world never remembers the name of Johann Gambolputty
de
> >von Ausfern- schplenden
> >- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
> >burstein- von- knacker- thrasher-
> > apple- banger- horowitz- ticolensic- grander- knotty- spelltinkle-
> >grandlich- grumblemeyer- spelterwasser
> >- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
> >bratwustle- gerspurten- mitz
> >- weimache- luber- hundsfut- gumberaber- sh&#65533;nendanker- kalbsfleisch-
> >mittler- aucher von Hautkopft of Ulm?
> >
>
>
> Hi OM,
>
> I lived in Ulm, what was he known for?
>
> 73's
> Richard Clark, KB7QHC

He was a great German composer.

4498. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 22:45:44 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <91rd6apjv1@nntp9.atl.mindspring.net>
Source record: 174347

--
Why is it that the world never remembers the name of Johann Gambolputty de
von Ausfern- schplenden
- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
burstein- von- knacker- thrasher-
apple- banger- horowitz- ticolensic- grander- knotty- spelltinkle-
grandlich- grumblemeyer- spelterwasser
- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
bratwustle- gerspurten- mitz
- weimache- luber- hundsfut- gumberaber- sh&#65533;nendanker- kalbsfleisch-
mittler- aucher von Hautkopft of Ulm?

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a43256d.162623930@news.seanet.com...
> On Wed, 20 Dec 2000 11:07:56 -0600, "KB9WFK" <KB9WFK@mindspring.com>
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> >grandlich- grumblemeyer- spelterwasser
> >- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
> >bratwustle- gerspurten- mitz
> >- weimache- luber- hundsfut- gumberaber- sh&#65533;nendanker- kalbsfleisch-
> >mittler- aucher von Hautkopft of Ulm?
> >
>
>
> Hi OM,
>
> I lived in Ulm, what was he known for?
>
> 73's
> Richard Clark, KB7QHC

Did you know his wife, Sarah Gambolputty de von Ausfern- schplenden
- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
grander-
knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-

bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
sh&#65533;nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm

or his only other known surviving relative, Carl Gambolputty de von Ausfern-
schplenden
- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
grander-
knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
sh&#65533;nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm?

4499. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 23:09:37 UTC
From: Pie`` <picaruso@dontwriteme.com>
Message-ID: <R_a06.149566$hk4.5476592@news.infostrada.it>
Source record: 174348

"Allen Emer" <aemer@monmouth.com> ha scritto nel messaggio
news:3A3CE29C.8869EFF7@monmouth.com...
> Any one know of a modeling program that allows calculating elements
> using flat (& slightly curved) metal tape measure ruler material?
> Or doesn't it critically matter that it is not a radial element?
>
> Allen Emer, N2YAC

Sorry don't know about such a program, but a used a standard program to
model my tape-antenna, inputting about 1/3 of its wideness as diameter.
I made a 3 el yagi with folded dipole as radiator and I'm quit satisfied of
its performance in fox-hunting. (i didn't made any measure of its gain or
F/B ratio or beam angle but just
resonance and impedance).
The impedance is 100 Ohms, matched with a lambda/4 75 Ohms TV cable.

--
73 de IK2VTJ, Piero.

http://www.infinito.it/utenti/ardf.it
http://ardfitalia.supereva.it
http://www.qsl.net/ik2vtj

4500. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-20 23:27:21 UTC
From: richardharrison@webtv.net
Message-ID: <9287-3A414059-14@storefull-114.iap.bryant.webtv.net>
Source record: 174349

Roy Lewallen wrote:
"The problem is that loss CAN`T be ignored when dealing with vertical antennas."

Alas, that is too true. Problem is that loss must be determined by the site and actual equipment and most often is unknown until measured.

The older edition of the Antenna Book agrees with many other texts in presentation of theoretical (lossless) patterns. I mentioned the ARRL book because I thought many would be able to look at the figures for themselves. I don`t have a newer ARRL book. It would have been informative to have the effects of loss included.

I`ve heard that someone is giving me a copy of the newest ARRL antenna book for Christmas. So, next time I post, I may not be so ignorant.

The elevation angle at whch a horizontal dipole begins to surpass a vertical in radiation depends on losses as Roy says. That is a good reason to use EZNEC which obviously takes into account the losses it`s told to use.

My intent in posting was to explain why Mark got better DX (1500 miles) with his vertical than with his 1/4-wave-high dipole. Mark`s mobile installation is apparently very good, because most I`ve seen would have difficulty in competition even with his too-low dipole.

The sufficiency of 1/4-wave height for horizontal antennas is something I hear repeated often. I believe this fallacy may be based upon obtaining a drivepoint impedance near 70 ohms. Too bad most of the radiation is nearly straight up from a horizontal antenna at this altitude. This altitude is good for near vertical incidence, which was what the army was after in the example I gave from the WW-2 handbook. No fallacy at all is involved if you want sky-wave coverage of a few hundred miles or less. The 1/4-wave high dipole may be the best antenna for you. For greater distance, it is helpful to bring the elevation angle of the radiation down by getting the altitude of the horizontal antenna up.

I`ve actually installed horizontal dipoles at offices and in oil camps around South America and seen how they worked. At low elevations, you get the near vertical incidence results as discussed in this thread. For DX, horizontal dipoles have to be raised nearly twice as high as the 1/4-wave-high vertical incidence antennas.

I could also tell of many events while trying to use HF SSB mobiles in the Land Rovers and trucks we had in South America. They had long whip antennas mounted atop fiberglass boxes containing the loading coils with

motorized tap switches. The results weren`t good. We did much better with VHF FM after discarding the SSB.

Best regards, Richard Harrison, KB5WZI

4501. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 00:04:19 UTC
From: fractenna@aol.com
Message-ID: <20001220190419.06184.00001874@ng-ff1.aol.com>
Source record: 174350

With due respect, can you guys change the thread title if you want to go off-topic? Chuck is NOT being charged with illegal wiretapping and I think we should all respect his privacy.

Thanks!

73
Chip N1IR

4502. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 00:15:08 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A414B76.F3E3EB45@home.com>
Source record: 174351

Pete Holden wrote:

> I have a 20m, homebrew vertical, a ground plane, mounted on the peak of my
> roof. It is a bit over 16 feet tall with its base about 0.38 wavelengths
> above the ground. I have five radials radiating out from its base, each the
> length of the antenna. The worst SWR I get is 1.2:1 and the antenna seems
> to work just fine. I guess I should be satisfied.
>
> But, due to the arrangement of my roof, the radials are radiating out over a
> partial circle (maybe 200 degrees). The open part (no radials) of the
> radial circle points northwest.
>
> My question is, does this make my antenna somewhat directional? Is there
> any problem with not having the radials evenly divided?
>
> Thanks, Pete KA0TZK

It may be somewhat directional, but probably not enough to make any significant difference. Despite every precaution, nobody's antenna pattern resembles that which is predicted by theory -- there are always factors which affect the pattern. Any problem with not having the radials evenly divided is not likely to have any noticable effect. If you were to notice a consistent lack of contacts from a given direction it might be worth looking into. The main factor which you have already indicated is that it "seems to work just fine" -- have fun. Antennas are funny people -- they fire the arrows into the air, but you cannot always predict where those arrows will land. 73 and gud DX

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4503. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 00:20:26 UTC
From: k1bqt@aol.com
Message-ID: <20001220192026.02588.00005070@ng-cc1.aol.com>
Source record: 174352

>Thanks for not calling me "functionally illiterate" with an 'alleged Ph.D." though--<

Both charges would be incorrect, so I wont. Your PhD is real and you are, indeed, a literate person (although inclined to be a bit of a troublemaker at times). On the internet, being a bit of a troublemaker is allowed, encouraged, and even celebrated! Someone said so on NPR last week.

Happy holidays to you, Mary, and AJ. Really. Peace and relaxation.

73

Rick K1BQT

4504. Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 00:26:41 UTC
From: Mike N4DIA <michaelj@networktel.net>
Message-ID: <t42jhveqep6n02@corp.supernews.com>
Source record: 174353
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

All,

Looking to replace an antenna. Because of several restrictions, I really need it to be a through the window mount. I would like to hear from any of you who have used any 2 band 2m/70cm antennas and which ones any of you would recommend. My previous vehicle used a RS ant that had adequate performance but I know there has to be much better antennas on the market.

Thanks
Mike
N4DIA

4505. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 01:15:07 UTC
From: rwclark@seanet.com
Message-ID: <3a4656c1.175251458@news.seanet.com>
Source record: 174354

On Wed, 20 Dec 2000 16:45:44 -0600, "KB9WFK" <KB9WFK@mindspring.com>
wrote:

>> Hi OM,
>>
>> I lived in Ulm, what was he known for?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Did you know his wife, Sarah Gambolputty de von Ausfern- schplenden
>- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
>burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
>grander-
> knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
>- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- nï¿½rnburger-
>bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
>shï¿½nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm
>
>or his only other known surviving relative, Carl Gambolputty de von Ausfern-
>schplenden
>- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
>burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
>grander-
> knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
>- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- nï¿½rnburger-
>bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
>shï¿½nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm?
>
>

Hi OM,

You got me there too :-)

Ol' Carl must be a blast at parties.

However, how can he be a
> von Ausfern-schplenden
>von- knacker
and
>von Hautkopft of Ulm
(which denotes at least four "of's")? Is his picture in the
Bundespostoffice?

73's
Richard Clark, KB7QHC

4506. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 01:33:51 UTC
From: n2ey@aol.com
Message-ID: <20001220203351.19648.00003461@nso-fp.aol.com>
Source record: 174355

In article <Pine.GSO.4.10.10012151823450.4570-100000@unics>, "R.Wilhelm" <nhbiwilh@rrzn-user.uni-hannover.de> writes:

>What is the probability for life to emerge on a 12000 km diameter planet
>150 million km away from a 1.4 million km star having a surface
>temperature of around 6000 K and being located about 30000 lightyears away
>from the galactic center ?

Over a period of six billion years, it's pretty high.

>What it the propability that a species generated in this process will
>develop nuclear bombs and fly to the moon?

Over a period of a million or so years - very high.

>The probability is low, but it happened anyway.

No. We have no idea what the probablilities are, because we have so little information. The sun is an ordinary type of main-sequence star - there are millions of them visible to us. How many of them have planets like ours? Nobody on this rock knows. Earth could be unique, or there could be millions just like it out there.

We do know that some other stars have planets. Maybe most of them do.

What's the probability that Earth is unique? I say much lower than anything you described.

73 de Jim, N2EY

4507. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 01:37:09 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A415EC5.6000705@hiwaay.net>
Source record: 174356

Richard- If you read the enclosures, also, there was a post from Yuri on this thread. The thread had been going along mostly on topic, until Chip had to twit Yuri about his (Chips) unanswered challenge re the 10M SSB contest. Why he chose that thread, instead of just issueing a straight jibe at Yuri, the Lord only knows. Yuri had told him long ago that he (YUri) was not interested in playing with children during a serious contest.

Hope this helps- Bill-W4BSG

Richard Clark wrote:

> On Wed, 20 Dec 2000 11:25:05 -0600, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
>
>> WE all admit that you won- but -- so what?
>>
>> Bill-W4BSG
>
>
> Hi Bill,
>
> Obviously some "winning" relation to either cell phones or cancer (as
> no link was provided, missed, nor responded to). I can see how cell
> phones and "winning" (sp?) could be mutually beneficial (given the
> off-topic divergence) but hardly as a boasting point.
>
> 73's
> Richard Clark, KB7QHC

4508. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 02:34:26 UTC
From: fractenna@aol.com
Message-ID: <20001220213426.11009.00003330@ng-cu1.aol.com>
Source record: 174357

>Yuri had told him long ago that he
>(YUri) was not interested in playing with children during a serious contest.
>
>Hope this helps- Bill-W4BSG
>

Ye...es...and it was that unfounded hubris (of Yuri's)that led me to challenge Yuri in the 10M contest--a challenge he did not take up, for the simple reason that he harbored doubts as to his ability to beat me with my tiny fractal antenna and low power. And, of course, the right set of operating skills, honed first some 30 years ago--long before Yuri even knew what a contest is..

Now we know why he backed off: it appears I came in second in the country. Do you think Yuri would have come in first? Looks like we will never know. But based on his operating style I very, very much doubt that he could do the number of Q's I did at LP. With my lil' fractal quad yagi:-)

73
Chip n1IR

4509. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 02:35:35 UTC
From: fractenna@aol.com
Message-ID: <20001220213535.11029.00003060@ng-cu1.aol.com>
Source record: 174358

>Happy holidays to you, Mary, and AJ. Really. Peace and relaxation.
>
>73
>
>Rick K1BQT
>

Thanks; and best to all up there in the new millenium.

73
Chip n1IR

4510. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 02:47:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91rqvbotp0@208.207.71.170>
Source record: 174359

David wrote:
>
> I just wanted to say I agree that we disagree on rf ground aspects this is in my
> opinion one of the most fundamentally basic rules to start with then dependent
> on the
> antennas the band used ect you know the basic contingents,that's the place to
> start!
>
> The hobby continues.............
>

A couple weeks ago I was riding over the Rockies in a jet at 37,000
feet and I KNOW that the pilot talked on his radio to the ground. Been
wondering ever since what he did for a good ground.......

4511. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 02:54:25 UTC
From: xppq@aol.com
Message-ID: <20001220215425.19870.00004981@ng-ft1.aol.com>
Source record: 174360

John

Given the supports - trees, what ever

Install half square - also called a half
bobtail array.
feed in corner with coax of ladder line

has two in phase vertical sections
with maximum current and radiation
at the TOP !!! great antenna !
You will need some space
K3KY has nice web page on
bobtails and half bobtails.
Great dx antenna !!!

Josh n7xm@qsl.net

4512. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 02:58:21 UTC
From: Solomon Fernblatt <fernblatt@spicednondairyham.com>
Message-ID: <kle06.1773$fJ1.74907@news2.atl>
Source record: 174361

FINALLY a positive comment on the B&W! I have used them for years
both at home and professionally, and have had as good a luck with them
as with a random dipole and a tuner, without the bother of a tuner. I am
sure there are a few S units difference between it and a cut dipole, but
I like the antenna myself. :-)

Tom KA4RKT

David G. Nagel <nagel@core.com> wrote in message
news:3a3bb15d$0$90268$1dc6e903@news.corecomm.net...
> Go to B&W's web page and they will tell you just exactly what the
> numbers are and how much it will cost to but the balun and load for. I
> have one of their folded dipoles and like it.
> Dave Nagel
> WD9BDZ
>
> Cboone@Earthlink.net wrote:
> >
> > The balun is 16:1 according to the RF bridge KE5O and I used to
> > measure mine with...the resistor is 800 Ohms NON inductive/100watt
> >
> > Chris
> > WB5ITT
> >
> > Mike wrote:
> > >
> > > I came across one all tangled up. I am not interested in getting it
back
> > > like it should be.My question is what ratio is the large balun on it
and
> > > could this be of any use for making up another antenna. Also the large
> > > resistor in the center of the antenna can it be of use other than a
> > > dunny load.

4513. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 03:00:36 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91rrok$4d$0@208.207.71.170>
Source record: 174362

Cecil wrote:
>
> Alan Biocca wrote:
> > Interestingly enough, the spiral-wound wire on fiberglass whips perform
> > very poorly away from the band they are designed for (much worse than on
> > their design frequency).
>
> Is that band above or below the band they are designed for? Seems a
> 30m Hamstick and an autotuner should work reasonably well on 40m.
>

It will. But a 40 meter spiral wound works poorly on 15 and 10. I'd say its because the impedance of the spiral wound section acts as a series RF choke on the bands that are very much higher in frequency than the band the antenna is designed for.

Convert that statement into engineeringese any way you wish.

4514. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 03:07:09 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4173DD.CF00BBCD@IEEE.org>
Source record: 174363

Richard Harrison wrote:
> I`ve heard that someone is giving me a copy of the newest ARRL antenna
> book for Christmas. So, next time I post, I may not be so ignorant.

So, no more bliss for you, eh? :-)
--
http://www.mindspring.com/~w6rca

4515. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 03:13:16 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A41754C.7C50D401@IEEE.org>
Source record: 174364

N2EY wrote:
>
> <nhbiwilh@rrzn-user.uni-hannover.de> writes:
> >What is the probability for life to emerge on a 12000 km diameter planet
> >150 million km away from a 1.4 million km star having a surface
> >temperature of around 6000 K and being located about 30000 lightyears away
> >from the galactic center ?
>
> Over a period of six billion years, it's pretty high.

Actually, with the aid of a little hindsight, it is 100% probable. :-)
We are viewing the universe from the center of that 100% probability
which may or may not affect our objectivity.
--
http://www.mindspring.com/~w6rca

4516. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 03:27:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4178B3.2DFCBD1F@IEEE.org>
Source record: 174365

Dick Carroll wrote:
>
> Cecil wrote:
> >
> > Alan Biocca wrote:
> > > Interestingly enough, the spiral-wound wire on fiberglass whips perform
> > > very poorly away from the band they are designed for (much worse than on
> > > their design frequency).
> >
> > Is that band above or below the band they are designed for? Seems a
> > 30m Hamstick and an autotuner should work reasonably well on 40m.
>
> It will. But a 40 meter spiral wound works poorly on 15 and 10. I'd say
> its because the impedance of the spiral wound section acts as a series
> RF choke on the bands that are very much higher in frequency than the
> band the antenna is designed for.
>
> Convert that statement into engineeringese any way you wish.

Dick, all my "engineeringese" is in digital logic and microcomputers.
Ham Radio and antennas are merely my hobby. When a mobile antenna is
used on a higher frequency than its intended frequency, it demonstrates
a relatively low capacitive reactance between the turns of the coil that
can result in an LC resonance with the inductive reactance. The result
is called self-resonance where most of the energy is exchanged between
the inductive reactance and capacitive reactance with massive I^2*R losses.

In general, mobile antennas radiate well near their resonant frequency and
below. In general, more inductance than is needed should not be used on
a mobile antenna. I've heard it is possible to get a screwdriver with a
large top hat to resonate on 10m as a 3/4WL antenna. I'll bet that
configuration is pretty lossy.
--
http://www.mindspring.com/~w6rca

4517. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 04:31:46 UTC
From: k3bu@aol.com
Message-ID: <20001220233146.12100.00003097@ng-mn1.aol.com>
Source record: 174366

> And, of course, the right set of operating skills, honed
>first some 30 years ago--long before Yuri even knew what a contest is..
>

>73
>Chip n1IR

Lying skunk (again.) He was in diapers (honing his....) when I was collecting
contest awards.
If I sued Phimd for the crap he is acusing me of or ascribing to me ...

Get help, grow up and get the hell outa here jerk!
Frack OFF!

BUm

4518. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 05:19:54 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <91s47o$k3q$1@slb7.atl.mindspring.net>
Source record: 174367

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a4656c1.175251458@news.seanet.com...
> On Wed, 20 Dec 2000 16:45:44 -0600, "KB9WFK" <KB9WFK@mindspring.com>
> wrote:
>
> >> Hi OM,
> >>
> >> I lived in Ulm, what was he known for?
> >>
> >> 73's
> >> Richard Clark, KB7QHC
> >
> >Did you know his wife, Sarah Gambolputty de von Ausfern- schplenden
> >- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
> >burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
> >grander-
> > knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
> >- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
> >bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
> >sh&#65533;nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm
> >
> >or his only other known surviving relative, Carl Gambolputty de von
Ausfern-
> >schplenden
> >- schlitter- crasscrenbon- fried-digger- dingle- dangle- dongle- dungle-
> >burstein- von- knacker- thrasher- apple- banger- horowitz- ticolensic-
> >grander-
> > knotty- spelltinkle-grandlich- grumblemeyer- spelterwasser
> >- kurstlich- himbleeisen- bahnwagen- gutenabend- bitte- ein- n&#65533;rnburger-
> >bratwustle- gerspurten- mitz- weimache- luber- hundsfut- gumberaber-
> >sh&#65533;nendanker- kalbsfleisch-mittler- aucher von Hautkopft of Ulm?
> >
> >
>
> Hi OM,
>
> You got me there too :-)
>
> Ol' Carl must be a blast at parties.
>
> However, how can he be a
> > von Ausfern-schplenden
> >von- knacker

> and
> >von Hautkopft of Ulm
> (which denotes at least four "of's")?

He moved a lot. :-)

> Is his picture in the
> Bundespostoffice?
>
> 73's
> Richard Clark, KB7QHC

4519. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 05:31:20 UTC
From: Nick Dunklee <scsiguy03@yahoo.com>
Message-ID: <B666FF78.4EB2%scsiguy03@yahoo.com>
Source record: 174368
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

I no I kant! ;)

> From: Jim Dompier <planet_paradise@hotmail.com>
> Organization: Island Shades
> Reply-To: planet_paradise@hotmail.com
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,m
> isc.kids.health
> Date: Tue, 19 Dec 2000 21:29:27 -1000
> Subject: Re: Paranoid Bolognia, a prime example of Bullcrap
>
> In article <oe7%5.1823$zA6.150796@news-east.usenetserver.com>,
> bogus@ddress.com says...
>> As soon as I saw "Bolognia" in the title, I knew that this posting would
>> indeed be a "prime example of bullcrap". Buy a spelling checker and get a
>> clue.
>
> what is it with you spelling cops anyway? Can't you sleep at night if
> someone misspells?
>
>
>
>
>
> --
> =====V=====
> Jim Dompier
> Island Shades
> http://www.islandshades.com

4520. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 05:35:49 UTC
From: Nick Dunklee <scsiguy03@yahoo.com>
Message-ID: <B666FFDD.4EB3%scsiguy03@yahoo.com>
Source record: 174169
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Yeah, I have one, it's this awesome cellular screen! It blocks ALL radiation..thing is I can't reach the phone when it's in it...but that don't matter, because it can't find a signal anyway!...hrm...maybe I'd be better off just shutting it off...

> From: Orac <Orac@mac.com>
> Organization: The most powerful computer in the galaxy
> Newsgroups:
> alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,m
> isc.kids.health
> Date: Wed, 20 Dec 2000 13:05:04 GMT
> Subject: Re: Paranoid Bolognia, a prime example of Bullcrap
>
> In article <3A40A787.77BB2373@home.com>, James Knott
> <the.lights.are.on.but.no.one.is@home.com> wrote:
>
>> Orac wrote:
>>>
>>> In article <3a3f87ab.10469512@news.akorn.net>, 2w8ji@contesting.com (Tom
>>> W8JI)
>>> wrote:
>
>>>> The reason you hear some much pure unvarnished bullcrap about how dangerous
>>>> cellphones are is because people can hose you for money if they get you
>>>> good and paranoid.
>>>>
>>>> The "chip" that stops harmful radiation is a prime example, and the media
>>>> stirring up people to improve ratings is another.
>>>
>>> Not to mention all those "cellular phone shields" such as "Cell-Shield" and
>>> variants that clip on to cell phones. Their makers claim that they "decrease
>>> harmful radiation." Independent tests show that most of them are useless.
>>
>> Most?
>
> OK, OK. I was leaving open the possibility that, somewhere, somehow, one of
> those devices might actually decrease that dreaded radiation somewhat. :-)
>
> --
> Orac |"A statement of fact cannot be insolent."
> |
> |"If you cannot listen to the answers, why do you
> | inconvenience me with questions?"

4521. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 06:01:32 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A419C85.3F10CA07@att.net>
Source record: 174170

Thanks to Mark, Cecil, Ian, and Dick for reinforcing what I tried to say in my earlier posting. My, I had no idea what a nerve I was striking! <:}

I think that the original poster fell prey to the notion that a wire running from his shack equipment to a rod in the ground obviously had to be an r-f ground since that is what he intended it to be.

Sadly, even our simple little hamshack and antenna installations often are far more complex than we recognize or care to admit.

If any have taken offense at my comments, that is unfortunate, since my remarks were intended to be objective and technical, although I did bring in a personal note or two largely to suggest some credibility to my statements.

Anyone is free to organize their equipment anyway they please. If it works to their satisfaction, bless their hearts and more power to them.

But, let us all please think for a bit before publishing bold statements that simply do not hold up in the face of what has been known on this subject for the better part of 100 years.

It is a desirable goal for our station equipment to operate at zero r-f potential. It is not a necessary condition for effective and satisfactory operation. Above all, merely connecting a convenient length of wire from some piece of equipment to some sort of ground rod some distance away does not constitute the implementation of an "r-f ground." Nor is such an arrangement a fundamental, required element in any amateur station if proper antenna engineering has been done.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Dick Carroll wrote:
>
> David wrote:
> >
> > I just wanted to say I agree that we disagree on rf ground aspects this is in my
> > opinion one of the most fundamentally basic rules to start with then dependent
> > on the
> > antennas the band used ect you know the basic contingents,that's the place to
> > start!
> >
> > The hobby continues.....

> >
>
> A couple weeks ago I was riding over the Rockies in a jet at 37,000
> feet and I KNOW that the pilot talked on his radio to the ground. Been
> wondering ever since what he did for a good ground.......

--

4522. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 06:03:49 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A419D0E.53C917F1@att.net>
Source record: 174171

My screwdriver antenna operates that way with only a coil from the
feedpoint to ground. Detuning the antenna to provide a capacitive
driving point impedance does the trick. As Bill says, it was described
in the Handbook in the 50's.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Bill Turner wrote:
>
> On Wed, 20 Dec 2000 03:06:02 GMT, "Alan Biocca" <Alan.Biocca@usa.net> wrote:
>
> >So, the antenna clearly can work, the problem is matching 0.29 ohms
> >while cancelling 2k ohms of reactance. Almost all the energy will end up
> >dissipated in the tuner.
> ----------
>
> You say "almost all the energy will end up being dissipated in the tuner". That
> depends on where the tuner is located in the system. If you have the tuner
> installed directly at the base of the antenna with no coax at all, it will
> probably do ok, but if it is connected even a few feet away the loss in the coax
> will be quite large.
>
> With the example above, the best way to match the antenna is the old fashioned
> way that's been done for 50 years or more: Cancel the 2000 ohms with a coil of
> that reactance and use an L network to match the .29 ohms to the 50 ohms of the
> line. Works great, is much cheaper than a tuner and you'll learn some
> interesting things about matching and resonating antennas. Perhaps the most
> interesting thing is that you don't even need part of the L network - the
> antenna itself can be detuned to provide the missing part. Details are in any
> ARRL handbook.
>
> w7ti

4523. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 06:14:22 UTC
From: dmccord@usol.com
Message-ID: <3a419e6f.13055916@news.usol.com>
Source record: 174172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I have a R8 that is less than 6 months old and I am having problems
witht he antenna also. It was working Great and then all of a sudden
its like having a dummy load on the end of the coax!

I checked the coax (Which is also new) and Its not shorted and gives
me a perfect SWR when I connect a dummy load out there on the end of
the coax. Cushcraft (After a bunch of phone tag) had me send them the
matching box back to them, they tested it and returned it saying its
fine. I used to get better than a 2 on every band with out my tuner
now I get over a 8 swr and I can receive better if I connect the coax
to my dogs collar!

I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
ever get from me!

Worked great, Looks Great, Does not last
I can not afford almost 100$ a month for an antenna!

Delbert McCord
KA8OCN

On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:

>Hello to all,
>
>First let me say that up until now I've been a happy camper
>using Cushcraft products. However, I've just learned something
>that may be of interest to anyone considering purchasing a
>new Cushcraft antenna.
>
>I recently bought an R-8 vertical. It was just damaged by
>lightning and I e-mailed Cushcraft tech support regarding
>parts availability....the answer was 2 sentences that suggested
>I buy a new antenna and try to collect on insurance. Needless
>to say, I was not happy with that so I wrote a letter to the
>Cushcraft manager of amateur products. This gentleman was kind
>enough to telephone me today. Essentially, the conversation
>focused on the fact that the parts I needed would be so expensive
>as to make buying a new antenna more practical. However, one
>interesting fact did come to light. Parts for the R-8 vertical
>had not been "priced" yet and were thus unavailable. Further,
>Cushcraft does not "price" replacement parts until the product
>has been out for 9 to 12 months. I'd suggest you keep this
>in mind....if you drop your new R-8 or new whatever, you may
>not be able to get parts for it for up to a year!!

>
>thanks & 73,
>Phil
>W5BVB

4524. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 07:49:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91scoi$t2a$2@neptunium.btinternet.com>
Source record: 174173

> I've run this program, Reg, and it doesn't sweep out far
enough for me to see
> the bandwidth edges. Is there a fairly simple
approximation? I've used one for
> some years with my copper tape antennas that was derived
experimentally, but I'm
> interested to see how it compares with your algorithm.
===============

Yes, the program displays data only up to an SWR = 3
bandwidth. I didn't think anyone would be interested beyond
that.

What's an algorithm ? ;o) Everything is an approximation.

The antenna is considered as a 1/2-wave resonant
transmission line (which it is) with an impedance Zo. It
has a Q (sharpness of resonance) factor as does any tuned
circuit. The damping resistance is the sum of the radiation
and wire loss resistances. L and C values are those
appropriate to a transmission line of impedance Zo.

The feedpoint impedance, Zin = Rin + jXin, is then
computed versus frequency. Eventually Zin is compared with
the feedline impedance to calculate SWR versus frequency.

The most simple approximation would be to consider the
antenna as a series tuned circuit consisting of L, C, Rwire
and Rradiation, where the resistances are the equivalent
lumped values. And it should not be forgotten radiation
resistance itself changes fairly rapidly with frequency.

However, knowledge of the bandwidth at the antenna feedpoint
is mainly of academic interest because the bandwidth at the
business end of the feeder, the tuner and the transmitter,
is modified by the feedline. In general, the bandwidth at
the transmitter is made more narrow by the feedline and a
tuner. The longer the line in terms of wavelengths the
smaller the bandwidth. Only when line loss is several dB or
more can the bandwidth at the transmitter be greater than
that at the antenna.

Another factor which makes antenna bandwidth only of
academic interest - antenna feedpoint impedance hardly ever
exactly matches the line impedance even at resonance. This
in itself narrows the bandwidth for a given SWR as can be

seen from the SWR_FREQ program.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

4525. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 11:20:48 UTC
From: fractenna@aol.com
Message-ID: <20001221062048.00142.00001123@ng-mj1.aol.com>
Source record: 174174

>
>> And, of course, the right set of operating skills, honed
>>first some 30 years ago--long before Yuri even knew what a contest is..
>>
>
>>73
>>Chip n1IR
>
>Lying skunk (again.) He was in diapers (honing his....) when I was collecting
>contest awards.
>If I sued Phimd for the crap he is acusing me of or ascribing to me ...
>
>Get help, grow up and get the hell outa here jerk!
>Frack OFF!
>
>BUm
>

Perthaps, Yuri, you could be so kind as to tell us a contest acheivement from,
say, 1970 or 1971?

73
Chip N1IR

4526. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 11:43:01 UTC
From: fractenna@aol.com
Message-ID: <20001221064301.07794.00001651@ng-ff1.aol.com>
Source record: 174175

>
>I no I kant! ;)
>
>> From: Jim Dompier <planet_paradise@hotmail.com>
>> Organization: Island Shades
>> Reply-To: planet_paradise@hotmail.com
>> Newsgroups:
>>
>alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,m
>> isc.kids.health
>> Date: Tue, 19 Dec 2000 21:29:27 -1000
>> Subject: Re: Paranoid Bolognia, a prime example of Bullcrap
>>
>> In article <oe7%5.1823$zA6.150796@news-east.usenetserver.com>,
>> bogus@ddress.com says...
>>> As soon as I saw "Bolognia" in the title, I knew that this posting would
>>> indeed be a "prime example of bullcrap". Buy a spelling checker and get a
>>> clue.
>>
>> what is it with you spelling cops anyway? Can't you sleep at night if
>> someone misspells?
>>
>>
>>
>>
>>
>> --
>> =====V=====
>> Jim Dompier
>> Island Shades
>> http://www.islandshades.com
>

Here, such detritus gets publicly touted as the individual being "function
illiterate"....only on this NG you understand...

73
Chip N1IR

4527. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 12:47:08 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A41FBCC.2040104@hiwaay.net>
Source record: 174176
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

THis is a pretty good example of what I call an unfair attack. By your own words, the antenna was working fine when you first used it, and had a sudden change to poor performance. Logic tells us that something changed in the hook-up at your location, and did so abruptly. The fault can be found, and probably with only simple equipment. Why blaim the R8 when it was delivered in working order?

You say you have checked the Coax, and CushCraft has checked the box. Why did you stop there, and blaim them? There is more to the system than that.It is apparent that something changed at your location- maybe a 'hit' or a loose connection?

just my slant on it. Bill-W4BSG

Delbert McCord wrote:

> I have a R8 that is less than 6 months old and I am having problems
> witht he antenna also. It was working Great and then all of a sudden
> its like having a dummy load on the end of the coax!
>
> I checked the coax (Which is also new) and Its not shorted and gives
> me a perfect SWR when I connect a dummy load out there on the end of
> the coax. Cushcraft (After a bunch of phone tag) had me send them the
> matching box back to them, they tested it and returned it saying its
> fine. I used to get better than a 2 on every band with out my tuner
> now I get over a 8 swr and I can receive better if I connect the coax
> to my dogs collar!
>
> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
> ever get from me!
>
> Worked great, Looks Great, Does not last
> I can not afford almost 100$ a month for an antenna!
>
> Delbert McCord
> KA8OCN
>
>
>
>
>
> On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>
>

>> Hello to all,
>>
>> First let me say that up until now I've been a happy camper
>> using Cushcraft products. However, I've just learned something
>> that may be of interest to anyone considering purchasing a
>> new Cushcraft antenna.
>>
>> I recently bought an R-8 vertical. It was just damaged by
>> lightning and I e-mailed Cushcraft tech support regarding
>> parts availability....the answer was 2 sentences that suggested
>> I buy a new antenna and try to collect on insurance. Needless
>> to say, I was not happy with that so I wrote a letter to the
>> Cushcraft manager of amateur products. This gentleman was kind
>> enough to telephone me today. Essentially, the conversation
>> focused on the fact that the parts I needed would be so expensive
>> as to make buying a new antenna more practical. However, one
>> interesting fact did come to light. Parts for the R-8 vertical
>> had not been "priced" yet and were thus unavailable. Further,
>> Cushcraft does not "price" replacement parts until the product
>> has been out for 9 to 12 months. I'd suggest you keep this
>> in mind....if you drop your new R-8 or new whatever, you may
>> not be able to get parts for it for up to a year!!
>>
>> thanks & 73,
>> Phil
>> W5BVB

4528. Re: Vertical or horizontal antennas for 80m DX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 13:13:59 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A420217.6ADB@wt.net>
Source record: 174177

Xppq wrote:
>
> John
>
> Given the supports - trees, what ever
>
> Install half square - also called a half
> bobtail array.
> feed in corner with coax of ladder line
>
> has two in phase vertical sections
> with maximum current and radiation
> at the TOP !!! great antenna !
> You will need some space
> K3KY has nice web page on
> bobtails and half bobtails.
> Great dx antenna !!!
>
> Josh n7xm@qsl.net

Those can do a good job. When I was running my GP on 40m, another guy here in town ran a bobtail. His was the fairly normal three legged variety, and fed at the center element at the base with a high voltage cap. He was the only local that could outdo me to VK land. MK
--
http://web.wt.net/~nm5k

4529. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 13:24:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A420470.24BF@wt.net>
Source record: 174178

Alan Biocca wrote:
>
> Regarding using a Hamstick for 40 or 20 in place of a simple whip with
> an autotuner. A friend and I tried exactly that last summer.
> Interestingly enough, the spiral-wound wire on fiberglass whips perform
> very poorly away from the band they are designed for (much worse than on
> their design frequency). Worse than a stainless whip, which is pretty
> bad. I was amazed at how poorly they worked. The tuner could match them
> ok, but they were so dead you could hardly hear the band.

They work much better when resonant. What I would do is use a 20m stick
for 20m, and when you switch to 40m, add a 3 ft stinger whip to the top.
It will then work well on both bands, but you will have to get out to
switch. All hamsticks with very short stingers are fairly lousy
antennas. The longer the stinger on those the better. Can make a very
large difference in performance. A 20m stick and 3 ft stinger work very
well on 40m. Without the stinger , it will be the pits. MK
--
http://web.wt.net/~nm5k

4530. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 13:48:59 UTC
From: richardharrison@webtv.net
Message-ID: <15390-3A420A4B-4@storefull-111.iap.bryant.webtv.net>
Source record: 174181

Cecil, W6RCA`s post contains his web page address. A few clicks will let you see how EZNEC compares a 40M vertical versus a 40M dipole at a height of 66 feet (1/2-wavelength).

Other good stuff can be found on Cecil`s pages, too.

Best regards, Richard Harrison, KB5WZI

4531. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 13:51:28 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A420AE0.5AA8@wt.net>
Source record: 174179

Richard Harrison wrote:

> My intent in posting was to explain why Mark got better DX (1500 miles)
> with his vertical than with his 1/4-wave-high dipole. Mark`s mobile
> installation is apparently very good, because most I`ve seen would have
> difficulty in competition even with his too-low dipole.

It's no slouch...:) BTW, I was quite surprised myself when I first noticed this. It was about 2 AM one morning. I had driven over to a local choke and puke to eat breakfast one morning and was driving back home yakking to this guy I know in FLA. I got home and pulled in the driveway, and alerted him to stand by, as I was going in the house and getting on my dipole where I would have a "real" signal. Much to my surprise and dismay, when I got in the house on my dipole, I dropped strength a small amount. Maybe 5 db's worth or so. I tried it a few more times, and was repeated every time. Was no fluke.

> The sufficiency of 1/4-wave height for horizontal antennas is something
> I hear repeated often. I believe this fallacy may be based upon
> obtaining a drivepoint impedance near 70 ohms. Too bad most of the
> radiation is nearly straight up from a horizontal antenna at this
> altitude. This altitude is good for near vertical incidence, which was
> what the army was after in the example I gave from the WW-2 handbook. No
> fallacy at all is involved if you want sky-wave coverage of a few
> hundred miles or less. The 1/4-wave high dipole may be the best antenna
> for you. For greater distance, it is helpful to bring the elevation
> angle of the radiation down by getting the altitude of the horizontal
> antenna up.

I agree a 1/2 is better for dx than a 1/4 wl up. But still, you can work dx at the low heights ok. You just won't be setting the woods on fire. At that appx time, I had the usual 80/40 dipole with one coax feed at 36 ft. I was working a guy in Sydney, and we decided for kicks to try 80m. I was 100w, no amp. About 2 AM local time. I might have been maybe S 7-8 on 40m with the 1/4 wl high dipole. When we went to 80m, I was still quite Q5, and dropped a bit, but maybe only an S unit or two. And on 80m, the antenna was now at only 1/8 wl. "36ft". Still worked dx ok. Now on 160m, my dipole is at about 1/16 wl up. It is fairly lousy to dx, but I have still worked a bit on it. Mainly to the Caribbean areas. Have worked a couple of those islands out there, so it's still working at low angles to dx, although my inv L will eat it's lunch in that case. The low, low dipole works to dx, but sure nothing to write home about. It's pretty lousy at 1/16 wl up compared to the L at low angles.

> I`ve actually installed horizontal dipoles at offices and in oil camps

> around South America and seen how they worked. At low elevations, you
> get the near vertical incidence results as discussed in this thread. For
> DX, horizontal dipoles have to be raised nearly twice as high as the
> 1/4-wave-high vertical incidence antennas.

It helps to do that. But not totally necessary.
>
> I could also tell of many events while trying to use HF SSB mobiles in
> the Land Rovers and trucks we had in South America. They had long whip
> antennas mounted atop fiberglass boxes containing the loading coils with
> motorized tap switches. The results weren`t good. We did much better
> with VHF FM after discarding the SSB.

What freq were they on, and the distances used? MK

--
http://web.wt.net/~nm5k

4532. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 13:56:46 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <+gtCOtZou3x47wFUpjW1rzBd15g3@4ax.com>
Source record: 174180

"Mike N4DIA" <michaelj@networktel.net> wrote:

>All,
>
>Looking to replace an antenna. Because of several restrictions, I really
>need it to be a through the window mount.

This doesn't directly answer your question, but Diamond, Comet and
others make lip-mount bases that would give you a better electrical
connection, and not muss your car, either.

Bob
k5qwg

> I would like to hear from any of
>you who have used any 2 band 2m/70cm antennas and which ones any of you
>would recommend. My previous vehicle used a RS ant that had adequate
>performance but I know there has to be much better antennas on the market.
>
>Thanks
>Mike
>N4DIA
>

4533. Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 14:24:30 UTC
From: k3bu@aol.com
Message-ID: <20001221092430.21291.00005068@ng-co1.aol.com>
Source record: 174182

Freak crap:

>>> And, of course, the right set of operating skills, honed
>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>
>>>73
>>>Chip n1IR

I am getting tired of your crap mister!
Can you first explain how you arrived at the above statement? What is it based on? Is it just product of your sick fantasies (like other crap, Freaktennas etc.)? Are you suffering from Algoremania?

If you do explain, then you can proceed reading on.

>>Lying skunk (again). He was in diapers (honing his....) when I was
>collecting
>>contest awards.
>>If I sued Phimd for the crap he is accusing me of or ascribing to me ...
>>
>>Get help, grow up and get the hell outa here jerk!
>>Frack OFF!
>>
>>BUm
>>

Do yourself and ham radio fraternity some good, go and get some help and be rational, then we will welcome you with open arms. Please!!!

>Perthaps, Yuri, you could be so kind as to tell us a contest acheivement
>from,
>say, 1970 or 1971?
>
>73
>Chip N1IR

"Perthaps" I will give you a hint to some "acheivement" that might point you in direction of researching the subject before you make stupid statements:

If you explained and provided some material that you based your above conclusion and statement on, then you may read the following:

In 1971 CQ WPX Contest results (Feb 72) CQ Magazine had my color picture on the cover (first time contester on the cover)?. What were you honing?
Going further back -
Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture of two operators on the first page of results, one of them called "Jurco" in the

stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then I had years of contesting behind me and was awarded honorary title "Master of Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham radio was considered technical sport in Czechoslovakia. I have medal and a certificate (and pictures in the press) to prove it.

Now you got another egg in your face, go away, shape up and come back when you are pronounced fit by professionals in medical and legal areas.

Thank you,
hope it helps and have a nice day (or fuggetaboutit)
have a Happy Chanukah and don't confuse it with Christmas
like you did with Passover for "Easter breakfast"

... -.-

Yurko, oK3BU
Master of Sport

PS
I will not bother suing you for libel, defamation of character, antisemitic (antichristian) remarks, damage to my professional career, resigning from IBM, accusing me of running illegal copies of CT, calling Quad a Yagi, ad nauseam, ad nauseam....
By now you should realize that you should not tangle with me, every time you do, you look like bigger fool!

Sorry NG, I got provoked (again), trying to use plain unscientwific language in hope of getting the message through.
Back to Fruck delete key.

4534. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 15:04:14 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <91t65g$fg5$1@bob.news.rcn.net>
Source record: 174183
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Delbert McCord" <dmccord@usol.com> wrote in message
news:3a419e6f.13055916@news.usol.com...
> I have a R8 that is less than 6 months old and I am having problems
> witht he antenna also. It was working Great and then all of a sudden
> its like having a dummy load on the end of the coax!
>
> I checked the coax (Which is also new) and Its not shorted and gives
> me a perfect SWR when I connect a dummy load out there on the end of
> the coax> SNIP

Unfortunately, if the coax was developing problems, it would become more lossy and SWR readings would be entirely useless. You need to measure the power being delivered to the far end of the coax cable to make this determination. You can make a fairly decent microwave dummy load with several hundred feet of lossy cable.

Pete

4535. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 15:13:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A421E2F.324FDADB@IEEE.org>
Source record: 174184

Reg Edwards wrote:
> What's an algorithm ? ;o)

Did you hear about the new algorethm that just keeps on counting?
--
http://www.mindspring.com/~w6rca

4536. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 15:37:15 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4223AB.82E6D959@dvol.com>
Source record: 174185

millitesla@my-deja.com wrote:

> In article <3A3C4E6D.1978F95@dvol.com>,
> Brian Kelly <kelly@dvol.com> wrote:
>
> > One U.S. inch = 25.400mm exactly.
> > >
> > Bare copper U.S. #10 wire diameter is 0.1019 inches = 2.565mm
> > >
>
> There is no such thing as 2.565 mm wire in a metric country.

>
I said that U.S. #10 wire is 2.565mm in diameter, which it is. I did not
say there is any such thing as 2.565mm wire in metric countries.
>

> This is true for 3.5 floppy disks. The actual dimensions per ISO spec
> is 90 x 92 x 3 mm. None of these is 3.5 inches.
>
> It seems inches are used when being exact is not an issue

>
The neighborhood machine shops and manufacturing firms around here
routinely produce parts to 0.001 and 0.0001 inch tolerances. Is that exact
enough?
>

>
>
> Sent via Deja.com
> http://www.deja.com/

>
w3rv

4537. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 15:53:21 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A42275B.EFED1A48@home.com>
Source record: 174186

"David G. Nagel" wrote:

> Go to B&W's web page and they will tell you just exactly what the
> numbers are and how much it will cost to but the balun and load for. I
> have one of their folded dipoles and like it.
> Dave Nagel
> WD9BDZ
>
> Cboone@Earthlink.net wrote:
> >
> > The balun is 16:1 according to the RF bridge KE5O and I used to
> > measure mine with...the resistor is 800 Ohms NON inductive/100watt
> >
> > Chris
> > WB5ITT
> >
> > Mike wrote:
> > >
> > > I came across one all tangled up. I am not interested in getting it back
> > > like it should be.My question is what ratio is the large balun on it and
> > > could this be of any use for making up another antenna. Also the large
> > > resistor in the center of the antenna can it be of use other than a
> > > dunny load.

You are not alone. I used a B&W 370-15 antenna (T2FD type) for a number of years

with great success. The balun was 12:1 and the resistor was 600 ohms. I've been
on
the air since 1958, but moving around in the Navy made ideal antenna
installations
difficult. The B&W was an easy alternative. Yes, in the final analysis it was
down
somewhat from a dipole, but I worked everything I wanted including lots of DX.
B&W have always produced quality product and I thought their 370-15 was one of
them.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4538. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 15:55:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91t957$dk9$1@plutonium.btinternet.com>
Source record: 174187

Cecil wrote >
> Did you hear about the new algorethm that just keeps on
counting?
==========
No Cec, I havn't heard. Most people say it's the SWR which
counts.

Actually its the reflection coefficient.

Yours, Reg.

4539. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 16:00:25 UTC
From: richardharrison@webtv.net
Message-ID: <25379-3A423729-49@storefull-118.iap.bryant.webtv.net>
Source record: 174193

Mark keith wrote:
"What freq were they on, and the distances used?"

We had several frequencies in the 3 to 6 MHz range. We needed several due to broadcasters which would pop up or drift onto a channel we were using at times. We made no effort to adjust to ionospheric variations as we had no low, medium, and high frequency assignments.

Our main use was short-range communications, 40 or 50 miles. Usually it was base to mobile (including vessels at Tierra del Fuego) and these were usually within VHF range. We sometimes needed to communicate much farther, but we gave that up when we went to VHF FM.

Our SSB operators would be switched to the wrong channel and miss vital messages. Other times, the "speech clarifier" seemed to mystify the SSB operator. The RCA SSB equipment was a mess, too. Even at freezing temperatures, the plastic coil forms melted in the radios. In the Chaco Jungle, you can imagine the temperature problems.

So, Motorola FM proved quite a relief, even though propagation was almost limited to as far as the eye could see. I did talk to an oil-field supply house in west Texas from a Motorola Handie Talkie on one occasion, however. This was on 33 MHz. Of course we arranged relays and other strategies to alleviate the limited range problems. The operators could use the FM with few problems. We put up tall towers for our antennas, but these had to withstand monstrous winds at Tierra del Fuego.
I`m no civil erngineer, but we had a supply of line-pipe and wire rope, and I had steel handbooks. We also had excellent shops and welders. So, I designed the towers, made the antennas, and we put them up. I expect they are still standing and being used after 40 years.
Argentina "repatriated" the oilfield we found and developed, so I suppose YPF is the group now using the Motorola stuff or its replacements.

Best regards, Richard Harrison, KB5WZI

4540. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 16:01:08 UTC
From: richardharrison@webtv.net
Message-ID: <25379-3A422944-45@storefull-118.iap.bryant.webtv.net>
Source record: 174188

George, W5YR wrote:
Above all, merely connecting a convenient length of wire from some piece of equipment to some sort of ground rod does not constitute the implementation of an "r-f ground".

Very true. Wire has inductance and resistance.

2nd story shacks remind me of KTRH, 740KHz, a 50KW Houston station. The transmitter is located at Cedar Bayou on Galveston Bay. The site floods, so the transmitter is placed high above earth to keep dry during the floods. They have a 2nd story shack.

I used to visit the site. They had no loose r-f in the plant, burning fingers or anything else. RF grounding was the standard 120 barely buried radials from each of the four towers. This was connected with the plant via the coax lines to the power-divider/phasing cabinet. All of the plant grounds, including the r-f cabinets were connected to the a-c service entrance ground as required by the National Electrical Code. Ground loops were no problem.

The station gets out well. I listened to Dan Rather give a blow by blow account of Hurricane Carla roaring through Houston on my little hand held Hitachi transistor radio in Tierra del Fuego, I believe that`s about 9000 miles away, with scarsely any fading. KTRH does have a north-south directional array.

In olden times, many broadcasters located their plants atop high downtown buildings. I once worked for KXYZ which had an old Western Electric transmitter atop the Gulf Building in downtown Houston. Some FM and some AM broadcasters still locate plants atop tall buildings. RF grounding and isolation must avoid producing inhabited hot spots throughout the building, and they usually do. It should be no big deal.

The point is to use a balanced r-f connection to the load, or to use the feedline ground as the r-f connection to the antenna system ground. The r-f ground is needed at the unbalanced antenna. It is connected to your transmitter via the coax. You should do the same with your mobile installation. You ground the coax shield very well to the car body at the antenna. Bolting the radio case to the car body also, usually causes no problem. O.K. you use a mag-mount and have no connection to the car body at the antenna. Not so good.

Best regards, Richard Harrison, KB5WZI

4541. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 16:18:42 UTC
From: Eddie Haskell <harleybum@easyriders.com>
Message-ID: <C3q06.13501$qN6.1480955@typhoon.we.rr.com>
Source record: 174189
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

ALL "on-glass" antennas suck...just some more than others. Go with "Larson"
for better performance, but be advised that a mag-mount will outperform a
on-glass hands down everytime....Eddie

4542. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 16:57:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91td92iss1@neptunium.btinternet.com>
Source record: 174191

The resonant Q of a 1/2-wave dipole, considered as a series resonant circuit, is itself a very slowly changing logarithmic function of the slenderness-ratio = antenna length/diameter.

If B is the bandwidth between the 1 dB points then -

For a 160m dipole with 18 gauge wire, Q is roughly 17 and B = 55 KHz.

For a 10 meter dipole with 10 gauge wire, Q is roughly 11 and B = 1.3 MHz

For a 2 meter dipole with 1" diameter tubes, Q is roughly 5 and B = 14 MHz

So nobody, I hope, needs to readjust the tuner between 144 and 146 MHz.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:91scoi$t2a$2@neptunium.btinternet.com...
> > I've run this program, Reg, and it doesn't sweep out far
> enough for me to see
> > the bandwidth edges. Is there a fairly simple
> approximation? I've used one for
> > some years with my copper tape antennas that was derived
> experimentally, but I'm
> > interested to see how it compares with your algorithm.
> ==========
>
> Yes, the program displays data only up to an SWR = 3
> bandwidth. I didn't think anyone would be interested beyond
> that.
>
> What's an algorithm ? ;o) Everything is an approximation.
>
> The antenna is considered as a 1/2-wave resonant
> transmission line (which it is) with an impedance Zo. It

> has a Q (sharpness of resonance) factor as does any tuned
> circuit. The damping resistance is the sum of the
radiation
> and wire loss resistances. L and C values are those
> appropriate to a transmission line of impedance Zo.
>
> The feedpoint impedance, Zin = Rin + jXin, is then
> computed versus frequency. Eventually Zin is compared with
> the feedline impedance to calculate SWR versus frequency.
>
> The most simple approximation would be to consider the
> antenna as a series tuned circuit consisting of L, C,
Rwire
> and Rradiation, where the resistances are the equivalent
> lumped values. And it should not be forgotten radiation
> resistance itself changes fairly rapidly with frequency.
>
> However, knowledge of the bandwidth at the antenna
feedpoint
> is mainly of academic interest because the bandwidth at
the
> business end of the feeder, the tuner and the transmitter,
> is modified by the feedline. In general, the bandwidth at
> the transmitter is made more narrow by the feedline and a
> tuner. The longer the line in terms of wavelengths the
> smaller the bandwidth. Only when line loss is several dB
or
> more can the bandwidth at the transmitter be greater than
> that at the antenna.
>
> Another factor which makes antenna bandwidth only of
> academic interest - antenna feedpoint impedance hardly
ever
> exactly matches the line impedance even at resonance. This
> in itself narrows the bandwidth for a given SWR as can be
> seen from the SWR_FREQ program.
> --
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
>

4543. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:05:41 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <mvd44tkonsbbcrfp8o1u3mi79c0junf8ar@4ax.com>
Source record: 174190

"Reg Edwards" <g4fgq.regp@btinternet.com>
shared these priceless pearls of wisdom:

->> I've run this program, Reg, and it doesn't sweep out far
->enough for me to see
->> the bandwidth edges.
->===============
->
->Yes, the program displays data only up to an SWR = 3
->bandwidth. I didn't think anyone would be interested beyond
->that.

No, that's not the way I see the program working. I see some fractional bandwidth edges, not VSWR limit edges. I'll work it again later to see if it really is a VSWR limit or %bandwidth limit.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4544. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:07:54 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <DNq06.207$Ec.1343@newsfeed.slurp.net>
Source record: 174192
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Barnum allegedly had a door, next to the bird cages, with a sign over it:
"EGRESS". The door led to the alley.

73, Dave, K3BHJ

4545. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:17:54 UTC
From: rwclark@seanet.com
Message-ID: <3a48395e.233264777@news.seanet.com>
Source record: 174194

On 21 Dec 2000 14:24:30 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture of
>two operators on the first page of results, one of them called "Jurco" in the
>stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then I
>had years of contesting behind me and was awarded honorary title "Master of
>Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham radio
>was considered technical sport in Czechoslovakia. I have medal and a
>certificate (and pictures in the press) to prove it.

Hi Yuri,

Congrats (belatedly) on your achievements in Czechoslovakia. I
remember listening to Short Wave back then and following the
Czechoslovakian Spring ushered in by Dubcek and Svobada - a promise
cut short by nearly 30 years.

73's
Richard Clark, KB7QHC

4546. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:37:42 UTC
From: Steve Casey <Steven_casey@hotmail.com>
Message-ID: <cdr06.135$q31.374@news-srv1.fmr.com>
Source record: 174198
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I hope your dog is not wearing the collar when you attach the coax.

Delbert McCord wrote in message <3a419e6f.13055916@news.usol.com>...
>I have a R8 that is less than 6 months old and I am having problems
>witht he antenna also. It was working Great and then all of a sudden
>its like having a dummy load on the end of the coax!
>
>I checked the coax (Which is also new) and Its not shorted and gives
>me a perfect SWR when I connect a dummy load out there on the end of
>the coax. Cushcraft (After a bunch of phone tag) had me send them the
>matching box back to them, they tested it and returned it saying its
>fine. I used to get better than a 2 on every band with out my tuner
>now I get over a 8 swr and I can receive better if I connect the coax
>to my dogs collar!
>
>I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>ever get from me!
>
>Worked great, Looks Great, Does not last
>I can not afford almost 100$ a month for an antenna!
>
>Delbert McCord
>KA8OCN
>
>
>
>
>
>On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>
>>Hello to all,
>>
>>First let me say that up until now I've been a happy camper
>>using Cushcraft products. However, I've just learned something
>>that may be of interest to anyone considering purchasing a
>>new Cushcraft antenna.
>>
>>I recently bought an R-8 vertical. It was just damaged by
>>lightning and I e-mailed Cushcraft tech support regarding
>>parts availability....the answer was 2 sentences that suggested
>>I buy a new antenna and try to collect on insurance. Needless
>>to say, I was not happy with that so I wrote a letter to the
>>Cushcraft manager of amateur products. This gentleman was kind

>>enough to telephone me today. Essentially, the conversation
>>focused on the fact that the parts I needed would be so expensive
>>as to make buying a new antenna more practical. However, one
>>interesting fact did come to light. Parts for the R-8 vertical
>>had not been "priced" yet and were thus unavailable. Further,
>>Cushcraft does not "price" replacement parts until the product
>>has been out for 9 to 12 months. I'd suggest you keep this
>>in mind....if you drop your new R-8 or new whatever, you may
>>not be able to get parts for it for up to a year!!
>>
>>thanks & 73,
>>Phil
>>W5BVB
>

4547. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:39:54 UTC
From: n2ey@aol.com
Message-ID: <20001221123954.05691.00001557@nso-bh.aol.com>
Source record: 174195

In article <3A41754C.7C50D401@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>>
>> <nhbiwilh@rrzn-user.uni-hannover.de> writes:
>> >What is the probability for life to emerge on a 12000 km diameter planet
>> >150 million km away from a 1.4 million km star having a surface
>> >temperature of around 6000 K and being located about 30000 lightyears away
>> >from the galactic center ?
>>
>> Over a period of six billion years, it's pretty high.
>
>Actually, with the aid of a little hindsight, it is 100% probable. :-)

That's pretty high. But he didn't say the planet described was this one.

>We are viewing the universe from the center of that 100% probability
>which may or may not affect our objectivity.

Exactly. And our vision is extremely limited. We also see the universe as it was, not how it is.

We have no idea how common planets like this one are. We do know that millions of stars like our sun exist.

For all we know, the evolution of intelligent life could be as common as gravity.

73 de Jim, N2EY
>--

4548. Re: Could you translate it for me into metric system?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 17:57:03 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A42446F.FC691CC2@dvol.com>
Source record: 174196

"Ian White, G3SEK" wrote:

>
> >>
> >> Outside of the USA, we can look up #10 in tables, we can look up 6-32
> >> and get to M4 as the closest equivalent (as Brian kindly did)... but
> >> "Common 1" completely defeats us.

>
It's bad, very bad. I've been designing industrial machinery for almost five decades and I thought I had every piece of common hardware dimensional data on the planet. I have nothing on the dimensions of PVC pipe fittings. I finally went to a local plumbing components emporium and put the calipers to a one inch PVC pipe coupling, the answer is 1.630-1.635 inches outside diameter, very close to 1 5/8 inches. 41.3 mm for coil form purposes.
>
The whole scene is outrageous.
>
About twenty years ago I found myself in Normandy working in an electromechanical laboratory gathering test data for a technical paper I was was writing. One of the young French EEs was grousing loudly about us retarded Yanks and our inches, no silly inches in France, etc. So in wanders another young engineer, more of a mechanical type. I pointed to an overhead pipe which carried cooling water to the (French designed/built) equipment we were working with, "Alain, what is the size of that pipe?" "Du and a half inch". Young nationalist sparky stalked off in a snit.
>
A few years later I was managing a small machine building facility in Toronto when Ottowa declared that Canada was metric and the use of inches almost became a criminal act. In order to encourage the use of metrics Ottowa offered to take in the precision inch measuring instruments then in use in machine shops such as micrometers, calipers, scales, etc. and pay for the metric equivalents. That offer set off a stampede of heroic proportions. The Japanese toolmakers sent in regiments of their sales staff as every skilled mechanical tradesman, inspector and metrology lab in Canada headed for the Japanese precision tool catalogs. Everybody traded their old (in many cases useless junk) inch instruments in for shiny new metric equivalent instruments and Ottowa picked up the whole bloody huge bill. Virtually all of that new instrumentation was dual-calibrated inches/mm and everybody continued to use inches as usual.
>
I've been wondering ever since what Ottowa ever did with the carloads upon carloads of old tools they bought.
>
For my own part I don't care a whit if we use inches, millimeters, angstroms

or furlongs, they're all just dull numbers and none of them are "rational".
I'm tired of the unending conversion pushups.
>

>
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

>
Brian Kelly w3rv/M.E.

4549. Re: What is a good antenna fot 10-80 mtr.band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 18:05:04 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A424650.DA1C1A0@dvol.com>
Source record: 174197

"c.d.wit" wrote:

> Hello I am looking for a good antenna for 10-80 mtr. band.
> I love to make it my self .Can anubody give me some tips?
> c.d.wit@hccnet.nl

>
Start with http://www.ac6v.com/antprojects.html
>
w3rv

4550. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 19:50:21 UTC
From: "Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A425EFD.3C2A@rpi.edu>
Source record: 174199

George, W5YR wrote:
>
> Don't know, but it would be interesting to see what, if any, effect it
> has on your signal report at the "oother end."
>
> Another consideration: just how "good" a "ground" is a rod driven into
> rocky soil. What is its r-f resistance with respect to "actual earth
> ground?" That impedance may well be many times the impedance of the 10
> ft wire.
>
> If the grounding system is/at the shack really does affect your signal,
> then that points the finger to an antenna system that needs attention.
> End-fed wires can be an exception, of course, since effectively the
> entire shack is being floated between the counterpoise or "ground" wire
> and the part of the antenna that one hopes is doing the radiating. Such
> antennas should be avoided unless one is prepared to deal with the
> consequences of such operation. Back in 1946 I used a 260 ft end-fed
> wire on all bands and got away with it, but we and our equipment were a
> lot less critical in those days! <:}
>
> Balanced antennas fed with balanced lines usually prove to be the
> solution to almost all antenna problems, plus providing excellent
> operation on multiple bands.
> I use several here with no r-f anywhere that it does not belong.
>
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> wombat wrote:
> >
> > George, W5YR wrote in message <3A402F8E.14E8EE28@att.net>...
> > >
> > >Any attempt to connect to a ground rod will only place an impedance
> > >between the common "ground" in the shack and actual earth ground. This
> > >impedance not only prevents effective grounding but usually introduces
> > >all manner of new problems, including unwanted radiation from the ground
> > >wire.
> > >
> >
> > So would I potentially improve my ERP by disconnecting the 10' ground wire
> > running from the chassis of my HF rig to the ground rod I spent most of one
> > Sunday driving 8' into the rocky soil?

> >
> > wombat
>
> --
> 72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

The biggest problem with balanced lines (vs coax) is that you need to manually tune up the antenna system for each QSY - particularly between bands. Many of the new radios have internal automatic tuners, but I don't think most of them have balanced output - (I use 25+ year old tube equipment that needs a lot of manual tuning, so I know what a pain this can be.)

Curt Breneman
RPI Chemistry
KC2EBP

4551. Cushcraft R3 Model

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 20:32:45 UTC
From: jim@snoopy.cmagic.com
Message-ID: <3a4268bd.12730250@news.epix.net>
Source record: 174200

Anyone have a NEC model for the old Cushcraft R3?

4552. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 22:51:58 UTC
From: fractenna@aol.com
Message-ID: <20001221175158.00640.00005179@ng-cb1.aol.com>
Source record: 174201

>
>Freak crap:
>
>>>> And, of course, the right set of operating skills, honed
>>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>>
>>>>73
>>>>Chip n1IR
>
>I am getting tired of your crap mister!
>Can you first explain how you arrived at the above statement? What is it
>based
>on? Is it just product of your sick fantasies (like other crap, Freaktennas
>etc.)? Are you suffering from Algoremania?
>
>If you do explain, then you can proceed reading on.
>
>
>>>Lying skunk (again). He was in diapers (honing his....) when I was
>>collecting
>>>contest awards.
>>>If I sued Phimd for the crap he is accusing me of or ascribing to me ...
>>>
>>>Get help, grow up and get the hell outa here jerk!
>>>Frack OFF!
>>>
>>>BUm
>>>
>
>Do yourself and ham radio fraternity some good, go and get some help and be
>rational, then we will welcome you with open arms. Please!!!
>
>>Perthaps, Yuri, you could be so kind as to tell us a contest acheivement
>>from,
>>say, 1970 or 1971?
>>
>>73
>>Chip N1IR
>
>"Perthaps" I will give you a hint to some "acheivement" that might point you
>in
>direction of researching the subject before you make stupid statements:
>
>If you explained and provided some material that you based your above

>conclusion and statement on, then you may read the following:
>
>In 1971 CQ WPX Contest results (Feb 72) CQ Magazine had my color picture on
>the
>cover (first time contester on the cover)?. What were you honing?
>Going further back -
>Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture of
>two operators on the first page of results, one of them called "Jurco" in the
>stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then I
>had years of contesting behind me and was awarded honorary title "Master of
>Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham
>radio
>was considered technical sport in Czechoslovakia. I have medal and a
>certificate (and pictures in the press) to prove it.
>
>Now you got another egg in your face, go away, shape up and come back when
>you
>are pronounced fit by professionals in medical and legal areas.
>
>Thank you,
>hope it helps and have a nice day (or fuggetaboutit)
>have a Happy Chanukah and don't confuse it with Christmas
>like you did with Passover for "Easter breakfast"
>
>... -.-
>
>Yurko, oK3BU
>Master of Sport
>
>PS
>I will not bother suing you for libel, defamation of character, antisemitic
>(antichristian) remarks, damage to my professional career, resigning from
>IBM,
>accusing me of running illegal copies of CT, calling Quad a Yagi, ad nauseam,
>ad nauseam....
>By now you should realize that you should not tangle with me, every time you
>do, you look like bigger fool!
>
>Sorry NG, I got provoked (again), trying to use plain unscientwific language
>in
>hope of getting the message through.
>Back to Fruck delete key.
>
>

So it would appear that you finally got your act together in contesting just as I was getting out:-)

College called:-)

You would agree, no doubt, that 1970 preceeds 1971, no?

Yuri, there is no doubt and there is most certainly compelling evidence--nay freshly two weeks old--that what I said is true: you can't beat me and my 10M fractal quad Yagi:-) Or would you say that coming in #2 (according to the 3830 'rumor' listing) in US is a fluke?

73
Chip N1IR

4553. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-21 23:35:10 UTC
From: on4caf@qsl.net
Message-ID: <bs454tsmfj244f681td008gfbgd3ljcu11@4ax.com>
Source record: 174202

On Thu, 21 Dec 2000 17:17:54 GMT, rwclark@seanet.com (Richard Clark) wrote:

>On 21 Dec 2000 14:24:30 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
>
>>Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture of
>>two operators on the first page of results, one of them called "Jurco" in the
>>stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then I
>>had years of contesting behind me and was awarded honorary title "Master of
>>Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham radio
>>was considered technical sport in Czechoslovakia. I have medal and a
>>certificate (and pictures in the press) to prove it.
>
>Hi Yuri,
>
>Congrats (belatedly) on your achievements in Czechoslovakia. I
>remember listening to Short Wave back then and following the
>Czechoslovakian Spring ushered in by Dubcek and Svobada - a promise
>cut short by nearly 30 years.
>
>73's
>Richard Clark, KB7QHC

Richard brings back memories. In 1968, the time Richard talks about,
when Russian tanks entered the streets of Praha, Chech hams initiated and
relayed CW news messages on the ham bands. Still must have somewhere this
hand copied messages.
73,
Jan on4caf

4554. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:21:16 UTC
From: Fenmahl Drenichmalschinstienne <frolbo@drivos.net>
Message-ID: <08x06.137$Mj1.17113@news7.onvoy.net>
Source record: 174203
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Keep in mind that ALL thru the glass ants are crap. Yes, they do work but
poooooooorly. Do whatever you have to but stay away from them.

Mike N4DIA wrote in message ...
>All,
>
>Looking to replace an antenna. Because of several restrictions, I really
>need it to be a through the window mount. I would like to hear from any of
>you who have used any 2 band 2m/70cm antennas and which ones any of you
>would recommend. My previous vehicle used a RS ant that had adequate
>performance but I know there has to be much better antennas on the market.
>
>Thanks
>Mike
>N4DIA
>
>

4555. Tri-Band Beam Comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:32:53 UTC
From: castles@jps.net
Message-ID: <Vix06.2856$1%2.126150@sjc-read.news.verio.net>
Source record: 174204

I am looking for a source for a comparison of various tri-band beam antennas.

Help appreciated. 73, Don W6QEY

4556. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:46:33 UTC
From: k3bu@aol.com
Message-ID: <20001221194633.27758.00002569@ng-me1.aol.com>
Source record: 174205

Where is the answer to this crap?

>>>> And, of course, the right set of operating skills, honed
>>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>>

Maybe you will understand this:
You are frucked up, get help you idiot. You can't even read, or carry on correspondence.
Maybe 1965 precedes your crap, or maybe 1958 even more?

You lost any shred of credibility or respect you were so badly craving for.

You failed as antenna designer, ... and now as contester. What else you wanna be? You are already idiot, moron, etc. Congratulations!!

Keep it up jerk!

bada BUm1

4557. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:50:41 UTC
From: k3bu@aol.com
Message-ID: <20001221195041.27758.00002570@ng-me1.aol.com>
Source record: 174206

>
>Congrats (belatedly) on your achievements in Czechoslovakia. I
>remember listening to Short Wave back then and following the
>Czechoslovakian Spring ushered in by Dubcek and Svobada - a promise
>cut short by nearly 30 years.
>
>73's
>Richard Clark, KB7QHC
>
>

Thanks Richard,
I have some stories to tell about those days, we organized the network and kept the world informed about the truth. I was very fortunate to get out, literally they missed me by hours, got on the plane to Paris. Other's were not so fortunate. They still sentenced me to 5 years, but by then I was calling CQ contest as VE3BMV.
God Bless Canada, US and don't let the dummycrats to establish socialist hell here.

73 Yuri

4558. Re: Tri-Band Beam Comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:52:02 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A42A5B2.7030303@hiwaay.net>
Source record: 174211

Don- Ward Silver, N0AX, and Steve Morris, K7LXC did a study and reported at Dayton. They put it out, through Champion Radio Products, as "HF Tribander Performance". THey only tested nine antennas, and not everyone aggrees with them, but there are few comparative reports out there, and it has data you can evaluate for yourself.

Champion usually has adds in QST, etc. or you could use the CBA for either of them.

Bill-W4BSG

Donald Campbell wrote:

> I am looking for a source for a comparison of various tri-band beam antennas.
>
> Help appreciated. 73, Don W6QEY

4559. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 00:57:36 UTC
From: k3bu@aol.com
Message-ID: <20001221195736.27758.00002571@ng-me1.aol.com>
Source record: 174207

>>
>>Congrats (belatedly) on your achievements in Czechoslovakia. I
>>remember listening to Short Wave back then and following the
>>Czechoslovakian Spring ushered in by Dubcek and Svobada - a promise
>>cut short by nearly 30 years.
>>
>>73's
>>Richard Clark, KB7QHC
>
>Richard brings back memories. In 1968, the time Richard talks about,
>when Russian tanks entered the streets of Praha, Chech hams initiated and
>relayed CW news messages on the ham bands. Still must have somewhere this
>hand copied messages.
>73,
>Jan on4caf
>
>
>

One of them was my dear friend OK1ZQ, Vasek, who managed to transmit form the attic of the ministry of interior, building that Russians took first. He kept QSO with UN rep. minister Hajek in NYC for about 3 days, without food, barricaded on the top of the building. He suffered greatly afterwards. Prosecuted, stripped of license, thrown from lousy job to lousier. He was holder of world record in CQ WW CW on 40m, with windom and 200W. Great CW op. Hams in Prague used trolley wires for antenna, Russians were going nuts, trying to triangulate the signals, they were everywhere!

Yuri, oK3BU

4560. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:10:06 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <qqhCOqiYHytlQGqIruGdSou6c4rE@4ax.com>
Source record: 174209

On 22 Dec 2000 00:50:41 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>God Bless Canada, US and don't let the dummycrats to establish socialist hell
>here.
>
>73 Yuri

Hi Yuri,

I follow Canadian politics (and mine) by watching "Royal Canadian Air
Farce." My buddy AA7UJ does a lot of business in Canada and his
assessment of the political spectrum there is that your right wing
falls somewhat to the left of Franklin Roosevelt's New Deal program.
;-)

73's
Richard Clark, KB7QHC

4561. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:10:27 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <7Sx06.3336$dG.101604@newsread1.prod.itd.earthlink.net>
Source record: 174208

wunner what happens if somebody Mr.spells???

"Fractenna" <fractenna@aol.com> wrote in message
news:20001221064301.07794.00001651@ng-ff1.aol.com...
> >
> >I no I kant! ;)
> >
> >> From: Jim Dompier <planet_paradise@hotmail.com>
> >> Organization: Island Shades
> >> Reply-To: planet_paradise@hotmail.com
> >> Newsgroups:
> >>
>
>alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellula
r,m
> >> isc.kids.health
> >> Date: Tue, 19 Dec 2000 21:29:27 -1000
> >> Subject: Re: Paranoid Bolognia, a prime example of Bullcrap
> >>
> >> In article <oe7%5.1823$zA6.150796@news-east.usenetserver.com>,
> >> bogus@ddress.com says...
> >>> As soon as I saw "Bolognia" in the title, I knew that this posting
would
> >>> indeed be a "prime example of bullcrap". Buy a spelling checker and
get a
> >>> clue.
> >>
> >> what is it with you spelling cops anyway? Can't you sleep at night if
> >> someone misspells?
> >>
> >>
> >>
> >>
> >>
> >> --
> >> =====V=====
> >> Jim Dompier
> >> Island Shades
> >> http://www.islandshades.com
> >
>
> Here, such detritus gets publicly touted as the individual being "function
> illiterate"....only on this NG you understand...
>

> 73
> Chip N1IR

4562. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:16:50 UTC
From: icstars@uswest.net
Message-ID: <3ja54t04e6jdc9acuum2i4sum2ahtj97gc@4ax.com>
Source record: 174212

WELL..... I am also glad to see that someone else like the folded dipole. I have run one for a few years and get great reports on it. It will cretainly take the power on HF, with a low SWR. Naturally it is not great at 160 m, but if you are limited on space. it is the way to go.

I have the 1.8-30, copper.

Put me down as a satified user.

73's Owen KB5XE

On Wed, 20 Dec 2000 20:58:21 -0600, "Solomon Fernblatt" <fernblatt@spicednondairyham.com> wrote:

>FINALLY a positive comment on the B&W! I have used them for years
>both at home and professionally, and have had as good a luck with them
>as with a random dipole and a tuner, without the bother of a tuner. I am
>sure there are a few S units difference between it and a cut dipole, but
>I like the antenna myself. :-)
>
>Tom KA4RKT
>
>
>David G. Nagel <nagel@core.com> wrote in message
>news:3a3bb15d$0$90268$1dc6e903@news.corecomm.net...
>> Go to B&W's web page and they will tell you just exactly what the
>> numbers are and how much it will cost to but the balun and load for. I
>> have one of their folded dipoles and like it.
>> Dave Nagel
>> WD9BDZ
>>
>> Cboone@Earthlink.net wrote:
>> >
>> > The balun is 16:1 according to the RF bridge KE5O and I used to
>> > measure mine with...the resistor is 800 Ohms NON inductive/100watt
>> >
>> > Chris
>> > WB5ITT
>> >
>> > Mike wrote:
>> > >
>> > > I came across one all tangled up. I am not interested in getting it
>back
>> > > like it should be.My question is what ratio is the large balun on it
>and

>> > > could this be of any use for making up another antenna. Also the large
>> > > resistor in the center of the antenna can it be of use other than a
>> > > dunny load.
>

4563. Re: Chuck O'Neal --Illegal Wire tapping: Public Confession

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:22:21 UTC
From: "Ted, W2ICV" <>
Message-ID: <8va54t08tt1tos2ih0a6q19lob6d6dc31r@4ax.com>
Source record: 174210

You're right on, Don...no more whipping the pony for me. By the way,
that "guy" wrote Ecclesiastes. Styled himself as Solomon.

Wed, 20 Dec 2000 02:14:42 GMT, kg9qm@nomail.net (don) wrote:

>Bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored,
>bored, bored, bored, bored, bored, bored, bored, bored, bored, bored, bored.
>
>When the guy said "There ain't nothin' new under the sun", he must have been
>reading this thread. The horse is dead, quit beating it.
>
>thanks...
>
>
>In article <20001219205225.22187.00004999@ng-da1.aol.com>, k1bqt@aol.com was of
>the opinion...
>>
>>Hi Chip-
>>
>>>As you now have more information regarding my position on libel, I suggest
>>you consult an attorney should you have any further questions.<
>>
>>We all know YOUR position on libel, and your advice is good. Should Jeff
>>contact an attorney, he'd get the "real" story in a big hurry. Same for
>>proctology. We all know MY position on what constitutes an asshole. But, in
>>fairness, I suggest you contact your proctologist for a more
>>accurate...er..."assessment"!
>>
>>73 and happy holidays
>>
>>Rick K1BQT

4564. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:27:08 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <M5y06.21051$A06.782373@news1.frmt1.sfba.home.com>
Source record: 174213

Re: Line snagging in trees:

We've used a couple of techniques to minimize the difficulty with lines snagging in the trees. One is to use a pulley. The line goes over the tree and attaches to the eye of the block. Through the pulley is a loop of line that connects to the antenna, so it can be raised and lowered like a flag without danger of losing the end.

An improvement on this technique is to use aircraft type stainless steel cable. The pulley is still used, but the run over the tree is stainless cable, so it doesn't wear out for a long, long, long time. The line in the pully can be changed periodically, carefully.

Good Luck!

-- Alan Biocca
WB6ZQZ

4565. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:32:18 UTC
From: dcoffey@mindspring.com
Message-ID: <3a42aec5.79939295@news.mindspring.com>
Source record: 174214

I have a better idea.....why don't you two keep your petty bickering
to yourselves. Go start your own newsgroup or something so you can
argue incessantly over the merits of your respective antenna theories.

fractenna@aol.com (Fractenna) wrote:

>Despite W8JI's claims, I never, never, ever, said that a 'tree antenna'
>"radiates well" from its "fractal shape".
>
>I invite W8JI to quote directly from this article to support his false
>statement.
>
>He won't because he can't.
>
>Am I the ONLY one here who notices that W8JI insists on weaving a web of
>fractal insuation and false information?
>
>Ask why he is doing this.
>
>NC

4566. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:38:50 UTC
From: fractenna@aol.com
Message-ID: <20001221203850.28792.00006189@ng-cl1.aol.com>
Source record: 174216

>They still sentenced me to 5 years, but by then I was calling CQ
>contest as VE3BMV.
>God Bless Canada, US and don't let the dummycrats to establish socialist hell
>here.
>
>73 Yuri

So you admit that you have a criminal record. Could you tell us what the law breaking was about? I'm sorry, but I will not assume this is a mere 'freedom of speech issue'. And I don't believe that you were an inettelctual in that society (forgive my ignorance on this; feel free to elaborate).

Also, is it NOW your understanding that you can say anything you want--for example to New York Times reporter(s)--without any responsibility for the damage incurred?

73
Chip N1IR

4567. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:40:17 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <tkb54toc881109f763auvmdaug7qhb98io@4ax.com>
Source record: 174215

Don't let the negative comments unduly influence you Mike. There is
no question that the thru-the-glass antenna is a compromise compared
to a hard-wired antenna, but you can still get reasonable performance
from a good (Larsen) antenna. I have had one on my Jeep for 7 years,
and have never been sorry I didn't put on another antenna. I can
regularly hit repeaters out 60 to 100 miles with 50 watts. If that
isn't good enough for you, then you might have to look into something
else. Hey, an 11-element beam mounted on a pipe through the roof
would work a lot better. :-)

73, Dick - W6CCD
48 Years Mobile

On Wed, 20 Dec 2000 18:26:41 -0600, "Mike N4DIA"
<michaelj@networktel.net> wrote:

>All,
>
>Looking to replace an antenna. Because of several restrictions, I really
>need it to be a through the window mount. I would like to hear from any of
>you who have used any 2 band 2m/70cm antennas and which ones any of you
>would recommend. My previous vehicle used a RS ant that had adequate
>performance but I know there has to be much better antennas on the market.
>
>Thanks
>Mike
>N4DIA
>

4568. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 01:56:23 UTC
From: fractenna@aol.com
Message-ID: <20001221205623.28792.00006191@ng-cl1.aol.com>
Source record: 174217

>
>Where is the answer to this crap?
>
>>>>> And, of course, the right set of operating skills, honed
>>>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>>>
>
>Maybe you will understand this:
>You are frucked up, get help you idiot. You can't even read, or carry on
>correspondence.
>Maybe 1965 precedes your crap, or maybe 1958 even more?
>
>You lost any shred of credibility or >respect you were so badly craving for.

I did? When? Did Clarence not get his wings:-)>?

>
>You failed as antenna designer, ...

Things couldn't be better:-)

> and now as contester.

Number 2 in the US it would seem:-)

What else you
>wanna be?

Nothing; I haven't 'wanted to be' something for many years. Instead I have been
sedulous in becoming the many parts which make me a well rounded person.

> You are already idiot, moron, etc. >Congratulations!!

This is malicious libel.

>
>Keep it up jerk!
>

What else would you like to discuss?I have some thoughts below.

>bada BUm1
>

Lots of people operated contests back then, but few knew what a 'contest is',
just as 'dx is'.

In 1965 getting onto the cover of CQ was no big deal.(At that period in the
magazine almost all the subscribers did(:-)--that's a joke)) Nor was

contesting. The only decent activity was on CW. And even that was modest by present standards.

The era of modern contesting was the result of the practical technical application of tranceivers and the outmoding of AM. That really didn't kick in earnestly til about 1969-70 with the wider use and acceptance of cheaper Drake; National; Swan; Galaxy; and Heath transceivers (among others).

In other words, it was, as you say, not much of a 'sport' until then. And operating in 1965 hardly "honed" one's skills. Unless you think listening to rx noise is a skill!

Again, I said I would beat you (in the 10M contest) and you still have the hubris to call yourself a "Master". Well, sir, give us your thoughts on my 10M contest performance. How would you rate it; how would you have done better; what evidence do you have for that assertion?

BTW,I remind you that your predilection for libel will get you into legal issues. So concentrate on the talent and technical issues, and not attacks.

Finally, what is your status in the US? You mention that you were about to be jailed in Czechsolovakia and then escaped to Canada. Frankly, I see no evidence that this was a political asylum, but your further info would be helpful. Are you a Canadian citizen with residence in the US? There seems to be some ambigiuity regarding this in public records. At least the one's we've found to date.

Kindly clarify, off line if you wish.

Cordially,

NC

4569. Re: ladder line fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 02:00:54 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A42B60C.38175428@bellatlantic.net>
Source record: 174218

I hadn't thought of using aircraft cable over the tree - that would
be a real long lasting solution by comparison. I'll look into that.
Thanks!!

Alan Biocca wrote:

> Re: Line snagging in trees:
>
> We've used a couple of techniques to minimize the difficulty with lines
> snagging in the trees. One is to use a pulley. The line goes over the
> tree and attaches to the eye of the block. Through the pulley is a loop
> of line that connects to the antenna, so it can be raised and lowered
> like a flag without danger of losing the end.
>
> An improvement on this technique is to use aircraft type stainless steel
> cable. The pulley is still used, but the run over the tree is stainless
> cable, so it doesn't wear out for a long, long, long time. The line in
> the pully can be changed periodically, carefully.
>
> Good Luck!
>
> -- Alan Biocca
> WB6ZQZ

4570. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 02:08:25 UTC
From: k3bu@aol.com
Message-ID: <20001221210825.27776.00002729@ng-me1.aol.com>
Source record: 174219

```
>
>>Where is the answer to this crap?
>>
>>>>>> And, of course, the right set of operating skills, honed
>>>>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>>>>

??????
```

4571. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 02:13:54 UTC
From: Ron <NoSpam@nospam.com>
Message-ID: <CNy06.5765$W76.92264@typhoon.sonic.net>
Source record: 174220
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

The traps could be the problem here...I've had them blow up on Cushcraft antennas before when they get wet with even low power. Is the SWR the same on all bands? If it's not, take the traps apart and look for burned insulators, corroded connections, moisture or insect nests. I would also check for corrosion where the mast sections slide into each other. Clean those areas with a wire brush, and coat with "NoAlox" before reassembling. If it's the same on all bands, it's the coax connectors, or the tuning-box connections.

Ron N6AHA

"Peter Bertini" <commquart@erols.com> wrote in message
news:91t65g$fg5$1@bob.news.rcn.net...
>
> "Delbert McCord" <dmccord@usol.com> wrote in message
> news:3a419e6f.13055916@news.usol.com...
> > I have a R8 that is less than 6 months old and I am having problems
> > witht he antenna also. It was working Great and then all of a sudden
> > its like having a dummy load on the end of the coax!
> >
> > I checked the coax (Which is also new) and Its not shorted and gives
> > me a perfect SWR when I connect a dummy load out there on the end of
> > the coax> SNIP
>
> Unfortunately, if the coax was developing problems, it would become more
> lossy and SWR readings would be entirely useless. You need to measure
> the power being delivered to the far end of the coax cable to make this
> determination. You can make a fairly decent microwave dummy load with
> several hundred feet of lossy cable.
>
> Pete
>
>

4572. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 03:10:11 UTC
From: k3bu@aol.com
Message-ID: <20001221221011.23810.00000607@ng-fe1.aol.com>
Source record: 174221

>
>So you admit that you have a criminal record. Could you tell us what the law
>breaking was about? I'm sorry, but I will not assume this is a mere 'freedom
>of
>speech issue'. And I don't believe that you were an inettelctual in that
>society (forgive my ignorance on this; feel free to elaborate).
>
>Also, is it NOW your understanding that you can say anything you want--for
>example to New York Times reporter(s)--without any responsibility for the
>damage incurred?
>
>73
>Chip N1IR

His condition is getting worse and worse, pray for him!

4573. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 03:33:40 UTC
From: k3bu@aol.com
Message-ID: <20001221223340.23810.00000610@ng-fe1.aol.com>
Source record: 174222

>
>BTW,I remind you that your predilection for libel will get you into legal
>issues. So concentrate on the talent and technical issues, and not attacks.
>
>Finally, what is your status in the US? You mention that you were about to
>be
>jailed in Czechsolovakia and then escaped to Canada. Frankly, I see no
>evidence
>that this was a political asylum, but your further info would be helpful. Are
>you a Canadian citizen with residence in the US? There seems to be some
>ambigiuity regarding this in public records. At least the one's we've found
>to
>date.
>
>Kindly clarify, off line if you wish.
>
>Cordially,
>
>NC
>
>
>

NYFBYI
I bet you haven't found where I work. I do not exist, I am working for RCMP, MOSAD, FBI, CIA, CQ, so please do not investigate me, and don't tell anybody, you might get burned by your "low power" SB220.
Now you get the picture?

This is really sick, get help quickly before is too late! Call 911 and you might be saved.

007 ten-ten BUm

4574. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 03:50:16 UTC
From: dmccord@usol.com
Message-ID: <3a42cb34.6590388@news.usol.com>
Source record: 174223
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

This thread is about the LACK of Support From Cushcraft, With a antenna that is less than 6 months old I received the same fine customer service that many other Hams have claimed here.

I want to thank the person with the idea of a watt meter at teh antenna end of the coax into a dummy load, I had not thought of that and it sounds like a good idea.

I was told by Tech Support at Cushcraft the the ONLY thing that can go wrong with the R8 Vertical is the Black box (Matching network). The antenna is Bran new so it has not coroded yet, I checked all coils with at least a Volt Ohm meter and they have a connection.

The antenna is in my pole barn awating the weather and time that will allow me to play with it some more. Here in Michigan we have had over 2 feet of snow in the last week. I spend more time with the snow blower than I do with my Wife!

Could I have another problem, I am sure I could, I do not pretend to be an expert on antennas and feedline. So I spend the money and purchased an antenna from experts. I will say there could be some information on there website about trouble shooting antennas. There is nothing that I have found. The simple trick of the watt meter at the antennas end of the coax into a dummy load. In fact I am already working on purchasing 100 feet of New coax to run out the door and just use to test and compart to eliminate the coax from the problem.

And about the antenna working when it was "Out Of The Box" Fine but if I buy a car and it has a warrantee I expect it to work throughout the Warrantee period and beyond.

Again just to clarify this thread was about the lack of customer support at Cushcraft, Them supplier me Customer, They are suppost to help me....

73's & Have a Great Christmas

On Thu, 21 Dec 2000 06:47:08 -0600, Bill Aycock <baycock@hiwaay.net> wrote:

>THis is a pretty good example of what I call an unfair attack. By your
>own words, the antenna was working fine when you first used it, and had
>a sudden change to poor performance. Logic tells us that something
>changed in the hook-up at your location, and did so abruptly. The fault
>can be found, and probably with only simple equipment. Why blaim the R8
>when it was delivered in working order?

>
>You say you have checked the Coax, and CushCraft has checked the box.
>Why did you stop there, and blaim them? There is more to the system than
>that.It is apparent that something changed at your location- maybe a
>'hit' or a loose connection?
>
>just my slant on it. Bill-W4BSG
>
>
>Delbert McCord wrote:
>
>> I have a R8 that is less than 6 months old and I am having problems
>> witht he antenna also. It was working Great and then all of a sudden
>> its like having a dummy load on the end of the coax!
>>
>> I checked the coax (Which is also new) and Its not shorted and gives
>> me a perfect SWR when I connect a dummy load out there on the end of
>> the coax. Cushcraft (After a bunch of phone tag) had me send them the
>> matching box back to them, they tested it and returned it saying its
>> fine. I used to get better than a 2 on every band with out my tuner
>> now I get over a 8 swr and I can receive better if I connect the coax
>> to my dogs collar!
>>
>> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>> ever get from me!
>>
>> Worked great, Looks Great, Does not last
>> I can not afford almost 100$ a month for an antenna!
>>
>> Delbert McCord
>> KA8OCN
>>
>>
>>
>>
>>
>> On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>>
>>
>>> Hello to all,
>>>
>>> First let me say that up until now I've been a happy camper
>>> using Cushcraft products. However, I've just learned something
>>> that may be of interest to anyone considering purchasing a
>>> new Cushcraft antenna.
>>>
>>> I recently bought an R-8 vertical. It was just damaged by
>>> lightning and I e-mailed Cushcraft tech support regarding
>>> parts availability....the answer was 2 sentences that suggested
>>> I buy a new antenna and try to collect on insurance. Needless

>>> to say, I was not happy with that so I wrote a letter to the
>>> Cushcraft manager of amateur products. This gentleman was kind
>>> enough to telephone me today. Essentially, the conversation
>>> focused on the fact that the parts I needed would be so expensive
>>> as to make buying a new antenna more practical. However, one
>>> interesting fact did come to light. Parts for the R-8 vertical
>>> had not been "priced" yet and were thus unavailable. Further,
>>> Cushcraft does not "price" replacement parts until the product
>>> has been out for 9 to 12 months. I'd suggest you keep this
>>> in mind....if you drop your new R-8 or new whatever, you may
>>> not be able to get parts for it for up to a year!!
>>>
>>> thanks & 73,
>>> Phil
>>> W5BVB
>
>
>

4575. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 04:34:52 UTC
From: Mike N4DIA <michaelj@networktel.net>
Message-ID: <t45mfbguqbdu23@corp.supernews.com>
Source record: 174224

Dick,

I have been a Ham since I was 14 so I know the limitations I am working in. Even the RS I previously had would hit repeaters 50+ miles out on 70 watts. As previously stated, I am stuck by restrictions that I have no control over. I would love to mount a 1/2 wave on the roof but I can't. Simple... I need to limit the mount to a through the window.

I have had other hams tell me a home made 20 meter antenna I once had "sucked". Meanwhile, I was talking to McMurdo Station on 50 watts when they couldn't with 1K. I take it in stride. A masters in systems engineering helps (g)

Thanks
Mike

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:tkb54toc881109f763auvmdaug7qhb98io@4ax.com...
> Don't let the negative comments unduly influence you Mike. There is
> no question that the thru-the-glass antenna is a compromise compared
> to a hard-wired antenna, but you can still get reasonable performance
> from a good (Larsen) antenna. I have had one on my Jeep for 7 years,
> and have never been sorry I didn't put on another antenna. I can
> regularly hit repeaters out 60 to 100 miles with 50 watts. If that
> isn't good enough for you, then you might have to look into something
> else. Hey, an 11-element beam mounted on a pipe through the roof
> would work a lot better. :-)
>
> 73, Dick - W6CCD
> 48 Years Mobile
>
> On Wed, 20 Dec 2000 18:26:41 -0600, "Mike N4DIA"
> <michaelj@networktel.net> wrote:
>
> >All,
> >
> >Looking to replace an antenna. Because of several restrictions, I really
> >need it to be a through the window mount. I would like to hear from any
of
> >you who have used any 2 band 2m/70cm antennas and which ones any of you
> >would recommend. My previous vehicle used a RS ant that had adequate
> >performance but I know there has to be much better antennas on the
market.
> >
> >Thanks

> >Mike
> >N4DIA
> >
>

4576. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 04:52:13 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A42DDFD.7070402@hiwaay.net>
Source record: 174225

THis is low, even for you, Chip. making reference to an escapee from the USSRs actions as having a 'Criminal record' is the type of thing we see from you, and don't quite believe. It Stinks, but- I guess you have to win some way.
BTW- What did 'Hate' do? - care to wash your dirty lenin here instead of making childish remarks about better men?

Bill-W4BSG

Fractenna wrote:

>> They still sentenced me to 5 years, but by then I was calling CQ
>> contest as VE3BMV.
>> God Bless Canada, US and don't let the dummycrats to establish socialist hell
>> here.
>>
>> 73 Yuri
>
>
> So you admit that you have a criminal record. Could you tell us what the law
> breaking was about? I'm sorry, but I will not assume this is a mere 'freedom of
> speech issue'. And I don't believe that you were an inettelctual in that
> society (forgive my ignorance on this; feel free to elaborate).
>
> Also, is it NOW your understanding that you can say anything you want--for
> example to New York Times reporter(s)--without any responsibility for the
> damage incurred?
>
> 73
> Chip N1IR

4577. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 04:55:22 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A42DEAE.7F4449E6@bellatlantic.net>
Source record: 174226

Dick,

That one's easy. In aircraft, they run the ground lead
through a CMOS inverter. Turns the ground lead into
an antenna! And, if they want to save the cost of the
inverter, they simply fly upside down!

On another point:
For the ham shack in your home, I agree that an RF
ground should not be needed except as others have
noted (eg end fed wire). What has NOT been mentioned
is the National Electrical Code (NEC) requirement that, if
you drive an 8' ground rod for your antenna, you must
bond it to the house wiring grounding electrode system,
using some fairly heavy wire (#6 or bigger, depending
upon your service size). That is specified in NEC article
250 - 50, and receives little mention in ham radio
publications that talk about ground rods. The bonding
has nothing to do with RF ground - it is for safety.

Dick Carroll wrote:

> A couple weeks ago I was riding over the Rockies in a jet at 37,000
> feet and I KNOW that the pilot talked on his radio to the ground. Been
> wondering ever since what he did for a good ground.......

4578. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 05:00:31 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <cmn54tkh0bd6069itop4n2ermgt4t6kqdj@4ax.com>
Source record: 174227

Mike -

Get the Larsen 2-meter/440 glass mount and it will serve you just
fine. I was just pulling your leg about the beam. There are so many
hams bad-mouthing the glass-mounts I have to inject a little humor in
the discussion now and then. Just be sure you don't mount the base on
any metallic tinting or built-in metal shading like my Jeep has.

73, Dick - W6CCD

On Thu, 21 Dec 2000 22:34:52 -0600, "Mike N4DIA"
<michaelj@networktel.net> wrote:

>Dick,
>
>I have been a Ham since I was 14 so I know the limitations I am working in.
>Even the RS I previously had would hit repeaters 50+ miles out on 70 watts.
>As previously stated, I am stuck by restrictions that I have no control
>over. I would love to mount a 1/2 wave on the roof but I can't. Simple... I
>need to limit the mount to a through the window.
>
>I have had other hams tell me a home made 20 meter antenna I once had
>"sucked". Meanwhile, I was talking to McMurdo Station on 50 watts when they
>couldn't with 1K. I take it in stride. A masters in systems engineering
>helps (g)
>
>Thanks
>Mike
>
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:tkb54toc881109f763auvmdaug7qhb98io@4ax.com...
>> Don't let the negative comments unduly influence you Mike. There is
>> no question that the thru-the-glass antenna is a compromise compared
>> to a hard-wired antenna, but you can still get reasonable performance
>> from a good (Larsen) antenna. I have had one on my Jeep for 7 years,
>> and have never been sorry I didn't put on another antenna. I can
>> regularly hit repeaters out 60 to 100 miles with 50 watts. If that
>> isn't good enough for you, then you might have to look into something
>> else. Hey, an 11-element beam mounted on a pipe through the roof
>> would work a lot better. :-)
>>
>> 73, Dick - W6CCD
>> 48 Years Mobile
>>
>> On Wed, 20 Dec 2000 18:26:41 -0600, "Mike N4DIA"

>> <michaelj@networktel.net> wrote:
>>
>> >All,
>> >
>> >Looking to replace an antenna. Because of several restrictions, I really
>> >need it to be a through the window mount. I would like to hear from any
>of
>> >you who have used any 2 band 2m/70cm antennas and which ones any of you
>> >would recommend. My previous vehicle used a RS ant that had adequate
>> >performance but I know there has to be much better antennas on the
>market.
>> >
>> >Thanks
>> >Mike
>> >N4DIA
>> >
>>
>

4579. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 05:05:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <91unfd$3u3$1@nntp9.atl.mindspring.net>
Source record: 174228

Yuri:

Heh, heh.

Good work on Chip, what a piece of work...

But all to no avail...

Chip will probably say, as the Black Knght in one of Monty Python's skits said after he had all of his limbs hacked off, "its only a flesh wound, I've had worse!"

Happy Holidays,

-Peter K1PO

"Yuri Blanarovich" <k3bu@aol.com> wrote in message news:20001221092430.21291.00005068@ng-co1.aol.com...
> Freak crap:
>
> >>> And, of course, the right set of operating skills, honed
> >>>first some 30 years ago--long before Yuri even knew what a contest is..
> >>>
> >>>73
> >>>Chip n1IR
>
> I am getting tired of your crap mister!
> Can you first explain how you arrived at the above statement? What is it based
> on? Is it just product of your sick fantasies (like other crap, Freaktennas
> etc.)? Are you suffering from Algoremania?
>
> If you do explain, then you can proceed reading on.
>
>
> >>Lying skunk (again). He was in diapers (honing his....) when I was
> >collecting
> >>contest awards.
> >>If I sued Phimd for the crap he is accusing me of or ascribing to me ...
> >>
> >>Get help, grow up and get the hell outa here jerk!
> >>Frack OFF!
> >>
> >>BUm
> >>

>
> Do yourself and ham radio fraternity some good, go and get some help and
be
> rational, then we will welcome you with open arms. Please!!!
>
> >Perthaps, Yuri, you could be so kind as to tell us a contest acheivement
> >from,
> >say, 1970 or 1971?
> >
> >73
> >Chip N1IR
>
> "Perthaps" I will give you a hint to some "acheivement" that might point
you in
> direction of researching the subject before you make stupid statements:
>
> If you explained and provided some material that you based your above
> conclusion and statement on, then you may read the following:
>
> In 1971 CQ WPX Contest results (Feb 72) CQ Magazine had my color picture
on the
> cover (first time contester on the cover)?. What were you honing?
> Going further back -
> Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture
of
> two operators on the first page of results, one of them called "Jurco" in
the
> stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then
I
> had years of contesting behind me and was awarded honorary title "Master
of
> Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham
radio
> was considered technical sport in Czechoslovakia. I have medal and a
> certificate (and pictures in the press) to prove it.
>
> Now you got another egg in your face, go away, shape up and come back when
you
> are pronounced fit by professionals in medical and legal areas.
>
> Thank you,
> hope it helps and have a nice day (or fuggetaboutit)
> have a Happy Chanukah and don't confuse it with Christmas
> like you did with Passover for "Easter breakfast"
>
> ... -.-
>
> Yurko, oK3BU
> Master of Sport
>

> PS
> I will not bother suing you for libel, defamation of character,
antisemitic
> (antichristian) remarks, damage to my professional career, resigning from
IBM,
> accusing me of running illegal copies of CT, calling Quad a Yagi, ad
nauseam,
> ad nauseam....
> By now you should realize that you should not tangle with me, every time
you
> do, you look like bigger fool!
>
> Sorry NG, I got provoked (again), trying to use plain unscientwific
language in
> hope of getting the message through.
> Back to Fruck delete key.
>

4580. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 05:15:53 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A42E379.8035DEEB@bellatlantic.net>
Source record: 174229
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Fenmahl Drenichmalschinstienne wrote:

> Keep in mind that ALL thru the glass ants are crap. Yes, they do work but
> poooooooorly.

Why?

4581. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 05:45:28 UTC
From: kk5yy@arrl.net
Message-ID: <3a42e937.2788038@nntp.mindspring.com>
Source record: 174230

On 22 Dec 2000 01:38:50 GMT, fractenna@aol.com (Fractenna) wrote:

>>They still sentenced me to 5 years, but by then I was calling CQ
>>contest as VE3BMV.
>>God Bless Canada, US and don't let the dummycrats to establish socialist hell
>>here.
>>
>>73 Yuri
>
>So you admit that you have a criminal record. Could you tell us what the law
>breaking was about? I'm sorry, but I will not assume this is a mere 'freedom of
>speech issue'. And I don't believe that you were an inettelctual in that
>society (forgive my ignorance on this; feel free to elaborate).
>
>Also, is it NOW your understanding that you can say anything you want--for
>example to New York Times reporter(s)--without any responsibility for the
>damage incurred?
>
>73
>Chip N1IR

No Chip, you piece of shit, Yuri is a patriot who risked life and
liberty for his country. That the evil Soviet Empire sentenced him
is a badge of honor but you wouldn't understand anything about honor
would you you spinless vermin.

4582. Re: 2nd story shack

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 05:49:47 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A42EB42.B819BB24@att.net>
Source record: 174231

Actually not, at least not here, Curt. I can tune my wire antennas for say 40 meter cw and then operate from 7000 to 7150 with the internal tuner in the IC-756PRO or the Kachina taking up the slack. Changing bands merely takes a few seconds to set up some different numbers on the MFJ 989C tuner.

I use balanced lines to my wire antennas and then transition to coax via W2DU bead baluns into about 13 ft for RG-231 into the shack. From that point, everything is in coax. The heavy-duty external tuner takes most of the punishment in handling major impedance conversions which means that the internal tuner(s) are not at any risk in handling the small impedance changes due to QSYing within a band. I operate mostly QRP but never more than 100 watts into the antenna system.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

"Curt M. Breneman" wrote:
> The biggest problem with balanced lines (vs coax) is that you need to
> manually tune up the antenna system for each QSY - particularly between
> bands. Many of the new radios have internal automatic tuners, but I
> don't think most of them have balanced output - (I use 25+ year old tube
> equipment that needs a lot of manual tuning, so I know what a pain this
> can be.)
>
> Curt Breneman
> RPI Chemistry
> KC2EBP

4583. Re: More GAP antenna guestions.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 06:05:42 UTC
From: Mike Frye <km6ab@pacbell.net>
Message-ID: <3A42EF36.AAA170F5@pacbell.net>
Source record: 174232

Bill Russell wrote:

> I've seen a few GAP antenna postings in this group but I would like to
> hear from a few more ppl concerning GAP products. I am interested in
> the Titan DX and have read a few reviews. I know this is a compromise
> antenna. That said and sticking with verticals, what do u folks think
> of it compared to other brands? I also know that there are a lot of
> variables with any antenna installation so Im trying to average out
> the responses. It would be nice to be able to compare antennas that
> are all installed at the same site but that is not likley unless
> someone out there has done that.....Any advice will be helpful.
>
> Thx, Bill

Calling the GAP Titan a "compromise" antenna would be very kind. For the sake of the group I will hold back my true impressions. The antenna that it was replacing was a bent up 40m dipole fed with ladder line and a tuner at the the radio. The bent dipole was better than the Titan on most bands. My other antenna was a cloud burner and consisted of an SGC auto tuner with approx. 40ft of random wire mostly horizontal about 20ft above a few ground radials and it out performed the titan (small case on purpose) on DX and local on every band. Even local 10m vertical polarized stuff was better with the SGC and a horizontal wire. The titan had a great match on every band, but so do my dummy loads. I have participated in many A/B tests of trap verticals (GAP, Cushcraft R7, Hy-gain) and a multi-band dipole on 40& 80m at distances from a few mi to about 1200 and the dipole has always won.
Happy antenna hunting!

4584. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 06:20:32 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A42F2B0.1080801@hiwaay.net>
Source record: 174233

You misspelled 'spineless', but otherwise, you got it about right.
Bill

Gerald Schmitt wrote:

> On 22 Dec 2000 01:38:50 GMT, fractenna@aol.com (Fractenna) wrote:
>
> No Chip, you piece of shit, Yuri is a patriot who risked life and
> liberty for his country. That the evil Soviet Empire sentenced him
> is a badge of honor but you wouldn't understand anything about honor
> would you you spinless vermin.
>
>
>
>

4585. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 06:23:45 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A42F371.D4FDC2B7@netscape.net>
Source record: 174234

Fractenna wrote:
>
> >They still sentenced me to 5 years, but by then I was calling CQ
> >contest as VE3BMV.
> >God Bless Canada, US and don't let the dummycrats to establish socialist hell
> >here.
> >
> >73 Yuri
>
> So you admit that you have a criminal record. Could you tell us what the law
> breaking was about? I'm sorry, but I will not assume this is a mere 'freedom of
> speech issue'. And I don't believe that you were an inettelctual in that
> society (forgive my ignorance on this; feel free to elaborate).

You know, I have to admit that in just a few weeks of reading this
newsgroup, I have learned at least one profound lesson from you. I
never before fully appreciated the term "dipshit".

You are very much the consummate dipshit, and certainly have taken
dipshittery to new lows.

Before you send me any more unsolicited emails telling me not to send
you emails, which I never have and probably never will, consider that
they go immediately to the Dipshit bin, and are automatically
flushed.

--
Jim Fuller

4586. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 07:46:36 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91v0ss$o1o$0@208.207.71.139>
Source record: 174235

Roger Halstead wrote:
>

> She should have seen the RG-8 and RG-8X I had over in Breckenridge.
>
> I don't remember who manufactured it, but the jacket was a silver color,
> copper braid, foam dielectric, and stranded inner conductor.
>
> The stuff was great to work with as it was very flexible.
>
> After being out in the sun for only three years it looked like it had caught
> something fatal related to Mange.
>
> The cable had actually become sticky to touch and smelled like a cross
> between saran and vinyl. It discolored the braid and the loss had gone
> quite high.
>

A ham I know asked me if that stuff would work on two meters and I told
him,
"Sure, but I wouldn't bet on how much RF you'll get out the far end of
it". He was using something over 100 feet to his antenna. So he stuck a
wattmeter out at the far end, at the antenna, and it was delivering 5
watts out of the 45 he was putting inyo the coax from the rig.

Dick

4587. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 08:08:20 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91v25k$p05$0@208.207.71.139>
Source record: 174236

Fractenna wrote:

> (forgive my ignorance....)

But there's so MUCH of it.......

4588. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 08:09:47 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91v28b$p05$1@208.207.71.139>
Source record: 174237

Fractenna wrote:
>

> So you admit that you have a criminal record.

Can we assume you're still working on yours?

4589. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 08:11:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91v2aq$p05$2@208.207.71.139>
Source record: 174238

Bill Aycock wrote:
>
> You misspelled 'spineless', but otherwise, you got it about right.
> Bill
>

Yes he sure did.. The ONE thing that Fracky isn't is spinless.

> Gerald Schmitt wrote:
>
> > On 22 Dec 2000 01:38:50 GMT, fractenna@aol.com (Fractenna) wrote:
> >
> > No Chip, you piece of shit, Yuri is a patriot who risked life and
> > liberty for his country. That the evil Soviet Empire sentenced him
> > is a badge of honor but you wouldn't understand anything about honor
> > would you you spinless vermin.
> >
> >
> >
> >

4590. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 08:17:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <91v2m9$ss1$0@208.207.71.139>
Source record: 174239

Fractenna wrote:
>
> >
> > You are already idiot, moron, etc.!
>
> This is malicious libel.
>

Evidently it's pretty accurate, given that you can't understand the difference between opinion (accurate tho it may be) and malicious libel.

Tell you what Dipshit-(Jim has that right on)- Your should be sentenced to be booted out over Czechoslovokia in 1958 to fend for yourself. You couldn't begin to cut the mustard.

4591. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 10:25:01 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A432BD1.F60591F4@cmcorp.com>
Source record: 174240

"Peter O. Brackett" wrote:

> Yuri:
>
> Heh, heh.
>
> Good work on Chip, what a piece of work...
>
> But all to no avail...
>
> Chip will probably say, as the Black Knght in one of Monty Python's skits
> said after he had all of his limbs hacked off, "its only a flesh wound, I've
> had worse!"
>

Ahhh, No, that's what he said after ONE of his arms was off.
What he said after all of them was...

"Come back you cowards..... Oh! Alright we'll call it a draw!"

But those words could apply also....

>
> Happy Holidays,
>
> -Peter K1PO
>
> "Yuri Blanarovich" <k3bu@aol.com> wrote in message
> news:20001221092430.21291.00005068@ng-co1.aol.com...
> > Freak crap:
> >
> > >>> And, of course, the right set of operating skills, honed
> > >>>first some 30 years ago--long before Yuri even knew what a contest is..
> > >>>
> > >>>73
> > >>>Chip n1IR
> >
> > I am getting tired of your crap mister!
> > Can you first explain how you arrived at the above statement? What is it
> based
> > on? Is it just product of your sick fantasies (like other crap,
> Freaktennas
> > etc.)? Are you suffering from Algoremania?
> >
> > If you do explain, then you can proceed reading on.
> >

> >
> > >>Lying skunk (again). He was in diapers (honing his....) when I was
> > >collecting
> > >>contest awards.
> > >>If I sued Phimd for the crap he is accusing me of or ascribing to me ...
> > >>
> > >>Get help, grow up and get the hell outa here jerk!
> > >>Frack OFF!
> > >>
> > >>BUm
> > >>
> >
> > Do yourself and ham radio fraternity some good, go and get some help and
> be
> > rational, then we will welcome you with open arms. Please!!!
> >
> > >Perthaps, Yuri, you could be so kind as to tell us a contest acheivement
> > >from,
> > >say, 1970 or 1971?
> > >
> > >73
> > >Chip N1IR
> >
> > "Perthaps" I will give you a hint to some "acheivement" that might point
> you in
> > direction of researching the subject before you make stupid statements:
> >
> > If you explained and provided some material that you based your above
> > conclusion and statement on, then you may read the following:
> >
> > In 1971 CQ WPX Contest results (Feb 72) CQ Magazine had my color picture
> on the
> > cover (first time contester on the cover)?. What were you honing?
> > Going further back -
> > Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture
> of
> > two operators on the first page of results, one of them called "Jurco" in
> the
> > stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then
> I
> > had years of contesting behind me and was awarded honorary title "Master
> of
> > Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham
> radio
> > was considered technical sport in Czechoslovakia. I have medal and a
> > certificate (and pictures in the press) to prove it.
> >
> > Now you got another egg in your face, go away, shape up and come back when
> you
> > are pronounced fit by professionals in medical and legal areas.

> >
> > Thank you,
> > hope it helps and have a nice day (or fuggetaboutit)
> > have a Happy Chanukah and don't confuse it with Christmas
> > like you did with Passover for "Easter breakfast"
> >
> > ... -.-
> >
> > Yurko, oK3BU
> > Master of Sport
> >
> > PS
> > I will not bother suing you for libel, defamation of character,
> antisemitic
> > (antichristian) remarks, damage to my professional career, resigning from
> IBM,
> > accusing me of running illegal copies of CT, calling Quad a Yagi, ad
> nauseam,
> > ad nauseam....
> > By now you should realize that you should not tangle with me, every time
> you
> > do, you look like bigger fool!
> >
> > Sorry NG, I got provoked (again), trying to use plain unscientwific
> language in
> > hope of getting the message through.
> > Back to Fruck delete key.
> >

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

4592. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 10:26:10 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A432C16.228D72AB@cmcorp.com>
Source record: 174241

"Peter O. Brackett" wrote:

> Yuri:
>
> Heh, heh.
>
> Good work on Chip, what a piece of work...
>
> But all to no avail...
>
> Chip will probably say, as the Black Knght in one of Monty Python's skits
> said after he had all of his limbs hacked off, "its only a flesh wound, I've
> had worse!"
>
> Happy Holidays,
>
> -Peter K1PO
>
> "Yuri Blanarovich" <k3bu@aol.com> wrote in message
> news:20001221092430.21291.00005068@ng-co1.aol.com...
> > Freak crap:
> >
> > >>> And, of course, the right set of operating skills, honed
> > >>>first some 30 years ago--long before Yuri even knew what a contest is..
> > >>>
> > >>>73
> > >>>Chip n1IR
> >
> > I am getting tired of your crap mister!
> > Can you first explain how you arrived at the above statement? What is it
> based
> > on? Is it just product of your sick fantasies (like other crap,
> Freaktennas
> > etc.)? Are you suffering from Algoremania?
> >
> > If you do explain, then you can proceed reading on.
> >
> >
> > >>Lying skunk (again). He was in diapers (honing his....) when I was
> > >collecting
> > >>contest awards.
> > >>If I sued Phimd for the crap he is accusing me of or ascribing to me ...
> > >>
> > >>Get help, grow up and get the hell outa here jerk!

> > >>Frack OFF!
> > >>
> > >>BUm
> > >>
> >
> > Do yourself and ham radio fraternity some good, go and get some help and
> be
> > rational, then we will welcome you with open arms. Please!!!
> >
> > >Perthaps, Yuri, you could be so kind as to tell us a contest acheivement
> > >from,
> > >say, 1970 or 1971?
> > >
> > >73
> > >Chip N1IR
> >
> > "Perthaps" I will give you a hint to some "acheivement" that might point
> you in
> > direction of researching the subject before you make stupid statements:
> >
> > If you explained and provided some material that you based your above
> > conclusion and statement on, then you may read the following:
> >
> > In 1971 CQ WPX Contest results (Feb 72) CQ Magazine had my color picture
> on the
> > cover (first time contester on the cover)?. What were you honing?
> > Going further back -
> > Go check the CQ Magazine with 1965 CQ WW CW results, you would see picture
> of
> > two operators on the first page of results, one of them called "Jurco" in
> the
> > stripe T-shirt (Yurko, was OK3BU), who is now known as Yuri, K3BU. By then
> I
> > had years of contesting behind me and was awarded honorary title "Master
> of
> > Sport" bestowed on exceptional sportsmen like Emil Zatopek, etc. Yes, ham
> radio
> > was considered technical sport in Czechoslovakia. I have medal and a
> > certificate (and pictures in the press) to prove it.
> >
> > Now you got another egg in your face, go away, shape up and come back when
> you
> > are pronounced fit by professionals in medical and legal areas.
> >
> > Thank you,
> > hope it helps and have a nice day (or fuggetaboutit)
> > have a Happy Chanukah and don't confuse it with Christmas
> > like you did with Passover for "Easter breakfast"
> >
> > ... -.-

> >
> > Yurko, oK3BU
> > Master of Sport
> >
> > PS
> > I will not bother suing you for libel, defamation of character,
> antisemitic
> > (antichristian) remarks, damage to my professional career, resigning from
> IBM,
> > accusing me of running illegal copies of CT, calling Quad a Yagi, ad
> nauseam,
> > ad nauseam....
> > By now you should realize that you should not tangle with me, every time
> you
> > do, you look like bigger fool!
> >
> > Sorry NG, I got provoked (again), trying to use plain unscientwific
> language in
> > hope of getting the message through.
> > Back to Fruck delete key.
> >

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
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http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

4593. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 12:20:55 UTC
From: k3bu@aol.com
Message-ID: <20001222072055.23804.00000525@ng-fe1.aol.com>
Source record: 174242

Dipshitz wrote:

>And I don't believe that you were an inettelctual in that
>> society (forgive my ignorance on this; feel free to elaborate).
>>

Can you kindly elaborate what "an inettelctual" is? Is it like Freaky Frac? Is it like idiot with PhD? Then I wasn't it fer sure.

You remind me my Korean friend Sam-Dam-Fac who was sticking his nose where it didn't belong and got it chopped off.

You are sinking deeper and deeper, please kindly get some help before is too late. Can you dial 911?

I don't even hope it could help anymore!

SK

bada BUm

4594. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:05:20 UTC
From: 2w8ji@contesting.com
Message-ID: <3a434fa6.6853475@news.akorn.net>
Source record: 174243

On Wed, 20 Dec 2000 17:27:21 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
>
>My intent in posting was to explain why Mark got better DX (1500 miles) >with his vertical than with his 1/4-wave-high dipole. Mark`s mobile >installation is apparently very good, because most I`ve seen would have >difficulty in competition even with his too-low dipole.

The same thing happens here below 40 meters. I speak for above 40...because I have no verticals up there since Yagi's are so easy to install.

Look at a sampling of antennas used by sucessful low-band operators, such as ON4UN's book. If a low dipole was so good, you'd see a lot of them used instead of the dominance of verticals.

>The sufficiency of 1/4-wave height for horizontal antennas is something >I hear repeated often. I believe this fallacy may be based upon >obtaining a drivepoint impedance near 70 ohms.

More than likely it is because people compare a vertical with a poor ground system (like four elevated radials) against their low dipole, and the low dipole wins.

You can certainly work DX on a low dipole on the lower bands, but it is my experience that a low dipole is rarely close to a vertical with a **good** ground. Most others who have compared both a good vertical and a low dipole agree.

73 Tom

4595. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:09:11 UTC
From: 2w8ji@contesting.com
Message-ID: <3a435191.7345080@news.akorn.net>
Source record: 174244

On Wed, 20 Dec 2000 09:41:06 -0500, "Rudy Marcelletti"
<rudym@net-link.net> wrote:

>Yuri was refering to a comparison between a 1/2-wave dipole only 7 feet
>above earth and a 15-foot vertical whip with a near perfect connection
>to high-conductivity soil.

There isn't any "dirt" in the world that is high enough conductivity
to not require radials.

Look at conductivity charts, and compare the conductivity of the best
soils to saltwater, and then compare the conductivity of salt water to
copper.

It's a delusion to think because your soil is 30-40 mS/m instead of
5-10 mS/m you suddenly have no loss!

73 Tom

4596. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:12:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A43534B.1C4D@wt.net>
Source record: 174245

Richard Harrison wrote:
>
> Mark keith wrote:
> "What freq were they on, and the distances used?"
>
> We had several frequencies in the 3 to 6 MHz range. We needed several
> due to broadcasters which would pop up or drift onto a channel we were
> using at times. We made no effort to adjust to ionospheric variations as
> we had no low, medium, and high frequency assignments.

Yep, I wouldn't think that would be too good at the 50-60 mile range. Little too far for reliable ground wave, and too close for a decent sky wave, and even if the sky wave was open "up-down" the antenna type is lousy for that use. I'd give it about a 50% workabilty ratio. I think I'd use point to point VHF with yagi's or something along that line. The hf would be great for longer distances though. 200-300 miles should do fine on 6 mhz in the daytime. About like my normal 40m daytime mobile setup. 40m a great daytime regional band. Usually anyway. MK
http://web.wt.net/~nm5k

4597. Re: More GAP antenna guestions.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:15:48 UTC
From: 2w8ji@contesting.com
Message-ID: <3a43528a.7593441@news.akorn.net>
Source record: 174246

On Tue, 19 Dec 2000 13:10:50 -0500, Bill Russell
<willy@global2000.net> wrote:

>I've seen a few GAP antenna postings in this group but I would like to
>hear from a few more ppl concerning GAP products. I am interested in
>the Titan DX and have read a few reviews. I know this is a compromise
>antenna. That said and sticking with verticals, what do u folks think
>of it compared to other brands? I also know that there are a lot of
>variables with any antenna installation so Im trying to average out
>the responses. It would be nice to be able to compare antennas that
>are all installed at the same site but that is not likley unless
>someone out there has done that.....Any advice will be helpful.
>
>Thx, Bill

Hi Bill,

You might search out the ARRL review where they compared a Gap to a
trap vertical with a real ground system.

On the higher bands, a Gap is OK. On the lower bands, it is a very
poor antenna. While you can make contacts, a low dipole would be MUCH
better on the lower bands for DX than a Gap.

I had a Gap antenna given to me several years ago. My 35 foot
top-loaded vertical with 60 radials was several S units louder than
the Gap at any distance, and 1500 watts would totally zap the matching
stub.

I now use the aluminun for a homebrew antenna.

Buy a Butternut, or any other trap vertical, and install a good radial
system..or a dipole fed with ladder line and a tuner. You'll be better
off.

73 Tom

4598. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:21:23 UTC
From: 2w8ji@contesting.com
Message-ID: <3a435402.7969752@news.akorn.net>
Source record: 174247

On Tue, 19 Dec 2000 20:00:49 -0600, David <kb9lpk@telocity.com> wrote:

>Wet rag potential problem there!
>
>Well this can also cause cold solider contact in most cases.

We used that method in production of panel meters and never got cold joints. When soldering a delicate device, we would lay the device on a wet sponge while applying heat with only the joint area clear of the sponge.

The main thing that causes a cold joint (assuming it was heated enough and clean) is moving the joint while it is cooling, not how fast you remove heat after the solder flows. This isn't concrete!

How fast you cool the joint has nothing to do with joint quality as long you don't disturb the solder while it is hardening.

73 Tom

4599. Re: More GAP antenna guestions.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:25:37 UTC
From: pmarkham@newsguy.com
Message-ID: <Xns90125ACC8pmarkhamnewsguycom@209.155.56.97>
Source record: 174047

Bill Russell <willy@global2000.net> wrote in
<2h8v3tctficiepfkl44sjfd0ri82mfgur4@4ax.com>:

>I've seen a few GAP antenna postings in this group but I would like to
>hear from a few more ppl concerning GAP products.

A little info:

http://www.qsl.net/aa3rl/titan.html

Do a search at:

http://wmod.dejanews.com/home_ps.shtml

Entering keywords " gap titan" results in ~200 relative posts, in which
resides a great deal of "magic" based hyperbole and enough rf theory based
common sense to debunk most of the fiction, if you care to look for it.

Many good technical posts among ~1000 older posts are not available, at the
moment.

Pete/wa4hei

4600. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:31:17 UTC
From: 2w8ji@contesting.com
Message-ID: <3a43554c.8299785@news.akorn.net>
Source record: 174248

On Tue, 19 Dec 2000 19:52:40 -0600, David <kb9lpk@telocity.com> wrote:

>
>Well just my 2 cents, I would use a N style connector where ever possible!
>The PL-259 is a bit lossy .25-.50 db loss depending how you install & solider.
>
>A RCA connector has better loss properties than a PL-259 hi hi.
>
>Just my 2 cents...sk

Not true at all David. That is a popular but totally false "hamlore".

The loss in a UHF connector is immeasureable on conventional meters,
and that's true almost no matter how it is installed. The exception
would be if the connector was open or shorted.

One thing that will help you sort out rumor from fact is looking at
the numbers. Let's consider the .5 dB loss you quoted. That's almost
10% power loss.

If I ran 1500 watts through one of "your" PL-259's, it would dissipate
150 watts of heat.

Now let's consider how hot a 150 watt lightbulb gets, even though it
has dozens of times more surface area than the 259! Try this test, run
1500 watts through the connector and immediately grab it with you hand
after removing power. Now do that with a 150 watt lamp.

Let's try to not propagate such utter nonsense as .25 to .5 dB loss to
people trying to lean. At HF, the N connector is actually lossier than
a UHF connector. That's why a N connector will be unreliable at 5kW,
and a good UHF connector won't even get warm.

The exception are junk connectors like those from Radio Shack, which
fail at about a kilowatt or so.

73 Tom

4601. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:35:34 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4358A6.979@wt.net>
Source record: 174249

Fractenna wrote:

>
> Number 2 in the US it would seem:-)

On a band you could get out on with a limp weiner...So what... The only
thing you have proven on ten is you can mimic the fast talking AMEX guy
pretty well.

>
> What else you
> >wanna be?
>
> Nothing; I haven't 'wanted to be' something for many years. Instead I have been
> sedulous in becoming the many parts which make me a well rounded person.

Better be careful though, you know what happens when "well rounded"
people fall off antenna towers. Makes a well rounded mess that has to be
shoveled up by city workers.
>
> > You are already idiot, moron, etc. >Congratulations!!
>
> This is malicious libel.

When you are going to learn the difference between libel and opinion? Or
truth for that matter. MK
--
http://web.wt.net/~nm5k

4602. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:44:22 UTC
From: 2w8ji@contesting.com
Message-ID: <3a435847.9062720@news.akorn.net>
Source record: 174250

On Wed, 20 Dec 2000 20:44:45 GMT, tom_bruhns@agilent.com wrote:

>(A bit wary of a virtual tar-baby here...) OK, so is that ever an issue
>until the pair is mated? I never did disagree that the mated pair has a
>problem with respect to impedance, and I'm well aware of the impedance
>as a function of distance along a typical mated pair. But I'd for sure
>say it's a _system_ design problem, not the "fault" of the female half
>of the system.

It's almost ALWAYS the female's fault, even when discussing UHF
connectors. Look at the design.

The females have to fit around the male, and so the OD of the gripping
contact is larger than it should be for 50 ohms. The male is perfect
right up to the pin, and that pin is totally enclosed in the female.

Even a male-to-male adaptor has a much smaller bump than a female-to-
female.

My point isn't to disagree about impedance-critical cases when the UHF
is not a good idea, but to dispell these nonsense rumors that N
connector are from Heaven and UHF connectors from hell.

The fact is, if the connector is in a communications system below 150
MHz or so, no one would even be able to tell the difference in
performance.

In communications systems below 100 MHz, the N connector is a more a
sign of anal-retentiveness in the person picking the connector than
wisdom.

73 Tom

4603. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:48:50 UTC
From: fractenna@aol.com
Message-ID: <20001222084850.23909.00001393@ng-fe1.aol.com>
Source record: 174251

>
>THis is low, even for you, Chip. making reference to an escapee from the
>USSRs actions as having a 'Criminal record' is the type of thing we s

Then let me continue with this.You have taken some delight in turning black into white...

Yuri has admitted that he was ARRESTED and about to be put in PRISON for 5 years until he ESCAPED from Czechoslovakia. Your assumption is that he was some sort of freedom fighter. I make no such assumption. I asked him what his arrest and prison sentence was for; notice he does not respond.

Frankly it appears to me that Yuri has a problem with authority--whether it be an authority on a subject or one which holds society together.

That is why I asked and await said clarification.Again, Yuri admits to escaping from a 5 YEAR PRISON SENTENCE.

That's pretty incredible. The question is: for what?

73
Chip N1IR

4604. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:50:30 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A435C26.688@wt.net>
Source record: 174252

Tom W8JI wrote:

> It's a delusion to think because your soil is 30-40 mS/m instead of
> 5-10 mS/m you suddenly have no loss!
>
> 73 Tom

Thats fer sure. I have near those numbers here, and I still have the same problems everyone else does. Maybe to a slightly lesser degree, but they are still there. I need radials just like everyone else if I want to put out a halfway decent signal. You will notice the BC stations in this area still use 120 radials, good ground or not. MK

--
http://web.wt.net/~nm5k

4605. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:52:49 UTC
From: fractenna@aol.com
Message-ID: <20001222085249.23909.00001394@ng-fe1.aol.com>
Source record: 174253

>>>They still sentenced me to 5 years, but by then I was calling CQ
>>>contest as VE3BMV.
>>>God Bless Canada, US and don't let the dummycrats to establish socialist
>hell
>>>here.
>>>
>>>73 Yuri
>>
>>So you admit that you have a criminal record. Could you tell us what the law
>>breaking was about? I'm sorry, but I will not assume this is a mere 'freedom
>of
>>speech issue'. And I don't believe that you were an inettelctual in that
>>society (forgive my ignorance on this; feel free to elaborate).
>>
>>Also, is it NOW your understanding that you can say anything you want--for
>>example to New York Times reporter(s)--without any responsibility for the
>>damage incurred?
>>
>>73
>>Chip N1IR
>
>No Chip, you piece of shit, Yuri is a patriot who risked life and
>liberty for his country. That the evil Soviet Empire sentenced him
>is a badge of honor but you wouldn't understand anything about honor
>would you you spinless vermin.
>
>

Jerrold--

Do you really want Dr. Browne to see this??

Nowhere in Yuri's comments does he say or impute the interpretation you made. I asked for further info and he won't provide it.

Again--based on HIS comments-- I would speculate that Yuri has a problem with authority of any kind.

73
Chip N1IR

4606. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 13:58:44 UTC
From: k3bu@aol.com
Message-ID: <20001222085844.20833.00005148@ng-cp1.aol.com>
Source record: 174254

>>
>>Freak crap:
>>
>>>>> And, of course, the right set of operating skills, honed
>>>>>first some 30 years ago--long before Yuri even knew what a contest is..
>>>>>
>>>>>73
>>>>>Chip n1IR

K3BU wrote:
>Can you first explain how you arrived at the above statement? What is it
>based on?

No answer yet!
He is not revealing his intelligence gathering methods or sources. Now he got me into hot water and fired from KGB. I was terminated because I could not extract this information from Dipshitz (pssst, it is his cover name) and now they want to hire him. They never seen such a skilled individual (or multiple personality person) and KGB Major Fokoff will be contacting him soon.
I hope you are happy that you have ruined my professional career, my reputation, got me fired and taken bread away from my children.
Oh, oh! I hear Janet Reno's jack booted INS swat team knocking on my door. Looks like he told them about my immigrant status. I won't give up as easy as Elian. I will turn my TX on and paralyze their guns with EMP (those 8877s are good for something). They will be afraid to come after me, because of the FCC RF safety regulations, and they will not risk their lives for Janet. They will "know" that I would self destruct from the RF. If you guys don't hear from me, then you know what happened. On the other hand, if I can outsmart them like I did with reds, look for another something..BU.
See what have you done Dipshitz? Thanks a lot! I hope you can live with it!

Have a nice day!

Bada 1BYm Bada 3BUm

4607. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:01:25 UTC
From: fractenna@aol.com
Message-ID: <20001222090125.23909.00001395@ng-fe1.aol.com>
Source record: 174255

>NYFBYI
> I bet you haven't found where I work. I do not exist, I am working for RCMP,
>MOSAD, FBI, CIA, CQ, so please do not investigate me, and don't tell anybody,
>you might get burned by your "low power" SB220.
>Now you get the picture?
>
>This is really sick, get help quickly before is too late! Call 911 and you
>might be saved.
>
>007 ten-ten BUm

Your status in the US is unclear. But there are pro's at work finding out more.

BTW, shouldn't there be a 'no power' category for SB220's that are unconnected and in storage? I can put my NCL-2000 in that category too!

And they are for sale (since I don't use them)

NCL-2000 $ 600
SB-220 $600

These haven't been on the air for a while so you'll have to do some clean up/possible repair. For these prices that's the caveat. U Pay Shipping.

73
Chip N1IR

4608. Re: Cohen fool,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:01:42 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A435EC6.4030700@hiwaay.net>
Source record: 174258

Look- Dipshit- you can't even read with comprehension- just where did he say he was arrested? He said he got out just before the round-ups, and was only sentenced- in absentia, after he was out of the country.

You are so bent on blasting Yuri that you wouldn't know the truth if it hit you in the face.

You DO need help from a mental health professional.- As to being an 'authority'- as you implied- think again- the number of people that believe that is small, and getting smaller every day.

Hope this helps.

Bill-W4BSG

Fractenna wrote:

>> THis is low, even for you, Chip. making reference to an escapee from the
>> USSRs actions as having a 'Criminal record' is the type of thing we s
>
>
> Then let me continue with this.You have taken some delight in turning black
> into white...
>
> Yuri has admitted that he was ARRESTED and about to be put in PRISON for 5
> years until he ESCAPED from Czechoslovakia. Your assumption is that he was some
> sort of freedom fighter. I make no such assumption. I asked him what his arrest
> and prison sentence was for; notice he does not respond.
>
> Frankly it appears to me that Yuri has a problem with authority--whether it be
> an authority on a subject or one which holds society together.
>
> That is why I asked and await said clarification.Again, Yuri admits to escaping
> from a 5 YEAR PRISON SENTENCE.
>
> That's pretty incredible. The question is: for what?
>
> 73
> Chip N1IR

4609. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:03:23 UTC
From: fractenna@aol.com
Message-ID: <20001222090323.23909.00001396@ng-fe1.aol.com>
Source record: 174256

>Your should be sentenced
>to be booted out over Czechoslovokia in 1958 to fend for yourself.

Being a somewhat free spirit, I think I would have enjoyed being in Prague in those years.

Perhaps you have your decades off?

73
Chip N1IR

4610. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:05:49 UTC
From: fractenna@aol.com
Message-ID: <20001222090549.23909.00001397@ng-fe1.aol.com>
Source record: 174257

>When you are going to learn the difference between libel and opinion? Or
>truth for that matter. MK
>--
>http://web.wt.net/~nm5k
>

I know the difference. My attorney is on retainer to educate me, amon other
things.

It should be a very interesting new year with various new year greetings to a
select few.

Merry Christmas!

73
Chip N1IR

4611. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:10:20 UTC
From: k3bu@aol.com
Message-ID: <20001222091020.20833.00005149@ng-cp1.aol.com>
Source record: 174259

Dipshitz wrote:
>
>Yuri has admitted that he was ARRESTED and about to be put in PRISON for 5
>years until he ESCAPED from Czechoslovakia.

Huh? Where did you get that? Can you kindly splain? Or your brain so fracted up
that you cant even read?

>Frankly it appears to me that Yuri has a problem with authority--whether it
>be an authority on a subject or one which holds society together.

Huh? This is getting better (terribly worse)!
Ouch, just got another electric shock. Yes master Dipshitz, I will obey you
now. You are my sunshine, the smartest PHdeed inteclct... whatever you say, the
father of all antennas, frected and unfrected, super contest champion, pleaze
teach me some zpelung.
You should be Algore's chief of staff or sumethung, you wasting your precious
entelict here.

>That is why I asked and await said clarification.Again, Yuri admits to
>escaping
>from a 5 YEAR PRISON SENTENCE.
>
>That's pretty incredible. The question is: for what?
>

How you figured dat one? You kindly splain? Same way you figered Freaktennas?

Call 911 immediately, there might .. ah fuggetboutit
Sinkin, sinkin, sinkin....

BUm

4612. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:23:00 UTC
From: k3bu@aol.com
Message-ID: <20001222092300.20833.00005150@ng-cp1.aol.com>
Source record: 174260

>
>Your status in the US is unclear. But there are pro's at work finding out
>more.
>

What's it to you?
Save them work and effort, I was smuggled in a suitcase, given false names, plastic surgery, my name used to Hetler or something. My memory is fading, I am not as young as I look.

Your status is pretty clear though, like my Korean friend Sam Dam Fac, you are sorry excuse for Dipshitz.

bada BYm
and that's not me either

4613. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:25:13 UTC
From: 2w8ji@contesting.com
Message-ID: <3a435b28.9799785@news.akorn.net>
Source record: 174261
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

On Wed, 20 Dec 2000 00:35:03 GMT, "Don K." <dk@home.com> wrote:

>> I'm reluctant to take advice or a lecture from someone who professes
>> to be informed about this subject, yet who didn't understand a simple
>> basic fact like how the phone communicates to the cells and still gave
>> advice on the subject.
>
>Come on, now. Understand it? Of course I understand it.

If you understand it, then why did you give incorrect advice and
present it as a fact...instead of saying "I think" or "I guess"? Being
authoritative works better when you are right.

>Did I know
>specifically, cell phones are polled? --No I hadn't thought about it,
>but it makes sense, and I certainly understand it. That detail of how
>phones are tracked is irrelevant to the general discussion of exposure
>safety.

Anyone with any experience with RF would deduce they MUST do somthing
other than having an inert device laying on the seat. Anyone who knows
anything about exposure, or who has looked at it seriously, would know
how often the EM field was on.

>> To me, that indictates you give specific advice without understanding
>> how the system works, making your advice unreliable. I have a parrot
>> in the other room. One is enough.
>
>From my viewpoint, I've basically been responding to closed-minded
>statements from both extremes. It is ok to be skeptical. While the present
>US standard is believed to be safe, it did not come down from Mt. Olympus,
>and should not be defended as unalterable dogma.

The standards did come from more than 20 years of accumulated testing
in controlled environments. Despite all this testing, and researchers
standing to gain money and GREAT fame if they suceed in establishing a
link, the only agreement to this date between RF exposure and cell
damage is cooking.

Every single study that showed any link to cancer has been either
outright falsified (probably to gain status and money for the
scientist) or had very serious errors that show the reasearcher didn't
have a clue what he was doing. A prime example of fraud is the study
from California I quoted, and a prime example of unvarnished stupidity
is the study that (someone else pointed out) compared power lines to

Lukemia.

The damage is from heating, it is NOT accumulated damage if levels are kept below those that raise the cell's temperature. It is easy to quantify heating effects, and with a margin for tolerances added the results are 100% reliable.

The Chicken-Littles of the world may not like that...but that is the way it is.

>A few posts back you asked for a reference to the "so-called Russian
>standard", which I then provided.

So?

>Now you complain when I point out that
>the FDA is studying the effects of non-ionizing radiation (when only the
>paranoid would even consider such a thing) and cite a reference.
>-- I can't win, can I? :-)

I complained because you gave advice that is contrary to how the system actually works. Anyone who professes to understand the problem should also understand how the system works. Otherwise, it's just unreliable babbling.

For an example, look at the person who posted the nonsense about a microchip that cancels radiation. That person obviously hasn't the faintest idea about EM fields and how they work, otherwise they would never have quoted such absolute (and obvious) nonsense.

Like I said, I have a parrot in the other room. I never rely on his advice, because he just repeats things he doesn't understand. I love my bird, and certainly admire his good qualities, but he is unreliable for technical advice.

Cheers!
Tom

4614. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:30:36 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4364e3.420660@news.akorn.net>
Source record: 174262

On Tue, 19 Dec 2000 21:02:52 -0500, "J. Mc Laughlin" <n8tt@tir.com>
wrote:

>Dear Group:
> It can be worse. Study has shown that CU braided coax is slightly
>non-linear (produces harmonics) and that tendency is increased with
>even slight corrosion. RG214 is better - the AU seems to help. 73
>Mac

Any pressure contact joint can cause less than perfect linear
operation. That's true no matter what the materials are.

The level of that problem is insignificant in coaxial lines compared
to the loss problem.

4615. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:30:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A43658C.A7D70618@IEEE.org>
Source record: 174263

Mike N4DIA wrote:
> I have been a Ham since I was 14 so I know the limitations I am working in.
> Even the RS I previously had would hit repeaters 50+ miles out on 70 watts.
> As previously stated, I am stuck by restrictions that I have no control
> over. I would love to mount a 1/2 wave on the roof but I can't. Simple... I
> need to limit the mount to a through the window.

For 2m/70cm, I use a mag mount fed with RG-58 that fits snugly
in the door weatherstriping - no holes and no window feed through.
--
http://www.mindspring.com/~w6rca

4616. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:44:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4368B8.6F95@wt.net>
Source record: 174264

Fractenna wrote:
>
> >
> >THis is low, even for you, Chip. making reference to an escapee from the
> >USSRs actions as having a 'Criminal record' is the type of thing we s
>
> Then let me continue with this.You have taken some delight in turning black
> into white...
>
> Yuri has admitted that he was ARRESTED and about to be put in PRISON for 5
> years until he ESCAPED from Czechoslovakia. Your assumption is that he was some
> sort of freedom fighter. I make no such assumption. I asked him what his arrest
> and prison sentence was for; notice he does not respond.

Because it's none of your business. But I would wager to say it was for
being anti communist or something along those lines. "IE: refusing to
suck up to a bunch of !@#holes." I have a neighbor across the street
from Poland who did the same thing. He was a runner in Poland. When he
escaped, he ran out of Poland . Literally. He ran for his life. But a
tight ass sheltered little wanker from Boston wouldn't understand
something like that I guess.
>
> Frankly it appears to me that Yuri has a problem with authority--whether it be
> an authority on a subject or one which holds society together.

Yea, kinda like people did with Hitler , huh? MK

--
http://web.wt.net/~nm5k

4617. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:48:39 UTC
From: kk5yy@arrl.net
Message-ID: <3a44682f.175821162@nntp.mindspring.com>
Source record: 174265

On 22 Dec 2000 13:52:49 GMT, fractenna@aol.com (Fractenna) wrote:

>
>
>
>>>>They still sentenced me to 5 years, but by then I was calling CQ
>>>>contest as VE3BMV.
>>>>God Bless Canada, US and don't let the dummycrats to establish socialist
>>hell
>>>>here.
>>>>
>>>>73 Yuri
>>>
>>>So you admit that you have a criminal record. Could you tell us what the law
>>>breaking was about? I'm sorry, but I will not assume this is a mere 'freedom
>>of
>>>speech issue'. And I don't believe that you were an inettelctual in that
>>>society (forgive my ignorance on this; feel free to elaborate).
>>>
>>>Also, is it NOW your understanding that you can say anything you want--for
>>>example to New York Times reporter(s)--without any responsibility for the
>>>damage incurred?
>>>
>>>73
>>>Chip N1IR
>>
>>No Chip, you piece of shit, Yuri is a patriot who risked life and
>>liberty for his country. That the evil Soviet Empire sentenced him
>>is a badge of honor but you wouldn't understand anything about honor
>>would you you spinless vermin.
>>
>>
>
>Jerrold--
>
>Do you really want Dr. Browne to see this??

I sure do you worthless pieces of dog shit. He and I
have both worked in the same field for many years
and the Soviet Empire was our common foe.
This is my account and what I say is my business.
I have never even confirmed if I am employed or
where.

I hope you did get canned by BU for misfeasance
you worthless piece of crap. This is a big statement
but I think you are the biggest ass hole on the internet.

Threat don't work what now your going to come out
to New Mexico and whip my ass.

>
>Nowhere in Yuri's comments does he say or impute the interpretation you made. I
>asked for further info and he won't provide it.
>
>Again--based on HIS comments-- I would speculate that Yuri has a problem with
>authority of any kind.
>
>73
>Chip N1IR

4618. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 14:52:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <91vprk$c29$1@neptunium.btinternet.com>
Source record: 174266

Mark Keith wrote -
> You will notice the BC stations in
> this area still use 120 radials, good ground or not.
==========
I wonder why.

Serious questions :-

By how many dB would signal strength decrease if the number
of radials was reduced to 60 ?

Or if the number of radials was reduced to the point where
signal strength fell by 3 dB, how many radials would
remain ?

Estimates will suffice.

Reg.

4619. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 15:08:30 UTC
From: n8wwm@aol.comnospam
Message-ID: <20001222100830.03957.00005717@ng-ct1.aol.com>
Source record: 174267

fractenna dribbled:

>My attorney is on retainer to educate me, amon other
>things.

Whoopie do doofus. Go chew on your cud and shut up a while.

4620. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 15:13:53 UTC
From: n8wwm@aol.comnospam
Message-ID: <20001222101353.03957.00005718@ng-ct1.aol.com>
Source record: 174268

>Fractenna dribbled while munching squirrel turd:
>>
>
>> So you admit that you have a criminal record.
>

Ya know, you are one disgusting individual, frackie poo. What a friggin' dweeb.

Call your lawyer and sue me for defining your nature, dweeb.

4621. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 15:20:29 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <91vrgo$k68$1@iac5.navix.net>
Source record: 174119

Chip, your way over the line here, may I suggest you step back, take a breath, and weigh the seriousness of a Communist take over Vs a silly contest. Did your Dad never teach you how to be a gracious winner?

I am amazed that you play the Jew card all the time and bemoan the holocaust and refuse to accord Yuri, who was essentially in the same situation, any slack and refer to him as a criminal. You are an anti-Christian!

"Fractenna" <fractenna@aol.com> wrote in message news:20001221203850.28792.00006189@ng-cl1.aol.com...
> >They still sentenced me to 5 years, but by then I was calling CQ
> >contest as VE3BMV.
> >God Bless Canada, US and don't let the dummycrats to establish socialist hell
> >here.
> >
> >73 Yuri
>
> So you admit that you have a criminal record. Could you tell us what the law
> breaking was about? I'm sorry, but I will not assume this is a mere 'freedom of
> speech issue'. And I don't believe that you were an inettelctual in that
> society (forgive my ignorance on this; feel free to elaborate).
>
> Also, is it NOW your understanding that you can say anything you want--for
> example to New York Times reporter(s)--without any responsibility for the
> damage incurred?
>
> 73
> Chip N1IR

4622. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 15:33:58 UTC
From: richardharrison@webtv.net
Message-ID: <14317-3A437466-17@storefull-114.iap.bryant.webtv.net>
Source record: 174121

Mark Keith wrote:
"Yep, I wouldn`t think that would be too good at the 50-60 mile range.
(3 to 6 MHz)

Mark`s experience is the same as mine. We had many vehicular installations. These used vertical antennas as a practical matter. Vertical antennas have a null in their overhead pattern. So, short-haul ionospheric propagation is poor.

VHF`s advantage in line-of-sight communications is in its improved signal-to-noise ratio. Normal lack of ionospheric interference plus terrestrial blockage and loss lets you extend coverage. Antenna efficiency is usually much better too. As Mark pointed out, yagis and other high-gain arrays become practical, too.

We did continue using h-f for long-haul. For communication between oil camps and offices which involved hops of several hundred miles we had better equipment than the defective RCA SSB stuff. We had Collins 30K5 transmitters and 51-J receivers. No SSB, just AM, and with dipoles up as high as we could get them, usually 60 or 70 feet, we did just fine. Our frequencies were in the 3-6 MHz range, in competition with South American broadcasters which seemed to come and go at will. I also put a rhombic on Tierrra del Fuego to communicate with the public correspondence station near Buenos Aires. We had to use their frequency assignments. For that, we had a Hallicrafters HT-20, Glenn McCarthy had abandoned in Bolivia, and an Eddystone receiver I picked up at Radio Boliche ("Barato y Chi-Chi) in Buenos Aires. This was rock-solid. The Argentine Post office had a war-surplus BC-610 working with a dipole just down the road from our rhombic. No comparison at Radio Pacheco, the Argentine public correspondence station outside Buenos Aires. We knocked their ears off whenever we hit the air with our humble HT-20.

Best regards, Richard Harrison, KB5WZI

4623. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 15:44:58 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4376FA.49F6@wt.net>
Source record: 174120

Fractenna wrote:
>
> >When you are going to learn the difference between libel and opinion? Or
> >truth for that matter. MK
> >--
> >http://web.wt.net/~nm5k
> >
>
> I know the difference. My attorney is on retainer to educate me, amon other
> things.

Well, you can tell him or her I said they are doing a pathetic job.
Maybe they will get you a spell checker for a holiday gift. If I were
you, I'd fire them and hire Ventura as soon as his Minn. governor gig is
up. He'd whip you into shape in no time, and the exercise would get rid
of that extra roundness.

> Merry Christmas!

Merry christmas, happy hanukkah, good golf, good tennis or whatever
makes you happy.

Maaaaaaaaaaaaaaaaaarrrrrrrrrrrrrrrrrrrrrvvvvvvvvvvvvvvvvvvviiiiiiiinnnn
Ziiiiiiiiiiiiinnnnnnnnddddddddllllllllllleeeeeeeerr
Eeeeeeewwwwwwwwintnessssssss neeeeeeeeewwwwwwwssssss.

--
http://web.wt.net/~nm5k

4624. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:27:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4380E6.A634C0DD@eznec.com>
Source record: 174122

Probably the best answer to these questions is in the Brown, Lewis, and Epstein's 1937 paper. With their (undocumented but probably reasonably typical) ground conditions at 3 MHz, reduction from 113 to 60 0.4 free-space-wavelength radials resulted in a field strength decrease of about 0.4 dB for a 90 degree high radiator, and 0.7 dB for a 45 degree high radiator. To effect a 3 dB decrease required reducing the number of radials to 2 for a 90 degree high radiator and between 2 and 15 for a 45 degree high radiator. (For a 45 degree high radiator, 2 radials resulted in a reduction of 5.3 dB and 15 in a reduction of 2.0 dB.) All these are from Fig. 30 of the paper.

Some of the broadcasting professionals can correct me if I'm wrong, but I believe that a dB or two represents a noticeable (and costly) reduction in coverage area. It's also important for a broadcast station to maintain its coverage over seasonal and longer term changes in ground conductivity, hence the admitted overkill. But amateurs have different goals and requirements than broadcasters.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Mark Keith wrote -
> > You will notice the BC stations in
> > this area still use 120 radials, good ground or not.
> ========================
> I wonder why.
>
> Serious questions :-
>
> By how many dB would signal strength decrease if the number
> of radials was reduced to 60 ?
> ----
> Or if the number of radials was reduced to the point where
> signal strength fell by 3 dB, how many radials would
> remain ?
> ----
> Estimates will suffice.
> ----
> Reg.

4625. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:31:42 UTC
From: 2w8ji@contesting.com
Message-ID: <3a438062.1350253@news.akorn.net>
Source record: 174123

On Fri, 22 Dec 2000 14:52:45 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Serious questions :-
>
>By how many dB would signal strength decrease if the number
>of radials was reduced to 60 ?

Nothing at all, if the n length of the radials was 1/4 wl.

The reason the FCC suggests 120 radials is they want to have headroom
in case some radials are damaged or the system deteriorates over time.

A second issue is stability when weather changes in directional arrays
A very tiny change is FS can result in a large change in null depth
since all elements may not change the same with soil moisture changes.

>Or if the number of radials was reduced to the point where
>signal strength fell by 3 dB, how many radials would
>remain ?

That information is well documented for all to see. Look at the RCA
study. While the results may vary from system to system, it will give
you a good general idea.

My own situation on 160 tracks fairly well with that study.

No BC station manager in his "right mind" would want to give up one
dB, let alone three.

73 Tom

4626. K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:31:47 UTC
From: fractenna@aol.com
Message-ID: <20001222113147.21269.00005633@ng-co1.aol.com>
Source record: 174124

Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence when he left Europe.

I asked him what the offense was and he refused to elaborate.

Several people here are making the ASSUMPTION that this was some political issue, but Yuri is either incapable or unwilling to verify that.

Here are the facts:

1) based on his responses, K3BU has real issues with authority figures. For example: in the last day has managed to attack President Clinton; Vice President Gore; Attorney General Janet Reno; various European groups, and me. For the latter, I presume this is because I represent an authority on a technical subject of interest to this NG;

2) I am not politician, and I am not a public figure.

3) Yuri has used, and continues to use, malicious libel and attack me.

If Yuri would like to elaborate rather than make personal attcks, this may be useful in understanding his position. Frankly, his responses strike me as childish, irrational, disjointed, and not of high moral character or integrity. That is my impression, and I would be happy to afford him the opportunity to clarify his statements and have me put these impressions to rest.

Sincerely,

Nathan Cohen Ph.D.

4627. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:32:35 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A438222.EEF38565@3n.net>
Source record: 174125
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Delbert McCord wrote:
>
> I want to thank the person with the idea of a watt meter at teh
> antenna end of the coax into a dummy load, ...

I rode my Uncle Sam's great grey yachts as a field engineer in a previous life. One had a surface search radar that had extremely poor range. Turned out that some swab had replaced a section of waveguide with a 2x4 halfway up the mast. As luck'd have it the SWR and all looked ok .....

4628. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:37:55 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A438363.4020509@hiwaay.net>
Source record: 174127

Note clarifications interlined below

Fractenna wrote:

> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
> when he left Europe.

THat is NOT what he said. you lack reading skills

>
> I asked him what the offense was and he refused to elaborate.

That is HIS business, not yours.

>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:

Again- comprehension problems- these are assertions by Chip Cohen, (aka
Dipshit), not facts.

>
> 1) based on his responses, K3BU has real issues with authority figures. For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;

Those were political free speech, which we have here, and he did not
have where he left. I dont agree with his vehemence, but do agree that
he has the right .

>
> 2) I am not politician, and I am not a public figure.

You ARE a public figure- your own actions have made it so.

>
> 3) Yuri has used, and continues to use, malicious libel and attack me.

You attacked him first, with lies. He has hit back, but with more truth
than you will admit.

>
> If Yuri would like to elaborate rather than make personal attcks, this may be
> useful in understanding his position. Frankly, his responses strike me as

> childish, irrational, disjointed, and not of high moral character or integrity.

coming FROM Chip, this is hilarious. If it were about Chip- I would say-
right on!

> That is my impression, and I would be happy to afford him the opportunity to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,

Again- lacks comprehension and has mixed up vocabulary. Hypocracy is a
better word in this context.

>
> Nathan Cohen Ph.D.

4629. Comet interference with microwave antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:43:22 UTC
From: scannerdweeb@aol.comicstrip
Message-ID: <20001222114322.10095.00008498@ng-md1.aol.com>
Source record: 174126

Happy Holidays !
The 89th episode of
The Adventures of Scanner Dweeb comic strip
titled " Comet interference... "
is ready for your viewing pleasure at
http://www.ScannerDweeb.com
And thanks for your support of the hobby of radio !

See them first !
Want to be sent new comic strips
or special episodes via your e-mail
before they are put on the web site ?
Subscribe to the ScannerDweeb eGroup

http://www.egroups.com/group/ScannerDweeb

The Adventures of Scanner Dweeb comic strip
http://www.ScannerDweeb.com
http://scannerdweeb.netfirms.com
http://www.ScanShack.com
Special monthly episodes, not shown
on the web site, can ONLY be seen
in Popular Communications magazine !

4630. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 16:56:51 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92015f$mj5$1@iac5.navix.net>
Source record: 174128

Please don't compound your earlier nonsense by continuing to harangue Yuri. If you truly feel libeled, for God's sake sue him and keep it off the newsgroup. You have turned the mere suspicion that your an anal orifice to fact with your words.

Do you really need attention so badly, my aging boy genius, that you need to resort to outrageous responses? Once again I implore you to take your collection of posts to a competent mental health professional and get an unbiased opinion as to the normalcy of your behavior.

"Fractenna" <fractenna@aol.com> wrote in message news:20001222113147.21269.00005633@ng-co1.aol.com...
> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.
>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures. For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.
>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or integrity.
> That is my impression, and I would be happy to afford him the opportunity to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,

>
> Nathan Cohen Ph.D.

4631. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 17:00:30 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4388AE.1040108@hiwaay.net>
Source record: 174130

Fractenna wrote:

I presume this is because I represent an authority on a
> technical subject of interest to this NG;
> > Sincerely,
>
> Nathan Cohen Ph.D.

Have you gone into the agent business? what authority do you represent

and what aspect of his expertize do you make available? What is his technical subject?

Why would a NG supposed to be about amateur radio antennas be interested?

an inquisitive mind is asking.
Bill-W4BSG

4632. Fracky freaks out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 17:04:03 UTC
From: n8wwm@aol.comnospam
Message-ID: <20001222120403.22559.00002785@ng-fh1.aol.com>
Source record: 174129

> fractenna@aol.com (Fractenna), while munching his squirrel turd sandwich,
dribbled forth the following garbage:

>2) I am not politician, and I am not a public figure.
>Nathan Cohen Ph.D.<piling it higher and deeper>

True Freaky, I mean fracky...you are not a public figure. You are a PUBIC
figure.

4633. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 17:12:51 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j22029.irj.ln@mail.specsol.com>
Source record: 174131

Fractenna <fractenna@aol.com> wrote:
> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
> when he left Europe.

<blathering nonsense deleted>

You desperately need professional help in the following areas:

Reading and comprehension
20th century history
politial science
social interaction
self esteem and the need for attention

Jim Pennino

4634. Nathan Cohen Ph. D.: Incapable of Consistant Behavior?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 17:32:36 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <UeM06.1622$0s3.184387@typhoon.columbus.rr.com>
Source record: 174132

Hmmm,

First you whine that you are abused by the use of your name/
call in the subject line of a newsgroup thread, and then you start
an abusive newsgroup thread with someone else's call in
this *public* forum.

First you whine that all you want is for the discussion of you to
stop, and then you *initiate* a new thread guaranteed to draw
more attention to you in this *public* forum.

First you claim to not be a public figure, and then you continue
to expose yourself to ridicule by posting drivel in a *public* forum.

First you claim (repeatedly) to be starting legal actions against
multiple individuals, and then you fail to follow through on
even one of these (public) threats to sue.

First you post that your attorney has advised you to not respond
to postings, and then you proceed to respond *in the same
message*!

First you claim that your attorney (real or imagined) has advised
you that someone has illegally wiretapped you, and then you say
"never mind" and "let it drop".

First you had a small group of sycophants filing in support of
you from the "fractenna" entity (most notably "Phil"), and
recently even they don't file in support of your rants.

Frankly, your behavior strikes me as "childish, irrational, disjointed,
and not of high moral character or integrity." That is my impression,
and I would be happy to afford you the opportunity to clarify your
statements.

--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

"Fractenna" <fractenna@aol.com> wrote in message
news:20001222113147.21269.00005633@ng-co1.aol.com...
> Yuri, K3BU has made the assertion that he was escaping a 5year prison
sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.

>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures.
For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and
me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.
>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may
be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or
integrity.
> That is my impression, and I would be happy to afford him the opportunity
to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.

4635. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 18:01:23 UTC
From: richardharrison@webtv.net
Message-ID: <672-3A4396F3-40@storefull-118.iap.bryant.webtv.net>
Source record: 174133

Reg wrote:
"By how many dB would signal strength decrease if the number of radials was reduced to 60?"

Need to know the soil characteristics and frequency.

Ed Laport wrote the "Antenna" section of Keith Henney`s "Radio Engineering Handbook". Ed says to choose a site with good ground conductivity at least out to 1/2-wavelength from the antenna and down to the depth of wave penetration.

For details Laport says to refer to his RCA colleagues, R.F. Lewis and J. Epstein in: "Ground Systems as a Factor in Antenna Efficiency", Proc. IRE, 25-753, June 1937.
I believe these gentlemen along with G.H. Brown, also of RCA, "wrote the book" on radial ground systems.

Ed says 120 radials barely buried as needed for protection and 1/2-wavelength long make a nearly perfect ground. 95% to 98% efficiency may be expected of the ground connection.

Ed advises against compromise but says it is better to compromise the length of the radials than to compromise the number. I`ve read elsewhere that to use the wire saved in length by increasing the number of radials involves nearly no compromise at all.

Experiments have shown that at distances greater than about 1/3-wavelength from the base of a tower, ground losses are almost independent of tower height. So the radials are installed to improve ground conductivity close to the tower base. Often, a ground screen, or about 240 radials about 10 to 15 degrees long are layed right at the base of a tower, in addition, 120 of these radials are extended out to 90 degrees (1/4-wavelength) to complete the ground system.

In the U.S., the FCC requires AM broadcasters to use a system of radials at least 1/4 wavelength long and to use no fewer than 90, and says that there should be as many as praticable. FCC suggests 120 radials spaced every 3 degrees (equally spaced) and extending 0.35-0.4 wavelength from the tower. FCC also suggests a square ground screen 24 or 48 feet on a side. When a less than an "optimum" ground system is used, a complete field-intensity survey shall be conducted to establish that the field intensity meets minimum requirements. My recollection is that the stations I`ve worked in all had 120 radials from each tower, 90-degrees in length, and had a copper ground screen around and under each tower. That surely complied with FCC rules at the times they were constructed so as to avoid any special proof that the stations met the minimum field

strength requirements.

Best regards, Richard Harrison, KB5WZI

4636. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 18:32:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A439E2F.87BED2AE@IEEE.org>
Source record: 174135

Jerry Flanders wrote:
>
> If I understand this correctly, they thought their data shows that a
> 1/4 wl vertical with only two 0.4 wl radials is only 3db down from one
> with 113 radials of the same length over (presumably) typical ground
> at 3 MHz.
>
> Makes me wonder why anyone would ever go beyond 4-8 in an amateur
> installation.
>
> What change has been observed by hams who have taken measurements as
> they added radials? I think I remember reading reports of how the
> performance changed, but I don't remember the results.

I have a 1/4WL 40m vertical with 8 radials. I have never heard a
signal on the vertical that is stronger than the same signal is
on my one wavelength 40m dipole at 40ft. I keep trying to find
that stronger signal on the vertical but so far it has eluded me.
--
http://www.mindspring.com/~w6rca

4637. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 18:33:04 UTC
From: jflanders2@home.com
Message-ID: <3a439a7c.434124864@news>
Source record: 174134

If I understand this correctly, they thought their data shows that a
1/4 wl vertical with only two 0.4 wl radials is only 3db down from one
with 113 radials of the same length over (presumably) typical ground
at 3 MHz.

Makes me wonder why anyone would ever go beyond 4-8 in an amateur
installation.

What change has been observed by hams who have taken measurements as
they added radials? I think I remember reading reports of how the
performance changed, but I don't remember the results.

Jerry W4UK

On Fri, 22 Dec 2000 08:27:18 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Probably the best answer to these questions is in the Brown, Lewis, and
>Epstein's 1937 paper. With their (undocumented but probably reasonably
>typical) ground conditions at 3 MHz, reduction from 113 to 60 0.4
>free-space-wavelength radials resulted in a field strength decrease of
>about 0.4 dB for a 90 degree high radiator, and 0.7 dB for a 45 degree
>high radiator. To effect a 3 dB decrease required reducing the number of
>radials to 2 for a 90 degree high radiator and between 2 and 15 for a 45
>degree high radiator. (For a 45 degree high radiator, 2 radials resulted
>in a reduction of 5.3 dB and 15 in a reduction of 2.0 dB.) All these are
>from Fig. 30 of the paper.
>
>Some of the broadcasting professionals can correct me if I'm wrong, but
>I believe that a dB or two represents a noticeable (and costly)
>reduction in coverage area. It's also important for a broadcast station
>to maintain its coverage over seasonal and longer term changes in ground
>conductivity, hence the admitted overkill. But amateurs have different
>goals and requirements than broadcasters.
>
>Roy Lewallen, W7EL
>
>Reg Edwards wrote:
>>
>> Mark Keith wrote -
>> > You will notice the BC stations in
>> > this area still use 120 radials, good ground or not.
>> ======================
>> I wonder why.
>>
>> Serious questions :-

>>
>> By how many dB would signal strength decrease if the number
>> of radials was reduced to 60 ?
>> ----
>> Or if the number of radials was reduced to the point where
>> signal strength fell by 3 dB, how many radials would
>> remain ?
>> ----
>> Estimates will suffice.
>> ----
>> Reg.

4638. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 18:43:13 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <9207c1$c6j$1@news.hawaii.edu>
Source record: 174137
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Delbert McCord <dmccord@usol.com> wrote:
>
>The antenna is in my pole barn awating the weather and time that will
>allow me to play with it some more.

Don't let it keep you off the air. String a wire antenna and get
back on.

KH6O

4639. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 18:56:42 UTC
From: rwclark@seanet.com
Message-ID: <3a4b9cb9.324235536@news.seanet.com>
Source record: 174136

On Fri, 22 Dec 2000 09:12:51 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:

>Fractenna <fractenna@aol.com> wrote:
>> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
>> when he left Europe.
>
> <blathering nonsense deleted>
>
>You desperately need professional help in the following areas:
>
>Reading and comprehension
>20th century history
>politial science
>social interaction
>self esteem and the need for attention
>
>Jim Pennino

Hi Jim,

Let's look at the record (in response to a posting of mine):
>I was very fortunate to get out, literally
>they missed me by hours, got on the plane to Paris. Other's were not so
>fortunate. They still sentenced me to 5 years, but by then I was calling CQ
>contest as VE3BMV.
has been rendered into
>> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
>> when he left Europe.
as an obvious manipulation of the statement above. As there is no
other source of information than Yuri, these extraneous "facts" are an
invention. Let's consider on the face of it that the original
statement, although not specific, does include enough circumstantial
evidence to reveal that to have been operating as a Canadian ham
suggests that a license must've been obtained and in a timely manner
(how fast did the Canadian bureaucracies grant it?) FOLLOWING the
described event.

When my Dad served in Korea, he was a medic at a Korean POW camp
called Koje-Do. This place was so dangerous that the communist
internees managed to capture the camp commander and hold him hostage.
That is, until General "Bull" Boatner took over and cracked down. My
Dad's duties were inside that compound - unarmed - attending to the
sick and wounded. Several times, during riots he had to scale the
first perimeter fence (the guards would not shoot at any of his

pursuers until they followed him over that first fence).

The pressure in that camp was due to communist insurgents that volunteered (to their bosses) to be captured and interred in Koje-Do so they could serve as party leaders to the prisoners. They managed the riots and escape attempts and made sure that any escapee had a story to take back.

One evening my Dad discovered he was the subject of one such story when listening to Radio Peking announce his name being added to the list of War Criminals. As Dad was one of the few who was known by name within the compound (by those he was tending to), he became an automatic target to satisfy the commissar's quota of propaganda goals.

It is a shame that so many Americans are brain dead to the methods and practices of the commies that they support their agenda in the name of justice. I wouldn't doubt that these were the same sensitive souls and patriots that spit on me in uniform during 'Nam. The gulf that separates their ideals from their actions is immense.

73's
Richard Clark, KB7QHC

4640. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:01:49 UTC
From: rwclark@seanet.com
Message-ID: <3a4ca440.326162767@news.seanet.com>
Source record: 174138

On Fri, 22 Dec 2000 12:32:15 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Jerry Flanders wrote:
>>
>> If I understand this correctly, they thought their data shows that a
>> 1/4 wl vertical with only two 0.4 wl radials is only 3db down from one
>> with 113 radials of the same length over (presumably) typical ground
>> at 3 MHz.
>>
>> Makes me wonder why anyone would ever go beyond 4-8 in an amateur
>> installation.
>>
>> What change has been observed by hams who have taken measurements as
>> they added radials? I think I remember reading reports of how the
>> performance changed, but I don't remember the results.
>
>I have a 1/4WL 40m vertical with 8 radials. I have never heard a
>signal on the vertical that is stronger than the same signal is
>on my one wavelength 40m dipole at 40ft. I keep trying to find
>that stronger signal on the vertical but so far it has eluded me.

Hi Cecil,

That may be so, but it doesn't respond to the question until you add
more radials and report the presence/absence of change. The question
directly above is searching for the quality of change or improvement
if you were to add more. The probable response would be no change or
a barely perceptible change (and this is the reason why he doesn't
remember the results - they weren't meaningful).

73's
Richard Clark, KB7QHC

4641. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:07:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A43A684.81BC65CA@IEEE.org>
Source record: 174139

Richard Clark wrote:
> That may be so, but it doesn't respond to the question until you add
> more radials and report the presence/absence of change. The question
> directly above is searching for the quality of change or improvement
> if you were to add more. The probable response would be no change or
> a barely perceptible change (and this is the reason why he doesn't
> remember the results - they weren't meaningful).

I suspect that if I doubled the number of radials from 8 to 16, my
vertical would outperform my one-WL dipole under certain conditions
but would it be worth the effort?
--
http://www.mindspring.com/~w6rca

4642. Freedom fighters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:27:28 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <jb974tc0mnu1b7q7ski34l94ldkelrv7on@4ax.com>
Source record: 174140

On 22 Dec 2000 00:57:36 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>>Richard brings back memories. In 1968, the time Richard talks about,
>>when Russian tanks entered the streets of Praha, Czech hams initiated and
>>relayed CW news messages on the ham bands. Still must have somewhere this
>>hand copied messages.
>>73,
>>Jan on4caf
>>
>>
>>
>
>One of them was my dear friend OK1ZQ, Vasek, who managed to transmit form the
>attic of the ministry of interior, building that Russians took first. He kept
>QSO with UN rep. minister Hajek in NYC for about 3 days, without food,
>barricaded on the top of the building. He suffered greatly afterwards.
>Prosecuted, stripped of license, thrown from lousy job to lousier. He was
>holder of world record in CQ WW CW on 40m, with windom and 200W. Great CW op.
>Hams in Prague used trolley wires for antenna, Russians were going nuts, trying
>to triangulate the signals, they were everywhere!
>
>Yuri, oK3BU

Some one should write a book about those events, if it hasn't been
written already.

Interesting that Cohen is for the Dark Side. But then he's an...
academician?

4643. Cohen's Hanukka Tale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:27:28 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <hu974tchvbdr6dvnsjlsk4rdj9rg10c6tk@4ax.com>
Source record: 174141

On Fri, 22 Dec 2000 08:44:08 -0600, Mark Keith <nm5k@wt.net> wrote:

>Fractenna wrote:

>> Frankly it appears to me that Yuri has a problem with authority--whether it be
>> an authority on a subject or one which holds society together.
>
>Yea, kinda like people did with Hitler , huh? MK

It follows from Cohen's arguments.

The communist regime in Czechoslovakia held that society together.

The nazis held the Reich together. The Jews and other "victims" of the
nazis had trouble with authority, so they were punished.

Is that right? The irony of the timing of Cohen's remarks is uncanny.

Those Macabees, why they just had a problem with Roman authority...and
their oil supply.

4644. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:30:40 UTC
From: richardharrison@webtv.net
Message-ID: <19935-3A43ABE0-87@storefull-111.iap.bryant.webtv.net>
Source record: 174142

Roy Lewallen wrote:
"It`s also important for a broadcast station to maintain its coverage over seasonal and longer term changes in ground conductivity, hence the admitted overkill."

True, and that should be expanded to include short-term changes in conductivity. For example, a station by the sea might have its conductivity rise and fall with the tides. Or, a station in the desert might have its conductivity quickly rise after a sudden downpour were it not for "overkill" ground systems which made conductivity under the antenna good, come what may.

There is a regulatory problem, too. You don`t need 120 radials if they are always submerged under the sea. But, in the desert, more than 120 radials might be worth the cost.

The FCC allows variances from the rules, but the proof that performance is up to requirements is a burden upon the applicant.

The rules are reasonable because regulation must be in a sense a "one size fits all", except for the specials, operation. If every case was a special, regulation would be too costly. We already know what happens with no regulation. We attempt to get by with the least regulation possible, while providing enough control to avoid chaos.

Best regards, Richard Harrison, KB5WZI

4645. mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 19:54:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A43B17C.78066705@IEEE.org>
Source record: 174143
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
got from Radio Shack. My favorite AM station is on 1620. This
darned AM receiver only goes up to 1610. Anybody know of any
sources of mods for AM/FM receivers?
--
http://www.mindspring.com/~w6rca

4646. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 20:03:56 UTC
From: tom_bruhns@agilent.com
Message-ID: <920c38$p21$1@nnrp1.deja.com>
Source record: 174144

In article <3a435847.9062720@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> ... Look at the design.
Indeed! :-) I see we are in perfect agreement then.

Cheers, and Merry Christmas
Tom

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

4647. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 20:27:16 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.10012222025560.13707-100000@exp.bde-arc.ampr.org>
Source record: 174145
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Fri, 22 Dec 2000, Cecil wrote:
> I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
> got from Radio Shack. My favorite AM station is on 1620. This
> darned AM receiver only goes up to 1610. Anybody know of any
> sources of mods for AM/FM receivers?

Try asking on "rec.radio.amateur.equipment." That's where modification questions belong.

I don't have an answer for you. Most of the old equipment simply wasn't designed to go into the 1620-1710 range that was recently added to the AM broadcast band in the U.S.

4648. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 20:42:08 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <920eav$qv1$1@nnrp1.deja.com>
Source record: 174147

In article <20001222113147.21269.00005633@ng-co1.aol.com>,
fractenna@aol.com (Fractenna) released a brain fart when he wrote:
> Yuri, K3BU has made the assertion

[[nothing of consequence snipped]]

> have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.
>

For the most part I lurk on this NG, reading the traffic and not saying
much. From time to time, though, the "dialogue" reminds me of the odor
and the mess when Grandpa fell through the outhouse floor.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com
http://www.deja.com/

4649. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 20:42:19 UTC
From: James Knott <the.lights.are.on.but.no.one.is@home.com>
Message-ID: <3A43BCAB.C599858C@home.com>
Source record: 174146
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

Studies have shown that studies cause cancer. ;-)

Steve Punter wrote:
>
> >My Jabra will ensure sufficient distance in the meantime.
>
> Unless, of course, you happen to believe those studies out of the UK that
> claim that earbuds cause MORE radiation to reach your soft tissues that just
> holding a phone to your head.
>
> Now I think that's hogwash, but as I'm sure you would be quick to remind me,
> I can't PROVE THAT, and hey, better safe than sorry right? Time to throw out
> the Jabra.
> --
> Steve Punter
> http://www.arcx.com/sites

--
Replies sent via e-mail to this address will be promptly
ignored.
To reply, replace everything to the left of "@" with
"james.knott".

4650. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 20:50:32 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <$Y+fLBAY67Q6Ewnm@g3ohx.demon.co.uk>
Source record: 174153
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <Pine.LNX.4.10.10012222025560.13707-100000@exp.bde-arc.ampr.org>, D. Stussy <kd6lvw@bde-arc.ampr.org> writes
>On Fri, 22 Dec 2000, Cecil wrote:
>> I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
>> got from Radio Shack. My favorite AM station is on 1620. This
>> darned AM receiver only goes up to 1610. Anybody know of any
>> sources of mods for AM/FM receivers?
>
>Try asking on "rec.radio.amateur.equipment." That's where modification
>questions belong.
>
>I don't have an answer for you. Most of the old equipment simply wasn't
>designed to go into the 1620-1710 range that was recently added to the AM
>broadcast band in the U.S.
>

If it has a synthesized local oscillator - can't say.
If it has a good old-fashioned free-running circuit - probably pretty easy. Over 30 years ago, I modified a radio to cover 160m (goes up to 2MHz). Still have it!

If it IS a free-running circuit, drop me a personal e-mail, and I'll give you the info.

Ian.

4651. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 21:02:09 UTC
From: "Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A43C151.13EC@rpi.edu>
Source record: 174149

Jim Rodenkirch wrote:
>
> Mark's comment, "Or better yet, make it yourself. Thats what I
> do. They want too much cashflow for the common vertical antennas on the
> market" hits the nail on the head. I second the suggestions that one, "roll
> his own." I've put up a home brew system that works from 40 down to 10 by
> encorporating a coil, in series with the transmission line input, and a
> vacuum capacitor, in parallel with the transmission line and ground. The
> radiating element is 28 feet of conduit, mounted at ground level. The 20
> radials vary in length from 60 feet to 20.
>
> I maintain less than 1.5:1 VSWR across the bands and have 207 DXCC confirmed
> in three years of operating the system. I treat it as a system and do all
> "tuning" at the antenna - no tuner is going to darken the door of my shack,
> by golly.
>
> Total cost: $35 for the capacitor, probably $20 in copper wire for the
> radials and the coil (I rolled my own), $10 for the conduit and whatever 50
> feet of coax cost me 6 or 7 years ago...not a bad investment AND I dont'
> have to call some manufacturer when I can't tune up his $300 vertical on all
> bands.
>
> Try something like that...it's fun and informative AND
> inexpensive...regards, Jim R. K9JWV

Jim,

How to you tune the antenna? Do you have a motor on the vacuum cap, or
do you have some preset positions for each band?

Curt Breneman
RPI Chemistry
KC2EBP

4652. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 21:02:55 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <3kP06.24803$A06.902733@news1.frmt1.sfba.home.com>
Source record: 174148

On 19-Dec-2000, Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Is that band above or below the band they are designed for? Seems a
> 30m Hamstick and an autotuner should work reasonably well on 40m.

We didn't try that combo. It might work. The helical wound whips seem to act like a choke away from resonance.

We tried a couple of combinations, and were expecting the 40 meter model to be useable with a tuner on 80-20 at least. Was not effective at all. I would expect a higher Q antenna like a 40M bug-catcher to work fairly well on 80 with a good end-fed autotuner, does anyone do that?

> > Here is another idea. Change the top section of the screwdriver to a
> > tube of wire screen two inches in diameter.
>
> A horizontal top hat is even better to lower the height of the
> antenna.

The tube of screen is about as effective as a pretty big top-hat, and is easy to construct. I modelled it but haven't tried building it. The air resistance of either top-hat or wire tube may be an issue on top of the screwdriver coil, especially when cranked out to 75m.

-- Alan WB6ZQZ

4653. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 21:06:17 UTC
From: fractenna@aol.com
Message-ID: <20001222160617.12028.00003115@ng-mn1.aol.com>
Source record: 174150

>Fractenna <fractenna@aol.com> wrote:
>> Yuri, K3BU has made the assertion that he was escaping a 5year prison
>sentence
>> when he left Europe.
>
> <blathering nonsense deleted>
>
>You desperately need professional help in the following areas:
>
>Reading and comprehension
>20th century history
>politial science
>social interaction
>self esteem and the need for attention
>
>Jim Pennino

Not so.

Yuri has asserted that he was to be JAILED for 5 years. Notice he never said why; it is only crass assumptions and speculations that ascribe this to 'freedom fighters'.He never, ever, said this.

I asked a Czaech friend of mine, who escape with his family during the 68 invasion. He knew quite a few hams and his father was an engineer then. What he said was very curious--.

"This Yuri fellow has a Russian name. Did he defect?"

I also asked a Russian co-worker. He said:

"Yes Chip. He is Russian name. Ask where he came."

So, Yuri, again we wonder: what is it exactly you were arrested for and sentenced for? Who did the sentencing? What is your status in the US and Canada?

What passport do you travel under?

73
Chip N1IR

4654. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 21:06:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A43C24A.145C83F2@IEEE.org>
Source record: 174151

Alan Biocca wrote:
> The air
> resistance of either top-hat or wire tube may be an issue on top of
> the screwdriver coil, especially when cranked out to 75m.

Not at all. Take a look at:
http://people.delphi.com/cecilmoore/mobnow.htm
Not much horizontal air resistance there. Works like a charm.
--
http://www.mindspring.com/~w6rca

4655. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 21:42:20 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A43CABC.36D2B0B8@dvol.com>
Source record: 174152
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil wrote:

> I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
> got from Radio Shack. My favorite AM station is on 1620. This
> darned AM receiver only goes up to 1610. Anybody know of any
> sources of mods for AM/FM receivers?

>
. . . Ya can't diddle the oscillator coil slug??
>
Heh.
>
>--

> http://www.mindspring.com/~w6rca

4656. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 22:05:44 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o7j029.ed7.ln@mail.specsol.com>
Source record: 174155

Fractenna <fractenna@aol.com> sniveled once more:
> Not so.

> Yuri has asserted that he was to be JAILED for 5 years. Notice he never said
> why; it is only crass assumptions and speculations that ascribe this to
> 'freedom fighters'.He never, ever, said this.

He said he was running radios. That was enough for the Soviets. If you
knew anything of history, you would know this.

True, Yuri has never called himself a "freedom fighter". Unlike you, some
people don't have to been continually calling attention to how wonderful
they are.

> I asked a Czaech friend of mine, who escape with his family during the 68
> invasion. He knew quite a few hams and his father was an engineer then. What
> he said was very curious--.

> "This Yuri fellow has a Russian name. Did he defect?"

> I also asked a Russian co-worker. He said:

> "Yes Chip. He is Russian name. Ask where he came."

I used to work with a guy by the name of Manuel. He was of Korean ancestry
and American born. So your point with the name Yuri being of Russian
extraction would be exactly what besides you being a clueless idiot?

> So, Yuri, again we wonder: what is it exactly you were arrested for and
> sentenced for? Who did the sentencing? What is your status in the US and
> Canada?

He never said he was ARRESTED, you brainless idiot.

> What passport do you travel under?

What business is that of yours?

> 73
> Chip N1IR

You desperately need professional help in the following areas:

Reading and comprehension
20th century history
politial science
social interaction
self esteem and the need for attention

Jim Pennino

4657. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 22:19:40 UTC
From: Kevin Alfred Strom <kevin.strom@innocent.com>
Message-ID: <3A43D37B.3965CC7C@innocent.com>
Source record: 174154

Roy Lewallen wrote:
>
> Probably the best answer to these questions is in the Brown, Lewis, and
> Epstein's 1937 paper. With their (undocumented but probably reasonably
> typical) ground conditions at 3 MHz, reduction from 113 to 60 0.4
> free-space-wavelength radials resulted in a field strength decrease of
> about 0.4 dB for a 90 degree high radiator, and 0.7 dB for a 45 degree
> high radiator. To effect a 3 dB decrease required reducing the number of
> radials to 2 for a 90 degree high radiator and between 2 and 15 for a 45
> degree high radiator. (For a 45 degree high radiator, 2 radials resulted
> in a reduction of 5.3 dB and 15 in a reduction of 2.0 dB.) All these are
> from Fig. 30 of the paper.
[...]

Not having the monograph in front of me, I can't tell if the authors
meant a 3 dB decrease _overall_ or merely 3 dB at ground level via
ground wave.

It is my recollection that verticals with poor ground returns
express most of their inefficiency through reduction in very low
angle radiation, with medium angles relatively less affected.

With all good wishes,

Kevin, WB4AIO.
--

Kevin Alfred Strom.

News, links, and pictures: http://www.kevin-strom.com

4658. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 22:48:51 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <920ll5$em1$1@slb6.atl.mindspring.net>
Source record: 174156

http://members.aol.com/k3bu/

Good grief. Learn to use a search engine.

Tom - N1MM

Fractenna <fractenna@aol.com> wrote in message
news:20001222113147.21269.00005633@ng-co1.aol.com...
> Yuri, K3BU has made the assertion that he was escaping a 5year prison
sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.
>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures.
For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and
me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.
>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may
be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or
integrity.
> That is my impression, and I would be happy to afford him the opportunity
to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.

4659. Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 22:57:39 UTC
From: Hitori Ecchi <NOSPAMhitoriecchi@hotmail.com>
Message-ID: <D%Q06.24199$c32.5494812@typhoon.san.rr.com>
Source record: 174157

If I run an end fed wire, or a dipole to a tree near my house, can the antenna wire touch the tree branches and leaves, or will this damage the transmitter? I am planning on using an FT-600 on the HF bands with not more than 100 Watt power.

Thanks in advance for you thoughts on this issue,
Hitori

4660. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 23:38:20 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A43E5EC.17A9@wt.net>
Source record: 174159

Reg Edwards wrote:
>
> Mark Keith wrote -
> > You will notice the BC stations in
> > this area still use 120 radials, good ground or not.
> ========================
> I wonder why.

As many mentioned, to add a minimum acceptable ground that can be
counted on no matter what the wx or moisture, etc.
>
> Serious questions :-
>
> By how many dB would signal strength decrease if the number
> of radials was reduced to 60 ?

I guess about .4 - .5 db. Almost exactly as Roy quotes from the 1937
paper. I had come to the conclusion .4 db could be had every time you
doubled the radials from tests I had run using eznec. Seems to come
pretty close to the 1937 study.
> ----
> Or if the number of radials was reduced to the point where
> signal strength fell by 3 dB, how many radials would
> remain ?

Zero according to the .4 db per doubling estimating. A quick calculation
shows 2 radials would show .6 dbi. if 120 radials were 3.0 dbi. But this
is just quick quessing...As another quick test, I just punched in a 160
vertical into elnec. With no radials over average soil the gain 1.4 dbi.
With 120 radials, 3.4 dbi. Came out pretty close... MK

--
http://web.wt.net/~nm5k

4661. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 23:39:22 UTC
From: 2w8ji@contesting.com
Message-ID: <3a43e2a5.10623304@news.akorn.net>
Source record: 174158

Hi Jerry,

On Fri, 22 Dec 2000 18:33:04 GMT, jflanders2@home.com (Jerry Flanders) wrote:

>If I understand this correctly, they thought their data shows that a >1/4 wl vertical with only two 0.4 wl radials is only 3db down from one >with 113 radials of the same length over (presumably) typical ground >at 3 MHz.

That may be what people think, but it certainly isnt what most people I know who have tried it both ways "see".

In a test here, two 1/4 wl radials were approaching ten dB down from a vertical with 60 radials laid on the surface of the earth.

WT8Y swore his 160 vertical with two radials was a killer antenna, yet W8NBO with half a ground system (about 20-30 radials in one half of a circle from his shunt-fed tower was stronger here night after night barefoot than WT8Y was with his two radial system.

As a matter of fact, when WT8Y went to a dipole he came closer to NBO (I'm about 600-700 miles from them). One might conclude his low dipole worked better than a vertical, until WT8Y added a bunch of radials to his vertical. He then actually started to beat W8NBO night after night.

No less than a half dozen others have have the same results, so selling me that two radials is only a couple dB down won't work unless you have some conclusive evidence everyone else is wrong.

>Makes me wonder why anyone would ever go beyond 4-8 in an amateur >installation.

I can answer that. Because they want a decent signal.

Why anyone would think the intense fields below and around a sparse elevated system won't couple heavily around the radials with concentarted fields into the lossy earth is beyond my reckoning! Few people would expect a dipole six feet off the ground to not have considerable ground losses, why they think a radial should be different is a mystery.

>What change has been observed by hams who have taken measurements as >they added radials? I think I remember reading reports of how the >performance changed, but I don't remember the results.

I posted my results dozens of times. Someone measured almost the same results at a BC station where an A-B test was made with only a radial change. Many other people have reported the same results. It's old, it's tired, but because a few articles made it in print the myth that a sparse ground system near earth is "better than 120 radials on the ground" will probably never die.

All I can say is I hope ANYONE who goes head-to-head with me in a low band contest or a pileup uses a low dipole or a vertical with less than a dozen or so radials.

I like winning.

73 Tom

4662. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-22 23:51:07 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A43E8EB.7FBD@wt.net>
Source record: 174160

Mark Keith wrote:
With no radials over average soil the gain 1.4 dbi.
> With 120 radials, 3.4 dbi. Came out pretty close...

Ooops, I guess it wasn't too close...2 db instead of three, but would
still leave with zero radials. MK
--
http://web.wt.net/~nm5k

4663. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:07:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <920qe1jdn1@uranium.btinternet.com>
Source record: 174161

Antenna = 1/4-wave vertical at 3 MHz.

Ground conductivity = 5mS.

Ground Permittivity = 13.

Length of radials = 1/4-wave.

Diameter of radials 1/6"

Calculated Results :-

No of Radials dB relative to lossless.
========== ================
120 1.1
60 1.2
8 1.8
4 2.4
2 3.5
1 5.0

Which figures are in the same ball park as B,L & E.

As someone, not an MW broadcaster, asked - what's the point
in having more than 8 radials in average or better than
average ground ?

Reg G4FGQ
======================================
Roy Lewallen wrote ..
> Probably the best answer to these questions is in the
Brown, Lewis, and
> Epstein's 1937 paper. With their (undocumented but
probably reasonably
> typical) ground conditions at 3 MHz, reduction from 113 to
60 0.4
> free-space-wavelength radials resulted in a field strength
decrease of
> about 0.4 dB for a 90 degree high radiator, and 0.7 dB for
a 45 degree
> high radiator. To effect a 3 dB decrease required reducing
the number of
> radials to 2 for a 90 degree high radiator and between 2
and 15 for a 45
> degree high radiator. (For a 45 degree high radiator, 2
radials resulted
> in a reduction of 5.3 dB and 15 in a reduction of 2.0 dB.)

All these are
> from Fig. 30 of the paper.
>
> Some of the broadcasting professionals can correct me if
I'm wrong, but
> I believe that a dB or two represents a noticeable (and
costly)
> reduction in coverage area. It's also important for a
broadcast station
> to maintain its coverage over seasonal and longer term
changes in ground
> conductivity, hence the admitted overkill. But amateurs
have different
> goals and requirements than broadcasters.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > Mark Keith wrote -
> > > You will notice the BC stations in
> > > this area still use 120 radials, good ground or not.
> > ======================
> > I wonder why.
> >
> > Serious questions :-
> >
> > By how many dB would signal strength decrease if the
number
> > of radials was reduced to 60 ?
> > ----
> > Or if the number of radials was reduced to the point
where
> > signal strength fell by 3 dB, how many radials would
> > remain ?
> > ----
> > Estimates will suffice.
> > ----
> > Reg.

4664. Re: Paranoid Bolognia, a prime example of Bullcrap

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:12:35 UTC
From: CBI <CBI@mindspring.com>
Message-ID: <920qjl$695$1@slb2.atl.mindspring.net>
Source record: 174162
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular,misc.kids.health

"James Knott" <the.lights.are.on.but.no.one.is@home.com> wrote in message
news:3A43BCAB.C599858C@home.com...
> Studies have shown that studies cause cancer. ;-)

Actually, it is the researchers that cause cancer in laboratory rats.

--
CBI, MD

4665. Cohen idiocy

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:33:16 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A43F2CC.80907@hiwaay.net>
Source record: 174163

Now that Chip has succeeded in making a complete fool of himself, again,
I wonder what attack he will make next. Maybe we can get him interested
in Chads, recounts, and politics. That requires about as much
inteligence as he has shown on the K3BU thread.

I still wonder what 'hate' did?- Does anyone really know?

Hope this is a fitting end to this current crap from Belmont.

Bill-W4BSG

4666. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:47:40 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A43F62C.E6A774AB@dvol.com>
Source record: 174164

Hitori Ecchi wrote:

> If I run an end fed wire, or a dipole to a tree near my house, can the
> antenna wire touch the tree branches and leaves, or will this damage the
> transmitter? I am planning on using an FT-600 on the HF bands with not more
> than 100 Watt power.
>
> Thanks in advance for you thoughts on this issue,
> Hitori

>
I have a 475 foot long end-fed wire antenna I shot thru seven trees with a bow and it works fine at 100w. The wire is cheap Home Depot #14 THHN *insulated* 600v stranded copper stuff. Feeedpoint impedances vary a bit between wet and dry weather but I've never had it arc over under any conditions. I've worked the world with it with a barefoot TS-940. There was a thread on the topic here a few months ago "Do trees absorb RF?" (tune DeJa). Test work has been done in the field by the military and there are losses to the vegitation as the frequency goes up, but not to any noticeable extent on freqs below 30Mhz.
>
w3rv

4667. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:48:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A43F66F.5CE8@wt.net>
Source record: 174165

Mark Keith wrote:
>
> Mark Keith wrote:
> With no radials over average soil the gain 1.4 dbi.
> > With 120 radials, 3.4 dbi. Came out pretty close...
>
> Ooops, I guess it wasn't too close...2 db instead of three, but would
> still leave with zero radials. MK
> --
> http://web.wt.net/~nm5k

Also, I might add something to this. I think those numbers, while theoretically they should be close, are somewhat misleading to the real world results. If a person were to look at those , they might think ,well thats only 2 db or maybe half an S unit. But in the real world I think the difference will seem much larger. If you work a guy on 160m, 1000 miles away with no radials, and are S 5, if you add 120 radials the difference is going to be much larger than a half S unit in the real world I would think. I bet would be at least a couple of S units. Maybe more. And that would make the estimate look flawed, but I think the outright gain numbers have less to do with it than the improved low angle performance with the better ground. It's the same ole deal as in comparing a dipole with 2.1 dbi gain with a mobile ant with much less. And having the vertical win to a certain place. Gain doesn't mean a thing unless it's at the angle you want it. The "good" radial systems give the angles below 15 degrees a real shot in the arm. 2 dbi can be pretty good if you start at 0 or less. With a 1/4 wave and no radials, anything below appx 15 degrees will be -dbi gain. That point will drop to about 7 degrees with the 120 radials. Seems to me a lot of the dx must use these angles below 15 degrees on the low bands. And giving a 2 db shot to the higher angles won't hurt either. I don't know if any of this makes sense, probably not, but I think just looking at the numbers could mislead on the performance gains of adding 120 radials. Or even just 60 for that matter. MK
--
http://web.wt.net/~nm5k

4668. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 00:56:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <920t6s$3ha$1@slb7.atl.mindspring.net>
Source record: 174166

Hey if you have no other choice, just do it! Doesn't seem to hurt the trees!

I have loaded up and effectively used antennas with the dipole wire elements just flung over tree tops, touching the branches and leaves everywhere and worked the world.

Of course I only loaded it up in dry weather. Didn't think it was advisable in rain or heavy snow.

Didn't notice any problems with the wires laying over the top of dry oak and/or pine trees with 200 Watts fed from an FT-1000 through a balanced tuner connected to ladder line fed to the tree top dipole elements.

Great temporary antenna, and for me... heh, heh... temporary led into a couple of years!

Peter K1PO

"Hitori Ecchi" <NOSPAMhitoriecchi@hotmail.com> wrote in message news:D%Q06.24199$c32.5494812@typhoon.san.rr.com...
> If I run an end fed wire, or a dipole to a tree near my house, can the
> antenna wire touch the tree branches and leaves, or will this damage the
> transmitter? I am planning on using an FT-600 on the HF bands with not more
> than 100 Watt power.
>
> Thanks in advance for you thoughts on this issue,
> Hitori
>
>

4669. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 01:08:51 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <920tvn$3jk$1@slb1.atl.mindspring.net>
Source record: 174167

What???

Did I read correctly?

Nathan assuming that he is a "authority figure"! Heh, heh... Meglomania of the highest order...

Now that's a real joke!

Nathan's continuously fractious and obnoxious behavior lead most to perceive him as partaking of desparate attempts to seek approval and credibility, and not as the confident quiet performance of one for whom that gentle mantle has been quietly condeeded by legions of admirers. Methinks he doth protest too much.

I ask, under what circumstances would Nathan's obnoxious and litigious actions be perceived as those of an "authority figure"? Really!!!

An authority figure, "walks softly and carrys a big stick". Nathan seems to "walk loudly and carry toothpicks".

What???

-Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20001222113147.21269.00005633@ng-co1.aol.com...
> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.
>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures. For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.

>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may
be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or
integrity.
> That is my impression, and I would be happy to afford him the opportunity
to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.

4670. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 01:10:54 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <920u33$7ae$1@iac5.navix.net>
Source record: 174168

You have no respect for yourself, so I guess it is presumptuous of us to expect you to have any for anyone else. I think you will find that Yuri had the same disdain for authority as the Jews in Germany had for Hitler's authority.

You are a self centered pompous, crazy ass, and if you do not understand that, take it to your attorney and have him explain it to you.

"Fractenna" <fractenna@aol.com> wrote in message news:20001222090549.23909.00001397@ng-fe1.aol.com...
> >When you are going to learn the difference between libel and opinion? Or
> >truth for that matter. MK
> >--
> >http://web.wt.net/~nm5k
> >
>
> I know the difference. My attorney is on retainer to educate me, amon other
> things.
>
> It should be a very interesting new year with various new year greetings to a
> select few.
>
> Merry Christmas!
>
> 73
> Chip N1IR

4671. Re: Cohen idiocy

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 01:14:10 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <920u97$7e4$1@iac5.navix.net>
Source record: 174269

The idiot got fired from his job at the University, and in his denial chose to blame the hatred of others as the reason it happened. You must have missed the series of messages from his Phil persona explaining how the world was out to get the most inventive ham to ever walk the planet.

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3A43F2CC.80907@hiwaay.net...
> Now that Chip has succeeded in making a complete fool of himself, again,
> I wonder what attack he will make next. Maybe we can get him interested
> in Chads, recounts, and politics. That requires about as much
> inteligence as he has shown on the K3BU thread.
>
> I still wonder what 'hate' did?- Does anyone really know?
>
> Hope this is a fitting end to this current crap from Belmont.
>
> Bill-W4BSG
>

4672. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 01:21:45 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <920un6$7dn$1@nnrp1.deja.com>
Source record: 174270

My homebrew dipole made from insulated lamp wire sits on the tree
branchs below the apartment. I worked all 50 states and the world with
it. Gets good signal reports too!

In article <D%Q06.24199$c32.5494812@typhoon.san.rr.com>,
"Hitori Ecchi" <NOSPAMhitoriecchi@hotmail.com> wrote:
> If I run an end fed wire, or a dipole to a tree near my house, can the
> antenna wire touch the tree branches and leaves, or will this damage
the
> transmitter? I am planning on using an FT-600 on the HF bands with
not more
> than 100 Watt power.
>
> Thanks in advance for you thoughts on this issue,
> Hitori
>
>

Sent via Deja.com
http://www.deja.com/

4673. Another problem with "authorities".

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 01:49:04 UTC
From: k3bu@aol.com
Message-ID: <20001222204904.20833.00005230@ng-cp1.aol.com>
Source record: 174271

Send NC to fix the problem there.
Maybe he should run for PM office (oh boy) and leave us dumb hams alone!

Read more about it
http://www.thetimes.co.uk/article/0,,3-57921,00.html

It is this kind of "authority" that his kind wants.
America! Bow your heads and say "yes master!"
We want 8 more years of dummycrats, long live comrad Lenin!
Please do not deport me master!!!

OK, I had enough, I am outa here for few more months, see if idiot is still
here poisoning the NG.
Gotta work on Razorticals (TM)

73 Yuri

4674. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 02:04:06 UTC
From: Tekkie <Tekkie*@netcarrier.com>
Message-ID: <MPG.14add2246cde27399897cc@news.netcarrier.com>
Source record: 174272
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

In article <t42jhveqep6n02@corp.supernews.com>, michaelj@networktel.net
says...
> All,
>
> Looking to replace an antenna. Because of several restrictions, I really
> need it to be a through the window mount. I would like to hear from any of
> you who have used any 2 band 2m/70cm antennas and which ones any of you
> would recommend. My previous vehicle used a RS ant that had adequate
> performance but I know there has to be much better antennas on the market.
>
> Thanks
> Mike
> N4DIA
>
>
>
Larson
--

Tekkie
Remove asterisk to reply; it is an anti-spam measure.

4675. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 02:35:01 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <92130l$ad3$1@nnrp1.deja.com>
Source record: 174274
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <3A43B17C.78066705@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
> got from Radio Shack. My favorite AM station is on 1620. This
> darned AM receiver only goes up to 1610. Anybody know of any
> sources of mods for AM/FM receivers?

Cecil, after 10 years of not being able to listen to my favorite
station, I would have found a new favorite station by now. Or a new
radio.

Look for something with Neal Boortz.

Sent via Deja.com
http://www.deja.com/

4676. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 02:48:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9213p4$o68$2@208.206.142.97>
Source record: 174273
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian Kelly wrote:
>
> Cecil wrote:
>
> > I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
> > got from Radio Shack. My favorite AM station is on 1620. This
> > darned AM receiver only goes up to 1610. Anybody know of any
> > sources of mods for AM/FM receivers?
>
> >
> . . . Ya can't diddle the oscillator coil slug??
> >
> Heh.

NAW.... he's a 'lecktrikal injuneer. Needs a technician (NOT a ham radio nocoder, either) to get that done. Most of those injuneers are lost without their slide rule, even if it does have a digital LCD readout. to get that done.

4677. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:07:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A442500.61D2AA4A@IEEE.org>
Source record: 174276
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Ian Jackson wrote:
> If it has a synthesized local oscillator - can't say.

It steps in 10KHz increments so I assume it is synthesized.
--
http://www.mindspring.com/~w6rca

4678. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:10:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4425A7.DFAEC8E9@IEEE.org>
Source record: 174277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian Kelly wrote:
> . . . Ya can't diddle the oscillator coil slug??

It steps in 10KHz digital increments. If I diddle the
oscillator coil, I will be on frequency at 1620 and
off frequency on some of the other stations. I was
hoping I could simply clip a diode.
--
http://www.mindspring.com/~w6rca

4679. Re: Needed: RG-63 coax (Belden 9857)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:13:55 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <3A442683.3EFAD140@qadas.com>
Source record: 174275

Unless the coax needs to be flexible, you can make some 125 ohm coax out of hardware store 1" I.D. copper pipe with an airspaced 1/8" O.D. center conductor. The impedence will be 124.6 ohms by my calculation [138 * LOG (OD/ID)]. You could also use .5" OD and 1/16" ID for 125.1 ohms impedence. The 1/2" would work nicely with Modified PL259 or Type N connectors. Use some center drilled 1/2" plastic "marbles" for center spacing.

Robert W0LMD

Dale Firmin wrote:

> I need a source for a small quantity of RG-63 coax (Belden 9857). This
> is 125 ohm impedance not to be confused with RG-62 which is 93 ohm. I
> only need about 12 feet of it and so far the only sources that I have
> found want to sell me a minimum of 1000 feet at a price around $500.
>
> I am trying to build a helical array interferometer so I cannot use any
> active or passive impedance matching until the signals are mixed since
> they will distort the phase angle unless they are absolutely identical
> (which is nearly impossible). The simplest solution is to use RG-63.
>
> I don't know the normal application of this cable. I have been told
> that it is used in radar. If anyone knows of a retailer willing to sell
> a small amount (hopefully by the foot or at least a small spool) please
> notify me by e-mail at daf02@bellsouth.net (that's a zero-two and not an
> oh-two). A kind donation of at least 4 pieces of scrap at least 3 feet
> long each would also work since I will be cutting it into identical
> lengths of 3 feet each anyway.
>
> Please respond via e-mail since I'm not a regular in this newsgroup and
> may not see the post. I have researched dejanews but have not found a
> similar post in the past.
>
> Dale

4680. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:15:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4426C7.EB58400@IEEE.org>
Source record: 174279
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian wrote:
> Cecil, after 10 years of not being able to listen to my favorite
> station, I would have found a new favorite station by now. Or a new
> radio.

Until a couple of months ago, WTAW in College Station, TX was on
1150 and I received it just fine. They have moved to 1620 very
recently and I can receive it on any number of my radios but not
on my main AM/FM stereo system.

> Look for something with Neal Boortz.

One of my favorites. He's on KLIF in Dallas and KLBJ in Austin.
There's another Libertarian on KLIF named Tom Kamb who is
raising all kinds of hell.
--
http://www.mindspring.com/~w6rca

4681. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:21:45 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <tLV06.5213$G4.222230@newsread2.prod.itd.earthlink.net>
Source record: 174278

Ph.d= Piled higher and Deeper

"Fractenna" <fractenna@aol.com> wrote in message
news:20001222113147.21269.00005633@ng-co1.aol.com...
> Yuri, K3BU has made the assertion that he was escaping a 5year prison
sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.
>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures.
For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and
me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.
>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may
be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or
integrity.
> That is my impression, and I would be happy to afford him the opportunity
to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.
>

4682. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:46:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <921amgflh5@bashir.peak.org>
Source record: 174282

Tom W8JI <2w8ji@contesting.com> wrote:

: You can certainly work DX on a low dipole on the lower bands, but it
: is my experience that a low dipole is rarely close to a vertical with
: a **good** ground. Most others who have compared both a good vertical
: and a low dipole agree.

The problem with low level dipoles is that most of the radiation is at
high angles. This is not conducive to long distance communication, although
it can work very well for short hop work.

--
Bill Nelson (billn@peak.org)

4683. Re: Needed: RG-63 coax (Belden 9857)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 04:53:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A442FC0.EE5A247F@eznec.com>
Source record: 174280

I thought of this solution when I read the posting, but I didn't feel it
was appropriate given the application. The problem would be connecting
to the homebrew cable. It would be difficult to make connections to it
without adding quite an impedance discontinuity. From the description of
his application, it looks like a predictable and constant impedance is
critical to proper operation. I might be wrong about this and, if so,
and if he doesn't need to bend the cable except a small amount, the
homebrew approach would be fine.

Roy Lewallen, W7EL

"Dr. Robert Suding" wrote:
>
> Unless the coax needs to be flexible, you can make some 125 ohm coax out of
> hardware store 1" I.D. copper pipe with an airspaced 1/8" O.D. center
> conductor. The impedence will be 124.6 ohms by my calculation [138 * LOG
> (OD/ID)]. You could also use .5" OD and 1/16" ID for 125.1 ohms impedence.
> The 1/2" would work nicely with Modified PL259 or Type N connectors. Use
> some center drilled 1/2" plastic "marbles" for center spacing.
>
> Robert W0LMD
>
> Dale Firmin wrote:
>
> > I need a source for a small quantity of RG-63 coax (Belden 9857). This
> > is 125 ohm impedance not to be confused with RG-62 which is 93 ohm. I
> > only need about 12 feet of it and so far the only sources that I have
> > found want to sell me a minimum of 1000 feet at a price around $500.
> >
> > I am trying to build a helical array interferometer so I cannot use any
> > active or passive impedance matching until the signals are mixed since
> > they will distort the phase angle unless they are absolutely identical
> > (which is nearly impossible). The simplest solution is to use RG-63.
> >
> > I don't know the normal application of this cable. I have been told
> > that it is used in radar. If anyone knows of a retailer willing to sell
> > a small amount (hopefully by the foot or at least a small spool) please
> > notify me by e-mail at daf02@bellsouth.net (that's a zero-two and not an
> > oh-two). A kind donation of at least 4 pieces of scrap at least 3 feet
> > long each would also work since I will be cutting it into identical
> > lengths of 3 feet each anyway.
> >
> > Please respond via e-mail since I'm not a regular in this newsgroup and
> > may not see the post. I have researched dejanews but have not found a
> > similar post in the past.

> >
> > Dale

4684. Homebrew Portable Vertical-QST Jan 2001

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:05:04 UTC
From: "Terry L. Lohrey" <tllohrey@kih.net>
Message-ID: <3oW06.2587$n5.44935@news6.giganews.com>
Source record: 174281

Greetings to the group.
Any thoughts/comments about the portable vertical described in the Jan 2001 issue of QST? I'm thinking about building for QRP use. Guess it's a knock off of the Alpha Delta Outreach. Author describes use from 10-40 meters with various horizontal top pieces for tuning bands.
As I'm not an antenna "guru" I'd like to hear the groups comments reference this particular antenna (pro and con)

Thanks and 73
Terry
KG4EMM

4685. Re: Homebrew Portable Vertical-QST Jan 2001

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:11:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A443407.4AA9258E@IEEE.org>
Source record: 174284

"Terry L. Lohrey" wrote:
> As I'm not an antenna "guru" I'd like to hear the groups comments reference
> this particular antenna (pro and con)

I haven't read the article yet, just looked at the pictures. IMO,
the spacing between the coil and the top hat should be increased.
--
http://www.mindspring.com/~w6rca

4686. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:20:32 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <gvc84tgfqrb53irk9r5d1dr257n3lk42se@4ax.com>
Source record: 174283

On 22 Dec 2000 14:05:49 GMT, fractenna@aol.com (Fractenna) wrote:

>>When you are going to learn the difference between libel and opinion? Or
>>truth for that matter. MK
>>--
>>http://web.wt.net/~nm5k
>>
>
>I know the difference. My attorney is on retainer to educate me, amon other
>things.

and how much has your attorney received from you so far? sounds like
your just the easy buck and he/she knows it, that's why (if there is
one) has stuck with you this long

>It should be a very interesting new year with various new year greetings to a
>select few.

yeah yeah yeah, you been saying that shit for over three years now,
you just like to hear (see yourself type) yourself talk.
BTW start using both hands when you type, I think your getting too
excited over this shit

>Merry Christmas!

Thank You!

>73
>Chip N1IR

Buzz

4687. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:32:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <921dcn$g8r$4@208.206.142.97>
Source record: 174285

If you'll do a Dejanews search on them you'll find a lot of discussion,
some if positive, some negative.

Dick

Solomon Fernblatt wrote:
>
> FINALLY a positive comment on the B&W! I have used them for years
> both at home and professionally,

4688. Re: RV Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:33:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A443941.2162CB14@IEEE.org>
Source record: 174287

Pete Holden wrote:
> I'm looking for a relatively cheap antenna to work 20m from my 5th wheel.
> I'm expecting to mount the antenna when I'm camped, then take it down for
> travel. Since my roof is rubber, not aluminum, it won't operate as an
> artificial ground (Is that a problem?).

Is it aluminum under the rubber? or fiberglas or plastic? You
can always attach a rod to the bumper and mount the antenna
on top of the rod. A $20 Hamstick works pretty well on 20m.

> Also, never having worked mobile, what do I do for a ground?

The metal chassis is the 'ground'. It is capacitively coupled to
the real ground.
--
http://www.mindspring.com/~w6rca

4689. RV Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:36:28 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <wRW06.65214$x6.30255840@news2.rdc2.tx.home.com>
Source record: 174286

I'm looking for a relatively cheap antenna to work 20m from my 5th wheel. I'm expecting to mount the antenna when I'm camped, then take it down for travel. Since my roof is rubber, not aluminum, it won't operate as an artificial ground (Is that a problem?).

Also, never having worked mobile, what do I do for a ground?

Thanks, Pete KA�TZK

4690. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 05:50:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <921eelmjc0@208.206.142.97>
Source record: 174288

Fractenna wrote:
>
> >
> >THis is low, even for you, Chip. making reference to an escapee from the
> >USSRs actions as having a 'Criminal record' is the type of thing we s
>
> Then let me continue with this.You have taken some delight in turning black
> into white...
>
> Yuri has admitted that he was ARRESTED and about to be put in PRISON for 5
> years until he ESCAPED from Czechoslovakia. Your assumption is that he was some
> sort of freedom fighter. I make no such assumption. I asked him what his arrest
> and prison sentence was for; notice he does not respond.
>
> Frankly it appears to me that Yuri has a problem with authority--whether it be
> an authority on a subject or one which holds society together.
>
> That is why I asked and await said clarification.Again, Yuri admits to escaping
> from a 5 YEAR PRISON SENTENCE.
>
> That's pretty incredible. The question is: for what?

Well, lets see now....there are a number folks of Jewish descent who
escaped from sentences handed down in Gernmany in the middle of the last
century. And, I would imagine you might be aware, many more who did
not. I suppose that is different than Yuri escaping the clutches of the
Soviets some dozen years later. Right. You idiot.

4691. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 06:34:07 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A444758.45D27254@home.com>
Source record: 174289

Hitori Ecchi wrote:

> If I run an end fed wire, or a dipole to a tree near my house, can the
> antenna wire touch the tree branches and leaves, or will this damage the
> transmitter? I am planning on using an FT-600 on the HF bands with not more
> than 100 Watt power.
>
> Thanks in advance for you thoughts on this issue,
> Hitori

An insulator at the tree end would be of value, but I've worked through trees
many times
with no ill effects. They may have been screaming, but I wouldn't have heard it
with my phones on!

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4692. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 06:57:04 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A444C60.D9153E4C@att.net>
Source record: 174290

Only problem I had with an EDZ made from the same wire was that contact
with moving branches in the wind eventually wore through the insulation
and allowed the branch to contact the antenna wire itself. This caused
the SWR to wander around when the wind was blowing, but didn't seem to
interfere much if any with the operation of the antenna.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Brian Kelly wrote:
>
> Hitori Ecchi wrote:
>
> > If I run an end fed wire, or a dipole to a tree near my house, can the
> > antenna wire touch the tree branches and leaves, or will this damage the
> > transmitter? I am planning on using an FT-600 on the HF bands with not more
> > than 100 Watt power.
> >
> > Thanks in advance for you thoughts on this issue,
> > Hitori
>
> >
> I have a 475 foot long end-fed wire antenna I shot thru seven trees with a bow
> and it works fine at 100w. The wire is cheap Home Depot #14 THHN *insulated*
> 600v stranded copper stuff. Feeedpoint impedances vary a bit between wet and dry
> weather but I've never had it arc over under any conditions. I've worked the
> world with it with a barefoot TS-940. There was a thread on the topic here a few
> months ago "Do trees absorb RF?" (tune DeJa). Test work has been done in the
> field by the military and there are losses to the vegitation as the frequency
> goes up, but not to any noticeable extent on freqs below 30Mhz.
> >
> w3rv

4693. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 07:03:13 UTC
From: Aaron Jones <nomail@nomail.com>
Message-ID: <sfj84tcm90pto0k3o94p1d5b3u6hppvdmq@4ax.com>
Source record: 174291
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil <Cecil.A.Moore@IEEE.org> wrote:
>Until a couple of months ago, WTAW in College Station, TX was on
>1150 and I received it just fine. They have moved to 1620 very
>recently and I can receive it on any number of my radios but not
>on my main AM/FM stereo system.

Check out www.wtaw.com. Much of their programming is
apparently available live on the net...

4694. wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 08:07:09 UTC
From: mrhuntnpeckextraletters@home.com
Message-ID: <3a4555c8.900800453@24.2.10.79>
Source record: 174292

I would like to build a simple antenna to pick up am and short wave stations so that I can listen to some of my vintage (1930's) radios.

I was thinking that I could use cablevision wire and outlets inside the house and run it from the top of the roof to one of the trees in the yard about 40 feet away, or to hang it a foot or so above the peak of the roof.

I am in the city. just outside Vancouver . B.C. Canada.

I am wondering if multistrand wire is better, or if single strand wire is enough, and how heavy a guage I should use , and if it needs to be bare wire, or if insulated wire is ok. I understand that a ground wire should be near the antanna just in case it gets struck by lightening, I could use some info on just how the best way to rig this would be. I have plenty of insulators

I am also wondering how much wire is best to use. I could make kind of an L shape by going to a nearby clothsline pole as well. would running it back and fourth to use more wire help, or make it worse?

I have a piece of bronze mesh from part of a paper mill here it is about 2 feet by four feet, and is made with lots of wire, I was also considering using this as well or instead. I have it hooked to my radio in the basement which gets me local stations, but not too much else. can I expect to pick up much more with a better antanna? are there very many short wave stations anyway? I only get a couple now.

any help , or tips would be greatly appreciated .
Phil

4695. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 09:10:12 UTC
From: fractenna@aol.com
Message-ID: <20001223041012.01489.00002007@ng-mb1.aol.com>
Source record: 174293

I asked Yuri why he was sentenced to 5 years of prison--a fact that he publicly stated but did not say why.

I also stated that appears to be compelled to attack people associated with authority, this based purely on his recent attacks on me as an authority on antennas, and extant US politicians, for reasons that make no sense.

That 'authority' issue is an inescapable impression.

As a result of this, Yuri now says he is leaving this NG,(something he claims to have done in the best, but then returns in a matter of days.)

He first did this in 1998 when he made the major transgression--one of many--of referring to me work as "fucktennas". I am appalled and seriously injured by this and other characterizations byYuri-- ESPECIALLY as he has never built, tested, modeled or had anything to do with my work or the independent assessment of it.

The difference this time is one of litigation. Yuri has finally gone over the top. I will not tolerate ANY more of his libel and other claims of injury against me.

If he is a citizen of NJ, as claimed, then he will be served with a cease and desist order in the new year, followed by more serious civil litigation should he not heed the requests stated.

Yuri is correct in that his personal attacks and malicious libel WILL, repeat WILL stop in the new millenium, or the issue of litigation will become a dominant one in the New Year for him.

If he wishes to try to beat me in a contest--a healthy competitive and measurable activity--I would welcome that. However false assertions about my lack of ability; lack of credibility; lack of antenna peformance; and pure, malicious libel just will NOT be acceptable in a public forum in the coming year.

It is up to him whether he can function on a public NG without focusing on me and others in a malicious and personal way.

Cordially,

Nathan Cohen, Ph.D.

4696. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 10:40:53 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <li%06.264$wE3.2047@newsfeed.slurp.net>
Source record: 174294

The itchy rectum blurted, in part:

>
>That 'authority' issue is an inescapable impression.
>

Heheh. Only to our limited mind.

Cordially,

DJW

4697. Re: K3BU Prison Sentence -- correction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 10:42:10 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Wj%06.266$wE3.1569@newsfeed.slurp.net>
Source record: 174295

The itchy rectum blurted, in part:

>
>That 'authority' issue is an inescapable impression.
>

Heheh. Only to your limited mind.

Cordially,

DJW

4698. Re: K3BU Prison Sentence -- addendum to the correction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 10:44:58 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <xm%06.268$wE3.1540@newsfeed.slurp.net>
Source record: 174296

This is FUN. Coffee-inspired euphoria. Not a frackin' thing to do with antennas.

The itchy rectum blurted, in part:

>
>That 'authority' issue is an inescapable impression.
>

Heheh. Only to your limited inescapably limited mind.

Cordially,

DJW

4699. Re: Cohen fool, was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 10:57:50 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Cy%06.270$wE3.1870@newsfeed.slurp.net>
Source record: 174297

The itchy rectum blurted, in part:

>Being a somewhat free spirit, I think I would have enjoyed being in Prague
in
>those years.

Since, I think, you have a limited livelihood at the moment (are those elderly aunts ponying up?), take yourself and your family to be somewhat free-spirit kibbutzim, not in Praha, but somewhere in Israel's disputed territory.

Winning a 10M contest from 4XX amid distractions WOULD make your incessant braying credible.

You'd fit right into local politics, as well.

Cordially,

DJW

4700. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 11:12:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9221eviuc1@neptunium.btinternet.com>
Source record: 174298

Let's consider a 1/4-wave vertical erected above the magic
number of 120 radials to be 100 percent efficient.

The radiation resistance of a 1/4-wave vertical is 37 ohms.

If the input resistance of TWO radial is 37 ohms, when the
1/4-wave vertical has only two radials the efficiency will
fall to 50 percent. Only 3 dB down on 120 radials.

The loss resistance of TWO long radials, shallow buried in
good soil is typically 37 ohms.

QED
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Mark Keith <nm5k@wt.net> wrote in message
news:3A43E5EC.17A9@wt.net...
> Reg Edwards wrote:
> >
> > Mark Keith wrote -
> > > You will notice the BC stations in
> > > this area still use 120 radials, good ground or not.
> > ==========
> > I wonder why.
>
> As many mentioned, to add a minimum acceptable ground that
can be
> counted on no matter what the wx or moisture, etc.
> >
> > Serious questions :-
> >
> > By how many dB would signal strength decrease if the
number
> > of radials was reduced to 60 ?
>
> I guess about .4 - .5 db. Almost exactly as Roy quotes
from the 1937
> paper. I had come to the conclusion .4 db could be had
every time you
> doubled the radials from tests I had run using eznec.
Seems to come

> pretty close to the 1937 study.
> > ----
> > Or if the number of radials was reduced to the point
where
> > signal strength fell by 3 dB, how many radials would
> > remain ?
>
> Zero according to the .4 db per doubling estimating. A
quick calculation
> shows 2 radials would show .6 dbi. if 120 radials were 3.0
dbi. But this
> is just quick quessing...As another quick test, I just
punched in a 160
> vertical into elnec. With no radials over average soil the
gain 1.4 dbi.
> With 120 radials, 3.4 dbi. Came out pretty close... MK
>
> --
> http://web.wt.net/~nm5k

4701. Re: K3BU Prison Sentence -- correction to the addendum to the correction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 11:18:30 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ZR%06.272$wE3.2092@newsfeed.slurp.net>
Source record: 174299

Arright. Coffee's really, really kicked in. Musta been the sojourn in the QC Dep't this week: finish designing it on the loading dock, ship 'em bricks in the first load, build it in the Roadway trailer, and do it right the 4th time. Or the fifth.

The following kicked out on the receiving dock in exchange for the earlier loads of bricks.

The itchy rectum blurted, in part:

>
>That 'authority' issue is an inescapable impression.
>

Heheh. Only to your inescapably limited, easily impressible mind.

Cordially,

DJW

4702. Re: RV Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 11:31:41 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001223063141.10907.00003657@ng-cu1.aol.com>
Source record: 174300

>
>I'm looking for a relatively cheap antenna to work 20m from my 5th wheel.
>I'm expecting to mount the antenna when I'm camped, then take it down for
>travel. Since my roof is rubber, not aluminum, it won't operate as an
>artificial ground (Is that a problem?).
>
>Also, never having worked mobile, what do I do for a ground?

You can use ground radials that are normally coiled up (small spools w/
alligator clips on the wire to connect them.
THen, use a full 1/5 wave radial.You could make it out of aluminum & clip it to
tj=he roof w/ "Mini" electrical conduit clamps.
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

4703. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 11:34:19 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <P4016.274$wE3.1952@newsfeed.slurp.net>
Source record: 174301

BBBBut, Reg:

I don't doubt your say-so, but ...

I've not understood how we know that

>The loss resistance of TWO long radials, shallow buried in
>good soil is typically 37 ohms.

?????????????

Do we know by inference, by measurement, by believing Brown & Krangbang,
(1937), by gosh .... how do we know?

Can we use voltimiters and anemometers to aid in figuring it out?

Merry Christmas and HNY.

73, Dave, K3BHJ

4704. Re: wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 12:52:23 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A44A007.637A@wt.net>
Source record: 174302

mrhuntnpeck wrote:
>
> I would like to build a simple antenna to pick up am and short wave
> stations so that I can listen to some of my vintage (1930's) radios.
>

> any help , or tips would be greatly appreciated .
> Phil

Totally non critical for receiving. Just string up the longest and
highest wire "any type " you can. Indoors, outdoors, no matter. Also
doesn't really have to be too long in most cases to do ok. MK
--
http://web.wt.net/~nm5k

4705. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 13:14:42 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A44A542.2252@wt.net>
Source record: 174303

Hitori Ecchi wrote:
>
> If I run an end fed wire, or a dipole to a tree near my house, can the
> antenna wire touch the tree branches and leaves, or will this damage the
> transmitter? I am planning on using an FT-600 on the HF bands with not more
> than 100 Watt power.
>
> Thanks in advance for you thoughts on this issue,
> Hitori

Almost all my wire antennas are run though trees at the ends. My inv L
is supported from a tree. If it were not for trees, I would be in sorry
shape here. Right now, I have appx 570 feet of wire running though
trees. Hardly ever a problem. Never an "antenna" problem, but have
cooked a few tree branches with high power rf when using bare wire.
Nearly legal limits worth of power to do it though. You will see that at
the ends of dipoles etc. I don't use bare wire anymore. MK
--
http://web.wt.net/~nm5k

4706. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 14:03:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A44B0C2.25BE5167@IEEE.org>
Source record: 174304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Aaron Jones wrote:
> Check out www.wtaw.com. Much of their programming is
> apparently available live on the net...

Thanks, but I receive WTAW just fine on four other radios.
I just wish that Optimus would tune 1620.
--
http://www.mindspring.com/~w6rca

4707. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 14:20:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A44B4C7.1A7A@wt.net>
Source record: 174305

Alan Biocca wrote:
>
> On 19-Dec-2000, Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
> > Is that band above or below the band they are designed for? Seems a
> > 30m Hamstick and an autotuner should work reasonably well on 40m.
>
> We didn't try that combo. It might work. The helical wound whips
> seem to act like a choke away from resonance.
>
> We tried a couple of combinations, and were expecting the 40 meter
> model to be useable with a tuner on 80-20 at least. Was not effective
> at all. I would expect a higher Q antenna like a 40M bug-catcher to
> work fairly well on 80 with a good end-fed autotuner, does anyone do
> that?

No, would be pretty lousy..Using tuners to "tune" mobile antennas where the loading coil is set for another freq is a bad idea. A 30m stick would work great on 40m if you added a longer stinger to tune to 40. If you want good performance, you HAVE to resonate the antenna. I know that goes against some peoples ideas on needing resonance to get good performance, but I think you will find it true on mobile antennas. The tuner should only be used as an impedance matcher if used at all. If you don't want to get out of the car to change the antenna, I would look into a screwdriver. MK
--
http://web.wt.net/~nm5k

4708. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 14:23:53 UTC
From: k1bqt@aol.com
Message-ID: <20001223092353.24620.00000864@ng-fm1.aol.com>
Source record: 174306

>Nathan assuming that he is a "authority figure"! Heh, heh... Meglomania of the highest order...<

Miloslovic is an authority figure. Every political hack on the evening news is an authority figure. Why can't Chip be one too??? Let's be fair!

Rick K1BQT

4709. Re: Trees and Antenna Wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 14:50:36 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A44BBBC.EAE64732@dvol.com>
Source record: 174307

"George, W5YR" wrote:

> Only problem I had with an EDZ made from the same wire was that contact
> with moving branches in the wind eventually wore through the insulation
> and allowed the branch to contact the antenna wire itself. This caused
> the SWR to wander around when the wind was blowing, but didn't seem to
> interfere much if any with the operation of the antenna.

>
It's a concern. I left a lot of slack between trees in order to hopefully minimize wire sliding & wear. The wire has only been up for about a year and half and no problems so far but I certainly don't expect it to last 30 years like my old tower & beams did. After I put the wire up I ran into the Wireman's ""Silky Toughcoat" series of insulated stranded Copperweld wire. The insulation is amazing, wire strippers bounce off the stuff. When I have to replace the existing antenna I'm gonna use the Toughcoat, should get a lot more years out of it than I will from the THHN.
>
w3rv

4710. Re: *** F_U_C_K___C_H_R_I_S_T_M_A_S *** KmFA7TkSJ0

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 15:11:08 UTC
From: gyoung2209@aol.com
Message-ID: <20001223101108.02503.00005788@ng-cc1.aol.com>
Source record: 174308

do you know the reason for the season

4711. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 15:29:25 UTC
From: 2w8ji@contesting.com
Message-ID: <3a44c429.68363628@news.akorn.net>
Source record: 174309

On Sat, 23 Dec 2000 11:12:38 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Let's consider a 1/4-wave vertical erected above the magic
>number of 120 radials to be 100 percent efficient.
>
>The radiation resistance of a 1/4-wave vertical is 37 ohms.
>
>If the input resistance of TWO radial is 37 ohms, when the
>1/4-wave vertical has only two radials the efficiency will
>fall to 50 percent. Only 3 dB down on 120 radials.

Amazing how it works out differently in actual measurements, at least
over my soil .

73 Tom

4712. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 15:58:44 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <9li94t0ruuute4ogj4ef3eq83qfeubc0dm@4ax.com>
Source record: 174310

On Fri, 22 Dec 2000 13:21:23 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>The main thing that causes a cold joint (assuming it was heated enough
>and clean) is moving the joint while it is cooling, not how fast you
>remove heat after the solder flows. This isn't concrete!

Another factor in making good joints is using 63/37 alloy solder, NOT 60/40 or something else. 63/37 solder is eutectic, which means it has the same melting and freezing point. Other alloys, believe it or not, melt and freeze at DIFFERENT temperatures and this can lead to fractured joints because they have a longer time period in which they could be disturbed. 63/37 goes from liquid to solid almost instantaneously (close enough for our purposes).

73, Bill W7TI

4713. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:03:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <922jn4$l18$1@neptunium.btinternet.com>
Source record: 174313

> Details are in any ARRL handbook.
==========
Details may very well be be in any ARRL handbook.

But the question arises - how much confidence can be placed in such publications ? The managers, the directors, the shareholders, the staff, are far more interested in making a profit, feeding the wife and kids, than in disseminating the true facts of life. Everybody has a price.

Don't believe without very serious criticism the old wives' tales, and waffle, bafflegab, etc., which helps to fill in the spaces between the antenna and black-box equipent adverts.

Reg, G4FGQ

4714. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:05:57 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <F3416.27572$A06.985883@news1.frmt1.sfba.home.com>
Source record: 174311

Cecil,

Your top-hat is impressive. Does it stay perfectly horizontal at freeway speeds? How much equivalent-radiator does it represent?

-- Alan WB6ZQZ

On 22-Dec-2000, Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Alan Biocca wrote:
> > The air
> > resistance of either top-hat or wire tube may be an issue on top of
> > the screwdriver coil, especially when cranked out to 75m.
>
> Not at all. Take a look at:
> http://people.delphi.com/cecilmoore/mobnow.htm
> Not much horizontal air resistance there. Works like a charm.
> --
> http://www.mindspring.com/~w6rca

4715. Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:07:10 UTC
From: cathexis@erols.com
Message-ID: <3a44c719.215961597@news.erols.com>
Source record: 174312

Greetings,

I'm aware of a similar thread that's current on the ng now
and I also know an earlier thread has been referenced as well, But
would like a couple of questions answered here please.

1. If a vertical is supported by a sizable tree, will the tree create a
substantial "null" in the radiation pattern? Assume the antenna
gets only physical support from the tree but the radiating element
is "shielded" from contact.

2. If the tree would create a null or "dead-zone" for your radiated RF,
what would be the effect of splitting the transmitted RF signal into
an array of 2 or 3 verts., each supported by a separate tree so as to
negate the effect of dead-zones? In other words, if placing a single
vert. on the so. side of tree #1 "deadened" northward radiation
could you get around this by splitting the signal to a 2nd vert. placed
on the north side of another tree?

3. If it was desirable to use an array of 2 or 3 verts. , can they share

radials? If not, can those separate radials touch or overlay one another?
Assume the radials are just buried an inch or two in the soil at most.

Final Question: I'm looking for some kind of graph that would show how
much PEP a given #guage wire or other radiating element could support.
For instance, if 14 AWG stranded will safely carry 100W PEP, what would
I need for 500W ? 1 kW ? etc. You've probably guessed by now that I'm
considering a homebrew vertical(s) and want to plan ahead for maybe getting
a linear sometime in the future.

Many THX. and Merry X-mas,

Andrew/ KG4JBM

I hope this makes sense. If not, my apologies and say so and I'll try to
reword it to make it more sensible.

4716. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:26:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <922jn6$l18$2@neptunium.btinternet.com>
Source record: 174314

The most satisfying way of finding the input resistance of a
shallow-buried ground radial is to measure it.

So-called, hand held, antenna analysers are sufficiently
accurate and available enough to do the job.

I am fortunate enough to be able to calculate it.

Unfortunately there are far too many old-wives, wafflers and
baffle-gabbers who waste people's time on this newsgroup by
disseminating ill-informed nonsense.

The problem for genuine students, radio novices, etc., is
how to distinguish between the overwheming masses of facts
and fiction with which they are inundated.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
David J. Windisch <davidw@copper.net> wrote in message
news:P4016.274$wE3.1952@newsfeed.slurp.net...
> BBBBut, Reg:
>
> I don't doubt your say-so, but ...
>
> I've not understood how we know that
>
> >The loss resistance of TWO long radials, shallow buried
in
> >good soil is typically 37 ohms.
>
> ?????????????
>
> Do we know by inference, by measurement, by believing
Brown & Krangbang,
> (1937), by gosh .... how do we know?
>
> Can we use voltimiters and anemometers to aid in figuring
it out?
>
> Merry Christmas and HNY.
>
> 73, Dave, K3BHJ

>
>
>

4717. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:30:36 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <922jvj$3c8$1@iac5.navix.net>
Source record: 174315
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

You might check with Rec.radio.CB, these folks know how to add all kinds of new frequencies. Perhaps one of them can tell you what you need to jumper on the radio to cover frequencies out of the old band.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A4425A7.DFAEC8E9@IEEE.org...
> Brian Kelly wrote:
> > . . . Ya can't diddle the oscillator coil slug??
>
> It steps in 10KHz digital increments. If I diddle the
> oscillator coil, I will be on frequency at 1620 and
> off frequency on some of the other stations. I was
> hoping I could simply clip a diode.
> --
> http://www.mindspring.com/~w6rca

4718. Radio Shack coax any good??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:37:13 UTC
From: k7jy@aol.com
Message-ID: <20001223113713.03999.00005425@ng-ct1.aol.com>
Source record: 174316

Radio Shack used to sell RG/8 coax a few years ago and I'm wondering if anyone knows if it's any good. Does anyone know the db loss figures for it? The shield on the stuff looks a bit thin compared to some of the other brands I've got lying around. Any comments would be appreciated. Thanks and 73, de John, K7JY.

4719. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:43:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <922kne$ep1$1@plutonium.btinternet.com>
Source record: 174318

Tom, you are like that trio of 1937 experimenters, not one
of whom sufficiently understood what they were investigating
to take the elementary precaution of measuring the
conductivity of the soil in which they laid their 113
radials.

No-one doubts your very extensive practical experience but
come back with some solid, numerical, convincing,
measurement facts, Your waffle might then carry some
weight.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Tom W8JI <2w8ji@contesting.com> wrote in message
news:3a44c429.68363628@news.akorn.net...
> On Sat, 23 Dec 2000 11:12:38 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Let's consider a 1/4-wave vertical erected above the
magic
> >number of 120 radials to be 100 percent efficient.
> >
> >The radiation resistance of a 1/4-wave vertical is 37
ohms.
> >
> >If the input resistance of TWO radial is 37 ohms, when
the
> >1/4-wave vertical has only two radials the efficiency
will
> >fall to 50 percent. Only 3 dB down on 120 radials.
>
> Amazing how it works out differently in actual
measurements, at least
> over my soil .
>
> 73 Tom

4720. power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:45:02 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <t49ligtm5slga1@corp.supernews.com>
Source record: 174317

What is the approximate Z of common 110v power cord? Years ago, hams used to run it as a twinlead type feedline for dipoles (it was called zipcord then), and it seems like it was around 75 ohms, or so. Is the modern stuff, with better insulation, still a good dipole feedline in some applications?

4721. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 16:52:54 UTC
From: jflanders2@home.com
Message-ID: <3a44d769.515269632@news>
Source record: 174069

I think "eutectic" only means that this particular ratio (63/37) of
the components of this alloy has the lowest melting point of all
possible ratios of these components. In other words, 63/37 is the
lowest melting temperature solder made of these two metals.

Jerry W4UK

On Sat, 23 Dec 2000 07:58:44 -0800, Bill Turner <w7ti@jps.net> wrote:

>Another factor in making good joints is using 63/37 alloy solder, NOT 60/40 or
>something else. 63/37 solder is eutectic, which means it has the same melting
>and freezing point. Other alloys, believe it or not, melt and freeze at
>DIFFERENT temperatures and this can lead to fractured joints because they have a
>longer time period in which they could be disturbed. 63/37 goes from liquid to
>solid almost instantaneously (close enough for our purposes).
>
>73, Bill W7TI

4722. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:01:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A44DA61.29A9029B@dvol.com>
Source record: 174070
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick Carroll wrote:

> > . . . Ya can't diddle the oscillator coil slug??
> > >
> > Heh.
>
> NAW.... he's a 'lecktrikal injuneer. Needs a technician (NOT a ham radio
> nocoder, either) to get that done. Most of those injuneers are lost
> without their slide rule, even if it does have a digital LCD readout.
> to get that done.

>
Some EE designed he radio he can't diddle, they do it to themselves.
>
rv

4723. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:10:40 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A44DC88.905BA130@home.com>
Source record: 174071

rb wrote:

> What is the approximate Z of common 110v power cord? Years ago, hams used
> to run it as a twinlead type feedline for dipoles (it was called zipcord
> then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> with better insulation, still a good dipole feedline in some applications?

The ARRL Antenna Book (15th Edition) contains an article on zip-cord antennas.
The impedance in some tests ran around 110 ohms, the velocity factor about
69.5%.
It could be used, however the bad news is the line loss -- about 4 db per 100 ft
at 14 mhz!

If you want to feed a dipole, or any other antenna cheaply, 300 ohm twinlead
works very well.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4724. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:12:29 UTC
From: N5NUG <n5nug@ix.netcom.com>
Message-ID: <3A44DCFD.EC45D1FF@ix.netcom.com>
Source record: 174072

I used zip cord and twisted pair lamp cord as a novice many years ago at age 13 when I couldn't afford coax cable. It is very lossy stuff but cheap!! 73, Ed - N5NUG

4725. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:14:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A44DD91.65BBBF8@IEEE.org>
Source record: 174073

Reg Edwards wrote:
> Details may very well be be in any ARRL handbook.
>
> But the question arises - how much confidence can be placed
> in such publications ? The managers, the directors, the
> shareholders, the staff, are far more interested in making a
> profit, feeding the wife and kids, than in disseminating the
> true facts of life.

Given that the "true facts of life" may not be known in our
lifetimes, there doesn't seem to be any conflict between
making a profit and disseminating good advice. In fact,
disseminating good advice probably increases profits. Is
there something in particular in The ARRL Handbook that
you object to?
--
http://www.mindspring.com/~w6rca

4726. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:18:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A44DE67.7AF26EEB@IEEE.org>
Source record: 174074

Alan Biocca wrote:
> Your top-hat is impressive. Does it stay perfectly horizontal at freeway
> speeds? How much equivalent-radiator does it represent?

It stays close enough to "perfectly horizontal". The two foot
shaft between the top of the screwdriver and the top hat is
very rigid. I'll measure the "equivalent-radiator" length and
get back to you.
--
http://www.mindspring.com/~w6rca

4727. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:23:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A44DF91.5F9DA71D@IEEE.org>
Source record: 174075
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian Kelly wrote:
> Some EE designed he radio he can't diddle, they do it to themselves.

If I had a schematic, I could probably diddle it. I haven't
even opened it up yet.
--
http://www.mindspring.com/~w6rca

4728. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:31:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A44E187.1DEA490E@IEEE.org>
Source record: 174077

rb wrote:
> What is the approximate Z of common 110v power cord? Years ago, hams used
> to run it as a twinlead type feedline for dipoles (it was called zipcord
> then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> with better insulation, still a good dipole feedline in some applications?

The dielectric is lossier at RF than the dielectric in coax and the
ohmic losses are high because Z0 is low. It's not a good choice for
a transmission line.
--
http://www.mindspring.com/~w6rca

4729. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 17:35:35 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A44E267.9C43AE1D@dvol.com>
Source record: 174076

Set'em up Joe wrote:

> Greetings,
>
> I'm aware of a similar thread that's current on the ng now
> and I also know an earlier thread has been referenced as well, But
> would like a couple of questions answered here please.
>
> 1. If a vertical is supported by a sizable tree, will the tree create a
> substantial "null" in the radiation pattern?

>
I don't know of any published data which indicates that trees have any noticeable
effect on verticals at HF freqs. There have been posts which stated that trees have
a significant effect at vhf/uhf.
>

> Assume the antenna
> gets only physical support from the tree but the radiating element
> is "shielded" from contact.
>
> 2. If the tree would create a null or "dead-zone" for your radiated RF,
> what would be the effect of splitting the transmitted RF signal into
> an array of 2 or 3 verts., each supported by a separate tree so as to
> negate the effect of dead-zones? In other words, if placing a single
> vert. on the so. side of tree #1 "deadened" northward radiation
> could you get around this by splitting the signal to a 2nd vert. placed
> on the north side of another tree?

>
I have a 20m vertical dipole strung thru a maple tree and I've never noticed any
"dead spots" at all. I think you'd be seriously overcomplicating your installation
for no particular benefit.
>

>
>
> 3. If it was desirable to use an array of 2 or 3 verts. , can they share
>
> radials? If not, can those separate radials touch or overlay one another?
> Assume the radials are just buried an inch or two in the soil at most.
>
> Final Question: I'm looking for some kind of graph that would show how
> much PEP a given #guage wire or other radiating element could support.
> For instance, if 14 AWG stranded will safely carry 100W PEP, what would
> I need for 500W ? 1 kW ? etc. You've probably guessed by now that I'm

> considering a homebrew vertical(s) and want to plan ahead for maybe getting
> a linear sometime in the future.

>
No such charts exist because the maximum current in a specific antenna wire depends on the antenna design. Using Ohm's Law and assuming a 20 ohm feedpoint impedance for a quarter wave vertical and 1500 watts of RF the maximum current would be 8.6 amps and would be located at the feedpoint. Any #14 wire hanging in free air or in trees will be loafing with 8.6 amps being pushed thru it. Use #14 for HF wire antennas and forget the "engineering".
>

>
> Many THX. and Merry X-mas,
>
> Andrew/ KG4JBM

>
w3rv

4730. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:01:40 UTC
From: k1bqt@aol.com
Message-ID: <20001223130140.07659.00007335@ng-fy1.aol.com>
Source record: 174078

In TV news, an Authority Figure is any character a harried behind-deadline reporter can scrape up to go on camera and claim special knowledge. Take the cellphone controversy and cancer, for example:

Cut 1, 1st A-Fig: "I teach Culinary Arts at Berkley, and I say cellphones cook your brains and cause cancer".

Cut 2, Man on Street reacts: "Jeez, I'd better confiscate little Johnny's Erricson right now, before it bakes him alive!"

Cut 3, 2nd A-Fig (to create tension): "I teach Remedial Astrology at BU's Metro Division, and belive me, that first meatball you interviewed is full of stewed pork rinds! Cellphones never hurt anyone--and they may even CURE brain cancer by killing tumor cells!"

Cut 4, Reporter (with a scare the poo out of me and you wrap-up): "Well folks, this issue won't be resolved anytime soon! Meanwhile, many believe a national tragedy is imminent as milions of these tiny flip-top fryolators insidiousy incinerate the intellegence of our youth! Live in Silicon Implant Valley, I'm Phil N. DeBIanc for CBS news".

Anybody wanna be an "authority"? It's easy. Just go....figure!

Rick K1BQT

4731. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:06:24 UTC
From: k1bqt@aol.com
Message-ID: <20001223130624.07659.00007336@ng-fy1.aol.com>
Source record: 174079

>...I have a parrot in the other room. I never rely on his advice, because he just repeats things he doesn't understand. I love my bird, and certainly admire his good qualities, but he is unreliable for technical advice.<

Classic. May I repeat that?

(oops, that wasn't the right thing to say, was it?)

Rick K1BQT

4732. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:11:14 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <922ps9$6gd$1@iac5.navix.net>
Source record: 174080

QST ran an article a number of years ago on using zip cord. As best I remember it was not very good. I will try to find the info, I am pretty sure it was sometime in the 70's and post it.

"rb" <rbigg@pcola.gulf.net> wrote in message news:t49ligtm5slga1@corp.supernews.com...
> What is the approximate Z of common 110v power cord? Years ago, hams used
> to run it as a twinlead type feedline for dipoles (it was called zipcord
> then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> with better insulation, still a good dipole feedline in some applications?
>
>
>
>

4733. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:14:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A44EB7A.FF019136@eznec.com>
Source record: 174081

In recent years, the ARRL Handbook has largely been written by volunteers, many of whom are professionals in the fields they write about. The editors are surely interested in making a living and feeding the family, as most of the rest of us are. But one of the better things about capitalism is that their desire to feed the family tends to enhance, rather than reduce, their efforts. The directors serve without pay and at the pleasure of the members, so it's not clear how they would profit by putting false information in the publications. The ARRL has no shareholders, unless you want to count the members as such. But they pay, rather than profit, regardless of the content of the publications.

The true facts of ARRL life haven't been accurately represented by your posting. Much as it must irritate, there are good and accurate sources of information besides Reg, and all that is not Reg is not bafflegab or old wives tales. In general, the ARRL publications (particularly the Handbook and Antenna Book) are very good, and real bargains for the price.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > Details are in any ARRL handbook.
> ============================
> Details may very well be be in any ARRL handbook.
>
> But the question arises - how much confidence can be placed
> in such publications ? The managers, the directors, the
> shareholders, the staff, are far more interested in making a
> profit, feeding the wife and kids, than in disseminating the
> true facts of life. Everybody has a price.
>
> Don't believe without very serious criticism the old wives'
> tales, and waffle, bafflegab, etc., which helps to fill in
> the spaces between the antenna and black-box equipent
> adverts.
> ----
> Reg, G4FGQ

4734. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:19:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A44ECC7.4397C848@eznec.com>
Source record: 174082

I don't know. The B & W antenna is prized because of its broadbandedness. Using lossy feedline will accomplish the same purpose -- it doesn't really matter whether the resistor is in the feedline or the center of the antenna. B & W users have shown that some folks are glad to trade a few (or a lot) of dB for broader bandwidth. This is just another way to do it.

Roy Lewallen, W7EL

Cecil wrote:
>
> rb wrote:
> > What is the approximate Z of common 110v power cord? Years ago, hams used
> > to run it as a twinlead type feedline for dipoles (it was called zipcord
> > then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> > with better insulation, still a good dipole feedline in some applications?
>
> The dielectric is lossier at RF than the dielectric in coax and the
> ohmic losses are high because Z0 is low. It's not a good choice for
> a transmission line.
> --
> http://www.mindspring.com/~w6rca

4735. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 18:29:32 UTC
From: tom_bruhns@agilent.com
Message-ID: <922qu8flm1@nnrp1.deja.com>
Source record: 174083

In article <3a44d769.515269632@news>,
jflanders2@home.com (Jerry Flanders) wrote:
> I think "eutectic" only means that this particular ratio (63/37) of
> the components of this alloy has the lowest melting point of all
> possible ratios of these components. In other words, 63/37 is the
> lowest melting temperature solder made of these two metals.

It's the composition which is completely melted at that lowest temp.,
but for instance, 60-40 starts to melt at the same temp, with solid and
liquid existing together over a range of temps. Look at a tin-lead
"phase diagram" for further info...you can probably find one on the net!

There's one, for example, at
http://www.umist.ac.uk/MatSci/research/intmic/phase/pbsndiag.htm

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

4736. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 19:00:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <922u1e$24e$1@plutonium.btinternet.com>
Source record: 174085

Cec, there's a difference between making a profit and making
a living.

Profits are invariably made, by definition, at somebody
else's expense.

I have nothing more against ARRL handbooks and publications
than I have against any other similar amateur handbooks and
publications. The USA is only one of several countries which
produce them.

USA versions are not sufficiently reliable to be quoted from
as an authority on the subject of radio engineering. This is
not surprising as they are produced by and for amateurs. As
I've said before the ARRL Handbooks are not Bibles or
Korans. They are not worthy of being worshipped. And
neither are the corresponding RSGB publications except that
they are a little nearer to qualifying.

My main objection to what occurs on this newsgroup is the
manner in which many questions are answered by referring to
the ARRL. Who the heck are they anyway ? If anybody has an
answer to a question then by all means give it. If he
hasn't got an answer then he should keep his mouth shut.

To refer to some other source of information is mostly a
form of bragging or name dropping. "I don't know the answer
but I know somebody who does." A recommendation by an
unqualified recommender is of little value.

Most answers to questions which refer to somewhere else are
a waste of bandwidth. If the questioner had easy access to
the reference material he would not be asking the question
anyway.

I hasten to add that I own no shares in any rival
publications. Please take a pich of salt and carry on as
normal.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Cecil <Cecil.A.Moore@IEEE.org> wrote in message

news:3A44DD91.65BBBF8@IEEE.org...
> Reg Edwards wrote:
> > Details may very well be be in any ARRL handbook.
> >
> > But the question arises - how much confidence can be
placed
> > in such publications ? The managers, the directors, the
> > shareholders, the staff, are far more interested in
making a
> > profit, feeding the wife and kids, than in disseminating
the
> > true facts of life.
>
> Given that the "true facts of life" may not be known in
our
> lifetimes, there doesn't seem to be any conflict between
> making a profit and disseminating good advice. In fact,
> disseminating good advice probably increases profits. Is
> there something in particular in The ARRL Handbook that
> you object to?
> --
> http://www.mindspring.com/~w6rca

4737. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 19:02:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A44F6D4.45A1@wt.net>
Source record: 174084

Reg Edwards wrote:
>
> The most satisfying way of finding the input resistance of a
> shallow-buried ground radial is to measure it.
>
> So-called, hand held, antenna analysers are sufficiently
> accurate and available enough to do the job.

Don't have one.
>
> I am fortunate enough to be able to calculate it.

Unfortunatly, that doesn't do me much good here. I'm a dummy who can barely count. But really, I've never really had a need to measure it. It's not going to help my system to know exactly what the ground or radial input resistance is. I know it still needs to be improved over what it is. So measuring it is kind of a waste of time, unless I'm just curious to know. I'm more bottom line performance oriented. Either it's working well, or it isn't. But, I'll be glad to go out and measure it if you have a fairly easy method to use, not needing any fancy test gear.

>
> Unfortunately there are far too many old-wives, wafflers and
> baffle-gabbers who waste people's time on this newsgroup by
> disseminating ill-informed nonsense.
>
> The problem for genuine students, radio novices, etc., is
> how to distinguish between the overwheming masses of facts
> and fiction with which they are inundated.

Very true. But if what you say is true, that the difference between two radials and 60 or 120 is only appx 3 db, why all the disparaging performance reports? Why would Tom report a 10 db spread between 2 radials and 60? Why would almost all the people that use verticals with small radial systems have lousy results when compared to the larger radial systems? An inquiring mind wants to know...I admitted my past statements were likely baffle gab when I posted them, but to me , they still make the most sense. Why would people see such a large difference in performance if the enhanced low angle performance didn't make the difference? Obviously the difference in outright gain is not all that great. So if thats the case, there must be another factor involved, and to me it would seem to be the enhanced low angle performance, or lowered PBA. Of course, this would apply more to far off DX than close in stuff which is usually the goal in using a vertical in the first place. If you know of a way to make 2 radials act like 60 other than raising to the

1/2 wl height, I sure wish you would fill all of us "dummies" in. I'm all for saving wire. So far two slightly elevated 1/4 wl radials, and a few shorter ones are not working that fantastic here. Does ok, but nothing to write home about. Makes me wonder who is really spreading the old wives tale here. I may not be able to explain what I'm doing, but I can tell what works and what doesn't. The vast majority of small radial system antenna owners give their system a thumbs down against even a fairly low dipole. Something is wrong there, when all the full radial systems, or elevated with the proper number of radials, eat dipoles for lunch at any distance. What are we all doing wrong? I'm open to any suggestions. At appx 15 bucks per 500 ft of wire, I could save some serious money. If I had my way, I'd much prefer no radials at all. MK

--
http://web.wt.net/~nm5k

4738. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 19:22:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <922u1f$24e$2@plutonium.btinternet.com>
Source record: 174086

Roy sez -
> In general, the ARRL publications (particularly the
> Handbook and Antenna Book) are very good, and real
bargains for the
> price.
==========
A sales blurb from a vested interest ? Lacking in
originality ?

By when have you planned to correct your technical and other
errors ?

;o) ;o) ;o)

Reg.

4739. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 19:52:39 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <922vqa$gh0$1@bob.news.rcn.net>
Source record: 174087
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

If it uses real tunable IF transformers, move the IFs ten kHz.

Pete

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A44B0C2.25BE5167@IEEE.org...
> Aaron Jones wrote:
> > Check out www.wtaw.com. Much of their programming is
> > apparently available live on the net...
>
> Thanks, but I receive WTAW just fine on four other radios.
> I just wish that Optimus would tune 1620.
> --
> http://www.mindspring.com/~w6rca

4740. Re: ganged roller inductors for double balanced tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:04:19 UTC
From: k9sqg@aol.com
Message-ID: <20001223150419.00798.00003674@ng-mm1.aol.com>
Source record: 174088

Price is $50 shipped, continental US only.

Merry Christmas and Happy New Year.

73s,

Evan

4741. Re: 6 meter ant. how hi ? ?????

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:08:53 UTC
From: Vincent Mcshane <vince.mcshane@virgin.net>
Message-ID: <qz716.4788$Yy.130949@news2-win.server.ntlworld.com>
Source record: 174089

I owe Bill Turner an apology. I made a mistake and I am now very sorry I
jumped the gun and started getting ratty without getting all the facts

I therefore apologise unreservedly
Sorry Bill
Vince McShane
Bill Turner <w7ti@jps.net> wrote in message
news:816l3t8dqasm01o0rjcp4qi356c1oq5a6q@4ax.com...
> On Fri, 15 Dec 2000 07:08:03 -0600, Mark Keith <nm5k@wt.net> wrote:
>
> >But I string low dipoles up that
> >aren't ten ft off the ground and I'm below grade 80 ft, and still do
> >fine on 80/40. Even the higher hf bands will work ok usually. Ten meters
> >would see a big cut if working local or dx though.
> ____
>
> Similar experience here. When mobiling, 80 and 40 get out equally well
whether
> I'm out in the open or down in a valley. On 20 I begin to notice the
valley
> effect; on 15 and 10 it is quite pronounced. Above that it's almost line
of
> sight.
>
> w7ti

4742. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:27:20 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <9231r4kln1@nnrp1.deja.com>
Source record: 174091
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <3A44DF91.5F9DA71D@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> Brian Kelly wrote:
> > Some EE designed he radio he can't diddle, they do it to themselves.
>
> If I had a schematic, I could probably diddle it. I haven't
> even opened it up yet.

All of that is quite unimportant. What is important is to be able to
diddle a paddle real fast.

Sent via Deja.com
http://www.deja.com/

4743. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:32:03 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A450BC2.7BFCBFEB@oio.net>
Source record: 174090

Andrew,
1. There would be ~some~ attenuation of signal, but very little.
Not worth worrying about at HF.
2. Seriously doubt if you could ever tell the difference.
3. Yes.
4. At any power level an amateur can use, #18 wire is adequate
for any antenna.
'Doc

4744. Re: wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:42:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A450E19.C2F47423@oio.net>
Source record: 174092

Phil,
Mark pretty well said it correctly. The most wire, as
high as you can get it.
At one time antennas for 'listening' were strung around
the eaves of a house on stand-off insulators. They worked
as well as most omnidiretional antennas.
Unless there is a particular station you want to hear
which would require a directional antenna, any of your suggestions
should work fine. You might concider an insulated wire with
a color that isn't obtrusive, and the size doesn't make any
difference.
Using a distribution system in the house makes things
more complicated. I don't think you would need any special
cable/wire, the same you used for the antenna should work as
well as any.
Merry Christmas
'Doc

4745. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:46:58 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A453973.E04ABA98@att.com>
Source record: 174093
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian wrote:
>
> In article <3A44DF91.5F9DA71D@IEEE.org>,
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > Brian Kelly wrote:
> > > Some EE designed he radio he can't diddle, they do it to themselves.
> >
> > If I had a schematic, I could probably diddle it. I haven't
> > even opened it up yet.
>
> All of that is quite unimportant. What is important is to be able to
> diddle a paddle real fast.

Ok, I'll bite. Please elaborate. I've not heard of diddling the paddle. ;-)

4746. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 20:51:10 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A451036.4AB4F663@home.com>
Source record: 174094

Fred Hambrecht wrote:

> QST ran an article a number of years ago on using zip cord. As best I
> remember it was not very good. I will try to find the info, I am pretty sure
> it was sometime in the 70's and post it.
>
> "rb" <rbigg@pcola.gulf.net> wrote in message
> news:t49ligtm5slga1@corp.supernews.com...
> > What is the approximate Z of common 110v power cord? Years ago, hams used
> > to run it as a twinlead type feedline for dipoles (it was called zipcord
> > then), and it seems like it was around 75 ohms, or so. Is the modern
> stuff,
> > with better insulation, still a good dipole feedline in some applications?
> >
> >
> >
> >

QST, March '79
J. Hall
Zip-Cord Antennas -- Do They Work"

This was in the antenna book biliography. Hope it Helps.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4747. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:23:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4517B5.5CE1A076@IEEE.org>
Source record: 174096
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian wrote:
> All of that is quite unimportant. What is important is to be able to
> diddle a paddle real fast.

Unfortunately, my inherited palsy diddles a paddle real fast
randomly and chaotically. I have to use a straight key adjusted
for about ten pounds thrust to overcome my father's genetic gift.
--
http://www.mindspring.com/~w6rca

4748. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:26:27 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A45184B.DAAC3C3B@att.net>
Source record: 174095

All these postings on this thread seem to overlook a credible,
consistent definition of "zip cord."

In the 30's and 40's, it was rubber/cloth insulated lamp cord (usually
green and yellow - remember?). It worked but was very lossy. But it
could be used and that is where the legend began.

In the 50's and later, it became "POSJ" plastic insulated lamp cord.
Still useful if not technically acceptable for many applications.

Lord knows what the insulation is these days, but I would bet that it is
better than cloth and rubber.

Some "zipcord" will have #18 or smaller wire, depending upon length and
price.

Other "zipcord" may have #16 or larger wire, again depending upon length
and price.

So, what is "zipcord?"

Beats me, but I think that the conventional wisdom of it being useful in
a pinch for a somewhat lossy but not unusable feedline is correct.
Certainly, stripped into separate halves or wires for a dipole, it will
work as well as any other insulated wire for a flat-top or inverted-V.
The classic emergency dipole made by splitting zipcord at one end into a
dipole, tying a knot in the center, and feeding it with the remainder
still stands as a usuable alternative to a "proper" dipole.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Irv Finkleman wrote:
>
> Fred Hambrecht wrote:
>
> > QST ran an article a number of years ago on using zip cord. As best I
> > remember it was not very good. I will try to find the info, I am pretty sure
> > it was sometime in the 70's and post it.
> >
> > "rb" <rbigg@pcola.gulf.net> wrote in message
> > news:t49ligtm5slga1@corp.supernews.com...
> > > What is the approximate Z of common 110v power cord? Years ago, hams used
> > > to run it as a twinlead type feedline for dipoles (it was called zipcord
> > > then), and it seems like it was around 75 ohms, or so. Is the modern

> > stuff,
> > > with better insulation, still a good dipole feedline in some applications?
> > >
> > >
> > >
> > >
>
> QST, March '79
> J. Hall
> Zip-Cord Antennas -- Do They Work"
>
> This was in the antenna book biliography. Hope it Helps.

4749. Re: Discone element lengths for Six Metres?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:26:27 UTC
From: Larry Bearse <4-1000@excite.com>
Message-ID: <9236tpei1@bob.news.rcn.net>
Source record: 174101

Craig <cpg@xtra.co.nz> wrote in message
news:e2d04tg2q6juuhidsaaquk6nehqarrulc1@4ax.com...
> I'm rebuilding an eight element discone hub that previously operated
> from 75-1300 MHz.
>
> I would be grateful if someone could advise what length I should cut
> the new vertical elements in order to include the 6M band.
>
> Thanks in advance, Craig

Hi Craig, I modified a discone a while back. I made a new vertical element from a mobile whip. It was cut to 54 inches and works great. I had to make an adapter to fit the 3/8 thread of the whip to fit the 1/4-20 thread of the horizontal element mounting setup. The sloping elements were already long enough on this ant, but yours may not be 1/4 wave if the lowest freq is 75Mhz. You may have to extend them to around 54 inches.

73.....Larry WA1LGQ

4750. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:27:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4518CA.D79F8A40@IEEE.org>
Source record: 174098

Roy Lewallen wrote:
> I don't know. The B & W antenna is prized because of its
> broadbandedness. Using lossy feedline will accomplish the same purpose
> -- it doesn't really matter whether the resistor is in the feedline or
> the center of the antenna. B & W users have shown that some folks are
> glad to trade a few (or a lot) of dB for broader bandwidth. This is just
> another way to do it.

Maybe you're right, Roy. I could sure undercut B&W prices if I use
zip cord to feed a dipole.
--
http://www.mindspring.com/~w6rca

4751. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:34:41 UTC
From: rbird2@peoplepc.com
Message-ID: <3a4518df.7612156@trialnews.peoplepc.com>
Source record: 174097

I have one on my car and it works great!

People try to put a Outbacker on a mag mount or install it
incorrectly, then complain it does not work. Like any antenna
Grounding is VERY important. On my first attempt at installing the
Outbacker, I cut some corners and could not get it to work correctly.
When I went back and did it right. It now works great.

Not everyone has the space and height availablr to permatly mount a
screwdriver antenna. I use a Hustler quick disconect on my Outbacker.

Rodger

On Wed, 20 Dec 2000 18:41:26 GMT, n4jzh@knology.net (Donnie) wrote:

>On Mon, 18 Dec 2000 07:54:02 -0700, wboas <wboas@chisp.net> wrote:
>
>>
>>Would anyone using the Outbacker brand `Perth' `Outbacker' or `Outreach'
>>HF mobile antennas care to comment on their performance?
>>
>>I am a newly-minted HAM, and need a multiband HF, mobile, portable
>>antenna. One user showed me his, liked it, but other opinions would be
>>helpful before I spend money.
>>
>>Thanks,
>>Bill
>>KC0IZI/AG ;-)
>>
>>
>>
>>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>>-----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>
> Every heard of a Dummy Load?
> Spend your hard earned Ham dollars on a Screwdriver.
> www.hsantennas.com
>
>

4752. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:35:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A451AA5.753DBA75@IEEE.org>
Source record: 174099

Reg Edwards wrote:
> Profits are invariably made, by definition, at somebody
> else's expense.

True under socialism, Reg, but not under capitalism. Under
capitalism, *creation of capital* occurs so everyone profits.
(How else could 13 colonies, starting from zilch, become the
most powerful economic empire in history? :-)
--
http://www.mindspring.com/~w6rca

4753. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:47:56 UTC
From: 2w8ji@contesting.com
Message-ID: <3a451d0a.91119920@news.akorn.net>
Source record: 174100

On Sat, 23 Dec 2000 16:26:16 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>The most satisfying way of finding the input resistance of a
>shallow-buried ground radial is to measure it.
>
>So-called, hand held, antenna analysers are sufficiently
>accurate and available enough to do the job.

Hi Reg,

Can you tell me how to measure the ground losses around my vertical
using a hand-held antenna analyzer?

That would be a very useful thing to learn.

73 Tom

4754. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 21:54:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A451F28.5805ED7F@IEEE.org>
Source record: 174102

"Rodger N. Bird" wrote:
> I have one on my car and it works great!

"Works great" is very subjective. According to actual 75m mobile antenna shootout measurements, an Outbacker radiates 88% less power than a good bugcatcher or screwdriver. That means if a good bugcatcher radiates 100 watts on 75m, the Outbacker radiates 12 watts. How can that possibly "work great" on 75m? IMO, the Outbacker is just about the *least* bang for the bucks in mobile antennas.

For instance, the 1dB improvement that the Outbacker has over a Hamstick on 75m costs $200. Anybody want to pay me $200 per dB?
--
http://www.mindspring.com/~w6rca

4755. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 22:07:01 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45207a.92000269@news.akorn.net>
Source record: 174103

On Sat, 23 Dec 2000 16:43:34 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Tom, you are like that trio of 1937 experimenters, not one
>of whom sufficiently understood what they were investigating
>to take the elementary precaution of measuring the
>conductivity of the soil in which they laid their 113
>radials.

Hi Reg,

I take it you are an experienced low-band operator. A person who has
many antennas to compare, and who does so frequently.

Please, as a demonstation of how accurate and thorough you are, tell
me how to measure ground loss with an antenna analyzer.

Maybe you could also tell me how to accurately measure soil
conductivity in a small area wher the radials sit.

73 Tom

4756. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 22:32:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <923944kmj1@slb3.atl.mindspring.net>
Source record: 174104

Rick:

Yeah, OK... OK... OK... I see now... from your examples I see that you allow a very modern interpertation of authority figures, I like to refer to those as "Neo-Authority Figures", where egalitarianism reigns supreme and anybody can be an "authority figure". But I am sure that Daniel Webster or the OED would roll over and groan at such a modern definition!

Previously, I was thinking along more traditional lines for the definition of "authority figure", you know like the Chief Justice of the Supreme Court, or The Pope, or the Captain of any Ship at Sea, or anybody's "Mom" or... "wait until your Father comes home!", or your old boot camp Gunnery Intstructor, Drill Sergeant, etc...

I agree that Nathan fits in the Neo category, but somehow I don't think he rates in the traditional category yet...

Just an opinion... from one who believes that authority is earned and awarded by others, and not gained through self-anointment.

Happy Holidays...

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20001223130140.07659.00007335@ng-fy1.aol.com...
> In TV news, an Authority Figure is any character a harried behind-deadline
> reporter can scrape up to go on camera and claim special knowledge. Take the
> cellphone controversy and cancer, for example:
>
> Cut 1, 1st A-Fig: "I teach Culinary Arts at Berkley, and I say cellphones cook
> your brains and cause cancer".
>
> Cut 2, Man on Street reacts: "Jeez, I'd better confiscate little Johnny's
> Erricson right now, before it bakes him alive!"
>
> Cut 3, 2nd A-Fig (to create tension): "I teach Remedial Astrology at BU's
> Metro Division, and belive me, that first meatball you interviewed is full of
> stewed pork rinds! Cellphones never hurt anyone--and they may even CURE brain
> cancer by killing tumor cells!"
>
> Cut 4, Reporter (with a scare the poo out of me and you wrap-up): "Well

folks,
> this issue won't be resolved anytime soon! Meanwhile, many believe a
national
> tragedy is imminent as milions of these tiny flip-top fryolators
insidiousy
> incinerate the intellegence of our youth! Live in Silicon Implant Valley,
I'm
> Phil N. DeBIanc for CBS news".
>
> Anybody wanna be an "authority"? It's easy. Just go....figure!
>
> Rick K1BQT

4757. Re: Non-symmetrical radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 22:34:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92399t$4rh$1@nntp9.atl.mindspring.net>
Source record: 174105

Pete:

Not so you would notice!

-Peter K1PO

"Pete Holden" <peholden@home.com> wrote in message
news:yU506.57474$x6.25162629@news2.rdc2.tx.home.com...
> I have a 20m, homebrew vertical, a ground plane, mounted on the peak of my
> roof. It is a bit over 16 feet tall with its base about 0.38 wavelengths
> above the ground. I have five radials radiating out from its base, each
the
> length of the antenna. The worst SWR I get is 1.2:1 and the antenna seems
> to work just fine. I guess I should be satisfied.
>
> But, due to the arrangement of my roof, the radials are radiating out over
a
> partial circle (maybe 200 degrees). The open part (no radials) of the
> radial circle points northwest.
>
> My question is, does this make my antenna somewhat directional? Is there
> any problem with not having the radials evenly divided?
>
> Thanks, Pete KA0TZK
>
>
>
>

4758. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 22:40:10 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9239ka$84c$3@208.207.71.145>
Source record: 174106
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian wrote:
>
> In article <3A44DF91.5F9DA71D@IEEE.org>,
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > Brian Kelly wrote:
> > > Some EE designed he radio he can't diddle, they do it to themselves.
> >
> > If I had a schematic, I could probably diddle it. I haven't
> > even opened it up yet.
>
> All of that is quite unimportant. What is important is to be able to
> diddle a paddle real fast.
>

So that leaves you out then?

4759. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 22:42:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9239nr$8ag$1@slb3.atl.mindspring.net>
Source record: 174107

Fractals:

Fractals - simply the visible tracings of the limit cycles emitted by
non-linear processes and systems, sometimes observable, sometimes
controllable, sometimes not, but always beautiful.

"But only God can make a tree!"

We will all have to admit that trees certainly have forms reminiscent of
fractal geometry.

I believe that Mother Nature produces many of her most beautiful creations
using fractal methods.

And so... I believe that the forms of trees qualify to be called fractals.

Anyone ever measure the bandwidth and number of resonances of a big old Oak
tree? How about a Sycamore, or Cypress?

-Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20001220100554.17365.00009750@ng-cg1.aol.com...
> Despite W8JI's claims, I never, never, ever, said that a 'tree antenna'
> "radiates well" from its "fractal shape".
>
> I invite W8JI to quote directly from this article to support his false
> statement.
>
> He won't because he can't.
>
> Am I the ONLY one here who notices that W8JI insists on weaving a web of
> fractal insuation and false information?
>
> Ask why he is doing this.
>
> NC

4760. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 23:10:25 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4530E1.4010706@hiwaay.net>
Source record: 173922

Peter- I prefer 'pseudo' to 'neo'. one means fake, the other means new.

Peter Bracket said:
"authority figure",

I agree that Nathan fits in the Neo category, but somehow I don't think he rates in the traditional category yet...

Just an opinion... from one who believes that authority is earned and awarded by others, and not gained through self-anointment.

Happy Holidays...

-Peter K1PO

4761. Re: Radio Shack coax any good??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 23:47:39 UTC
From: Allen Lee <alee@pobox.com>
Message-ID: <vaea4tc9lkrq5jl24kelk9s1f6be5dj3nf@4ax.com>
Source record: 174108

Its stiff as a brick in Alaska and if you can buy it anywhere else, do it. If its the only place you can find it, well there ya are. Id rather order it from HRO or AES and wait than use it, very thin shielding.

Al

On 23 Dec 2000 16:37:13 GMT, k7jy@aol.com (K7jy) wrote:

>Radio Shack used to sell RG/8 coax a few years ago and I'm wondering if anyone
>knows if it's any good. Does anyone know the db loss figures for it? The shield
>on the stuff looks a bit thin compared to some of the other brands I've got
>lying around. Any comments would be appreciated. Thanks and 73, de John, K7JY.

4762. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-23 23:59:48 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A453C74.25E7@wt.net>
Source record: 174109

Tom W8JI wrote:

> Hi Reg,
>
> I take it you are an experienced low-band operator. A person who has
> many antennas to compare, and who does so frequently.
>
> Please, as a demonstation of how accurate and thorough you are, tell
> me how to measure ground loss with an antenna analyzer.
>
> Maybe you could also tell me how to accurately measure soil
> conductivity in a small area wher the radials sit.
>
> 73 Tom

I think I know how he will go about it as I have his earthres program. I had remembered that a little while ago and checked it out again. But the only thing is here, I keep getting varied results trying to use different metering. Seems you need quite a bit of voltage and current to get an accurate reading. If I use my power line ground as a zero reference point, as one method, and try to use different meters to measure, I get different readings with each meter depending on the voltage used for ohms measuring, etc. I have a 45 volt Bell telephone ohm meter with reversable polarity, but it's resolution is too low for the ham use it seems. With that meter, I can stick a 2 ft car whip anywhere in the yard, and show a dead short to the power ground. Now, I doubt my situation is quite that good. So that means to make an accurate measurement, I need to use an external power source, and measure the current and voltage between different points. Seems to me, I could just use the power ground as a ground reference point and run a light bulb off 110v and then measure the current and voltage. Then stick a rod out in the yard, and measure again, except use the ground rod as the ground return and measure the voltage drop. I don't know if that would work well or not for accuracy. Dunno, it's kinda interesting, but still a bit of work to measure something I know will need to be improved anyway. I'm generally too lazy to go though all that. But even if I get an accurate measurement, what does it do for me? My idea of measuring the saturation of a radial system is to note the bandwidth. When it quits shrinking, you have enough radials. I can tell that from here in the shack without running any resistance tests outside. Being generally lazy, I tend to like that method. MK
--
http://web.wt.net/~nm5k

4763. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:04:52 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A453DA4.53F0@wt.net>
Source record: 174110
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian wrote:
>
> In article <3A44DF91.5F9DA71D@IEEE.org>,
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > Brian Kelly wrote:
> > > Some EE designed he radio he can't diddle, they do it to themselves.
> >
> > If I had a schematic, I could probably diddle it. I haven't
> > even opened it up yet.
>
> All of that is quite unimportant. What is important is to be able to
> diddle a paddle real fast.
>
> Sent via Deja.com
> http://www.deja.com/

Thats good to know. I feel better already. MK
--
http://web.wt.net/~nm5k

4764. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:36:40 UTC
From: w1rfi@aol.com
Message-ID: <20001223193640.24772.00006314@ng-cd1.aol.com>
Source record: 174111

>From: Brian Kelly kelly@dvol.com

>I don't know of any published data which indicates that trees have any
>noticeable effect on verticals at HF freqs.

I recall seeing a study done by the US military on HF. As I recall, when I made some assumptions about the spacing between trees and their figures for the attenuation in dB/mile of deducious forest, I estimated about 0.01 dB/tree.

73,
Ed Hare, W1RFI

4765. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:41:11 UTC
From: w1rfi@aol.com
Message-ID: <20001223194111.24772.00006315@ng-cd1.aol.com>
Source record: 174112

>From: fractenna@aol.com (Fractenna)

>Yuri, K3BU has made the assertion that he was escaping a 5year prison
>sentence when he left Europe.

>I asked him what the offense was and he refused to elaborate.

>Several people here are making the ASSUMPTION that this was some political
>issue, but Yuri is either incapable or unwilling to verify that.

>Here are the facts: <snippage>

One can interpret words that are not said to mean anything at all.

73,
Ed Hare, W1RFI

4766. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:41:55 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <nDb16.2492$oy3.148525@bgtnsc05-news.ops.worldnet.att.net>
Source record: 174113

Rick:

Exactly what was the % alcohol content of that beer? I could use some.

Happy Holidays!

Steve

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001223130140.07659.00007335@ng-fy1.aol.com...
> In TV news, an Authority Figure is any character a harried behind-deadline
> reporter can scrape up to go on camera and claim special knowledge. Take
the
> cellphone controversy and cancer, for example:
>
> Cut 1, 1st A-Fig: "I teach Culinary Arts at Berkley, and I say cellphones
cook
> your brains and cause cancer".
>
> Cut 2, Man on Street reacts: "Jeez, I'd better confiscate little Johnny's
> Erricson right now, before it bakes him alive!"
>
> Cut 3, 2nd A-Fig (to create tension): "I teach Remedial Astrology at BU's
> Metro Division, and belive me, that first meatball you interviewed is full
of
> stewed pork rinds! Cellphones never hurt anyone--and they may even CURE
brain
> cancer by killing tumor cells!"
>
> Cut 4, Reporter (with a scare the poo out of me and you wrap-up): "Well
folks,
> this issue won't be resolved anytime soon! Meanwhile, many believe a
national
> tragedy is imminent as milions of these tiny flip-top fryolators
insidiousy
> incinerate the intellegence of our youth! Live in Silicon Implant Valley,
I'm
> Phil N. DeBIanc for CBS news".
>
> Anybody wanna be an "authority"? It's easy. Just go....figure!
>
> Rick K1BQT

4767. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:43:16 UTC
From: k3bu@aol.com
Message-ID: <20001223194316.22898.00005955@ng-fq1.aol.com>
Source record: 174114

Nathan Cohen, PhD wrote this crap:

>Yuri has asserted that he was to be JAILED for 5 years. Notice he never said
>why; it is only crass assumptions and speculations that ascribe this to
>'freedom fighters'.He never, ever, said this.
>
>I asked a Czaech friend of mine, who escape with his family during the 68
>invasion. He knew quite a few hams and his father was an engineer then. What
>he said was very curious--.
>
>"This Yuri fellow has a Russian name. Did he defect?"
>
>I also asked a Russian co-worker. He said:
>
>"Yes Chip. He is Russian name. Ask where he came."
>
>So, Yuri, again we wonder: what is it exactly you were arrested for and
>sentenced for? Who did the sentencing? What is your status in the US and
>Canada?
>
>What passport do you travel under?
>
>73
>Chip N1IR

You piece of low life crap!!

What the hell are you? GESTAPO? KGB? MOSSAD? CIA? FBI?
What right do you have to ask those questions or snoop into my background?
Calling me a criminal? Ask your lawyer what that is called!

First you are playing superiority contest card and accusing me of things that
you have no clue about. when you get an egg in the face then you start
investigating me? What gives you pleasure to try to screw people?

Answer to your uncalled for and stupid questions has been for years on my home
pages. You making criminal out of me in the public forum. Memory of my murdered
father and sister and suffering that we went through will haunt you and your
children and you will be "rewarded" for that!
You can't even read and comprehend a sentence and you are professing to be an
authority on something?
I was never arrested you piece of shit, I do not have a Russian name, I was
never in Russia, and it is non of your frucking business what passport I have
or what I eat. You stick your nose into your wife's ....

Do us all favor and get the hell out of this NG and seek help. You are becoming dangerous, besides being pathetic.

73 and have a happy holidays!

Yuri
http://members.aol.com/k3bu/
http://members.aol.com/ve3bmv/

Sorry NG, I can't take this shit, I am into ham radio to make friends and not this, to be accused of being criminal, for what?
SK

4768. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 00:44:41 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <923gtr$s93$1@bob.news.rcn.net>
Source record: 174115

"Set'em up Joe" <cathexis@erols.com> wrote in message
news:3a44c719.215961597@news.erols.com...
> Greetings,
>
> I'm aware of a similar thread that's current on the ng now
> and I also know an earlier thread has been referenced as well, But
> would like a couple of questions answered here please.
>
> 1. If a vertical is supported by a sizable tree, will the tree create a
> substantial "null" in the radiation pattern? Assume the antenna
> gets only physical support from the tree but the radiating element
> is "shielded" from contact.

Hams support wire antennas, such as Ls, from steel towers. There usually
isn't a problem unless the tower is resonant on the wire operating
frequency.

Can you grid dip a tree?? Or, use a detuning stub???

Peter

4769. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 01:03:09 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A454B4D.4130EFFD@netscape.net>
Source record: 174116

Mark Keith wrote:
>
> .... Seems to me, I could just
> use the power ground as a ground reference point and run a light bulb
> off 110v and then measure the current and voltage. Then stick a rod out
> in the yard, and measure again, except use the ground rod as the ground
> return and measure the voltage drop....

What you are approaching is known to geophysicists as Vertical Electric Soundings, or just "resistivity" measurements. The complicating factor is that the apparent resistivity (and measured resistance) on the surface is affected by the resistivities of various layers of soil and rock to a surprising depth.

Field data are collected using a logarithmically spaced array of electrodes, and the interpretation is a fairly arcane art. The old traditional method is to plot the measured values on log log paper, then use books of overlay curves to find matches to various parts of the measured curve, eventually coming up with a layered earth model with each layer's resistivity and thickness.

There is no way to go from the field data (measurements) to a model; there is a way to go from a model to the measurements that you would see. Computer analysis involves starting with a guesstimate for the model, then calculating the measurements that would result, comparing those calculated values with the real values, and perturbing the model for a better fit in an iterative method of successive approximations until you get a solution that is within your specified limits of uncertainty, usually expressed as an RMS error (difference) between the calculated model results and the actual field data.

Many years ago, I developed a program to do just that, but that was many years ago, and HP doesn't even make the workstations on which it ran anymore (I don't think that they even remember making them...).

The values that you will measure at the surface are affected by various layers including the surface soil, the deeper soil, the underlying rock and/or deep soil layers, and so on, and the effects are surprisingly strong. In general, a layer will affect readings at electrode spacings considerably shorter than the layer's depth, depending upon the resistivity contrasts between various layers.

Undersoil topography will also affect the surface readings quite a bit.

It is a fairly complex subject. Most engineering geophysics texts
will discuss it.

This whole concept is the original contribution of the Schlumberger
brothers, who were very interested in the electrical properties of
the Earth, and who took time from the family vineyards to experiment.

And all of this is just the DC characteristics....

--
Jim Fuller

4770. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 01:07:33 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A454C55.B9841A25@netscape.net>
Source record: 174117

"Peter O. Brackett" wrote:
>
....
> Just an opinion... from one who believes that authority is earned and
> awarded by others, and not gained through self-anointment.

Well said, and in my perception, entirely true, although the
soi-disant "authority figures" often seem to be far too full of
themselves to see the essential truth.

--
Jim Fuller

4771. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 01:28:12 UTC
From: cathexis@erols.com
Message-ID: <3a454aa9.249645956@news.erols.com>
Source record: 174118

Thx. for those quick replies all. Brian, you're right I
was complicating things; Reason was if the trees would be
a problem then answers to the other questions would've had
some bearing on finding a workable solution. Doc, thanks for
your answers as well: You're always helpful and rarely cranky!
<grin>

I was concerned because IF I put up a vertical, one
idea is to have it very closely held to the tree and wondered
if it might not create a large null as it was so close to said tree.
Your replies tell me otherwise and I thank you.

I've had a lot of trouble with my random and my dipole
in that they need to be strung over multiple trees and are really
too high up to make installing insulators feasible anywhere save
the ends. Each has snapped (or dropped because a supporting
limb snapped instead) from wind action kicking the trees in various
directions at once. I'm sure you're familar with it. I don't intend to
trash these antennas. Instead, one reason for putting up a vertical
is simply because I only need one tree for the top anchor and reason
it might be less stress on the physical structure than 4 or 5 trees going
every which way at once.

14 AWG wire inside any flexible tubing (garden hose ?) should
have enough give to move with the tree and even if it drops it seems it'd
be a lot easier to throw back up than some dipole that's wind damaged
and dangling in two different places too high up to reach (like my current
one after last week's windstorm). Anyway, that's where my little mind is
drifting towards this week. Whatever I end up doing, I can assure you --
the solution will be neither expensive nor ideal. Thanks guys.

Andrew/ KG4JBM

4772. Re: wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 01:39:36 UTC
From: cathexis@erols.com
Message-ID: <3a4551a8.251437323@news.erols.com>
Source record: 174019

On Sat, 23 Dec 2000 14:42:01 -0600, 'Doc <w5lz@oio.net> wrote:

>Phil,
> Mark pretty well said it correctly. The most wire, as
>high as you can get it.
> At one time antennas for 'listening' were strung around
>the eaves of a house on stand-off insulators. They worked
>as well as most omnidiretional antennas.
> Unless there is a particular station you want to hear
>which would require a directional antenna, any of your suggestions
>should work fine. You might concider an insulated wire with
>a color that isn't obtrusive, and the size doesn't make any
>difference.
> Using a distribution system in the house makes things
>more complicated. I don't think you would need any special
>cable/wire, the same you used for the antenna should work as
>well as any.
> Merry Christmas
> 'Doc

I didn't see the original post but I'd like to add to Doc's
reply. If you chose to string around you're house or over it, PLEASE
don't get that wire anywhere near your power line. No matter where
you end up placing it consider: If the wire snapped in a wndstorm
could any part of it end up draped over your power line feed to the
house. If so, move the wire elsewhere.

As to color, I use blue. It looks very bright and noticible up
close or on the ground waiting to go up. But once it's up in the trees
it's very hard to spot againest the sky even for me the guy who put
it up. Once, my XYL complained about how one leg of my dipole was
gonna be tied off to a tree in the front yard:

> " OH Honey !! Not in the front yard ! Andrew,...No. No ! "

I took her out and said ;
> " Point to it ."

She couldn't. And it's still up.

Andrew / KG4JBM

4773. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 01:58:48 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <sLc16.29365$A06.1040738@news1.frmt1.sfba.home.com>
Source record: 174020

On 23-Dec-2000, Mark Keith <nm5k@wt.net> wrote:

> Alan Biocca wrote:
> >
...
> > at all. I would expect a higher Q antenna like a 40M bug-catcher to
> > work fairly well on 80 with a good end-fed autotuner, does anyone do
> > that?
>
> No, would be pretty lousy..Using tuners to "tune" mobile antennas
> where
> the loading coil is set for another freq is a bad idea. A 30m stick
> would work great on 40m if you added a longer stinger to tune to 40.
> If
> you want good performance, you HAVE to resonate the antenna. I know
> that
> goes against some peoples ideas on needing resonance to get good
> performance, but I think you will find it true on mobile antennas. The
> tuner should only be used as an impedance matcher if used at all. If
> you
> don't want to get out of the car to change the antenna, I would look
> into a screwdriver. MK

Well, it all depends on losses, and where the radiating currents are
located, I think. I have a screwdriver and it is a good antenna, but it
isn't for everyone or every occasion. At this time, there is no auto-
tuner for the best screwdrivers (since the Yaesu screwdriver is too
lossy, and the Screwdriver Antenna Memory doesn't auto-tune).

I'm experimenting with two different directions - one is to automate
the tuning of the Screwdriver, and the other is to do experiments with
a center fixed-loaded antenna and an autotuner at the base. While the
tuner-base center-coil antenna may not reach the screwdriver efficiency
I suspect it can easily outperform many currently common HF mobiles
including the helical whips, the ferrite cored coils, etc., while being
easiest
(and safest) to use on the highway.

4774. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:06:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <923lnv$dt2$0@208.207.71.145>
Source record: 174021

Fred Hambrecht wrote:
>
> QST ran an article a number of years ago on using zip cord. As best I
> remember it was not very good. I will try to find the info, I am pretty sure
> it was sometime in the 70's and post it.
>
> "rb" <rbigg@pcola.gulf.net> wrote in message
> news:t49ligtm5slga1@corp.supernews.com...
> > What is the approximate Z of common 110v power cord? Years ago, hams used
> > to run it as a twinlead type feedline for dipoles (it was called zipcord
> > then), and it seems like it was around 75 ohms, or so. Is the modern
> stuff,
> > with better insulation, still a good dipole feedline in some applications?
>

Back before ham radio became an efficiency engineer's playground
(pre-WW2
- I wasn't around but have discussed at length with some folks who were)
twisted lamp cord (no zip-cord in those days) was commonly used to
directly feed 1/2wave dipoles via a link of a couple turns on the cold
end of the plate tank. Nobody knew what they loss was and fer sure they
didn't worry themselves with it since the scheme worked quite well.
Wailing about "What's my SWR" was also unheard of. The elite used open
wire feeders and a HB tuner.

4775. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:07:42 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A455A6E.BDB346ED@dvol.com>
Source record: 174022

W1RFI wrote:

> >From: Brian Kelly kelly@dvol.com
>
> >I don't know of any published data which indicates that trees have any
> >noticeable effect on verticals at HF freqs.
>
> I recall seeing a study done by the US military on HF. As I recall, when I made
> some assumptions about the spacing between trees and their figures for the
> attenuation in dB/mile of deducious forest, I estimated about 0.01 dB/tree.

>
Uh-oh . . din know that. Thanks. Shoulda recommended dumping in a pair of 8877s to compensate for those losses . .
>

> 73,
> Ed Hare, W1RFI

>
w3rv

4776. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:15:58 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <923m8r$32t$1@nnrp1.deja.com>
Source record: 174025
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <9239ka$84c$3@208.207.71.145>,
Dick Carroll <dixie@townsqr.com> wrote:
>
>
> Brian wrote:
> >
> > In article <3A44DF91.5F9DA71D@IEEE.org>,
> > Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > > Brian Kelly wrote:
> > > > Some EE designed he radio he can't diddle, they do it to
themselves.
> > >
> > > If I had a schematic, I could probably diddle it. I haven't
> > > even opened it up yet.
> >
> > All of that is quite unimportant. What is important is to be able
to
> > diddle a paddle real fast.
> >
>
> So that leaves you out then?

All except diddling the coil.

Sent via Deja.com
http://www.deja.com/

4777. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:21:29 UTC
From: 2w8ji@contesting.com
Message-ID: <3a455d1c.107524388@news.akorn.net>
Source record: 174023

Hi Mark,

On Sat, 23 Dec 2000 17:59:48 -0600, Mark Keith <nm5k@wt.net> wrote:

>I think I know how he will go about it as I have his earthres program. I
>had remembered that a little while ago and checked it out again. But the
>only thing is here, I keep getting varied results trying to use
>different metering. Seems you need quite a bit of voltage and current to
>get an accurate reading. If I use my power line ground as a zero
>reference point, as one method, and try to use different meters to
>measure, I get different readings with each meter depending on the
>voltage used for ohms measuring, etc. I have a 45 volt Bell telephone
>ohm meter with reversable polarity, but it's resolution is too low for
>the ham use it seems.

If you are measuring the resistance at 60 Hz, you are deluding
yourself if think it will mean anything at 2 MHz.

Totally.

73 Tom

4778. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:22:34 UTC
From: 2w8ji@contesting.com
Message-ID: <3a455d8e.107638943@news.akorn.net>
Source record: 174024

On Sat, 23 Dec 2000 18:03:09 -0700, Jim Fuller <jefuller@netscape.net>
wrote:

>
>And all of this is just the DC characteristics....
>
>--
>Jim Fuller

Amen. It has nothing to do with the RF charcteristics.

73 Tom

4779. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:36:30 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <ydd16.6815$ad.505584@nntp3.onemain.com>
Source record: 174026

Hey Yuri, don't let the asshole get you down or run you off, he's not worth it...!! Just set your filters, and ignore him. It works very nicely.

--
RttyMan

"Yuri Blanarovich" <k3bu@aol.com> wrote in message news:20001223194316.22898.00005955@ng-fq1.aol.com...
> Nathan Cohen, PhD wrote this crap:
> Yuri
> http://members.aol.com/k3bu/
> http://members.aol.com/ve3bmv/
>
> Sorry NG, I can't take this shit, I am into ham radio to make friends and not
> this, to be accused of being criminal, for what?
> SK

4780. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 02:38:43 UTC
From: cathexis@erols.com
Message-ID: <3a456183.255497500@news.erols.com>
Source record: 174027
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 21 Dec 2000 12:37:42 -0500, "Steve Casey" <Steven_casey@hotmail.com>
wrote:

>I hope your dog is not wearing the collar when you attach the coax.

Would fido be vertically polarized or horizontally polarized ??
>
>Delbert McCord wrote in message <3a419e6f.13055916@news.usol.com>...
>>I have a R8 that is less than 6 months old and I am having problems
>>witht he antenna also. It was working Great and then all of a sudden
>>its like having a dummy load on the end of the coax!
>>
>>I checked the coax (Which is also new) and Its not shorted and gives
>>me a perfect SWR when I connect a dummy load out there on the end of
>>the coax. Cushcraft (After a bunch of phone tag) had me send them the
>>matching box back to them, they tested it and returned it saying its
>>fine. I used to get better than a 2 on every band with out my tuner
>>now I get over a 8 swr and I can receive better if I connect the coax
>>to my dogs collar!
>>
>>I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>>ever get from me!
>>
>>Worked great, Looks Great, Does not last
>>I can not afford almost 100$ a month for an antenna!
>>
>>Delbert McCord
>>KA8OCN
>>
>>
>>
>>
>>
>>On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>>
>>>Hello to all,
>>>
>>>First let me say that up until now I've been a happy camper
>>>using Cushcraft products. However, I've just learned something
>>>that may be of interest to anyone considering purchasing a
>>>new Cushcraft antenna.
>>>
>>>I recently bought an R-8 vertical. It was just damaged by
>>>lightning and I e-mailed Cushcraft tech support regarding

>>>parts availability....the answer was 2 sentences that suggested
>>>I buy a new antenna and try to collect on insurance. Needless
>>>to say, I was not happy with that so I wrote a letter to the
>>>Cushcraft manager of amateur products. This gentleman was kind
>>>enough to telephone me today. Essentially, the conversation
>>>focused on the fact that the parts I needed would be so expensive
>>>as to make buying a new antenna more practical. However, one
>>>interesting fact did come to light. Parts for the R-8 vertical
>>>had not been "priced" yet and were thus unavailable. Further,
>>>Cushcraft does not "price" replacement parts until the product
>>>has been out for 9 to 12 months. I'd suggest you keep this
>>>in mind....if you drop your new R-8 or new whatever, you may
>>>not be able to get parts for it for up to a year!!
>>>
>>>thanks & 73,
>>>Phil
>>>W5BVB
>>
>
>

4781. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:02:25 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <pkpa4tkav6f6t907e4ip0gdkrj09dbn4o5@4ax.com>
Source record: 174028

On Sat, 23 Dec 2000 18:29:32 GMT, tom_bruhns@agilent.com wrote:

>for instance, 60-40 starts to melt at the same temp, with solid and
>liquid existing together over a range of temps.

_____

Right, and this is what you don't want - a range of temps with liquid and solid existing together. 63/37 doesn't have this and that's why it is preferred.

Don't feel bad if this is a little puzzling. The solder industry took a long time to figure it out too.

73, Bill W7TI

4782. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:06:41 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <10qa4t0fh5918sm5m2g2ihb6ok8dqb99mu@4ax.com>
Source record: 174029

On Fri, 22 Dec 2000 15:06:18 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Not at all. Take a look at:
>http://people.delphi.com/cecilmoore/mobnow.htm
>Not much horizontal air resistance there. Works like a charm.
>--

That's a great picture, Cecil! What does your ex-wife think about it?

:-)

73, Bill W7TI

4783. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:13:55 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <sbqa4t8sbkodd59ah6j0n1vp6a55qrskdh@4ax.com>
Source record: 174030
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Fri, 22 Dec 2000 13:54:36 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
>got from Radio Shack. My favorite AM station is on 1620. This
>darned AM receiver only goes up to 1610. Anybody know of any
>sources of mods for AM/FM receivers?

Check the back side of the tuning capacitor. There should be at least two screwdriver adjustments, one of which will be for the AM oscillator. I'd guess you can turn it enough to get 10 more kHz. Good luck.

73, Bill W7TI

4784. Re: RV Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:24:25 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <nmqa4ton02es0fb6d6o6te36scr0mjlfb8@4ax.com>
Source record: 174031

On Sat, 23 Dec 2000 05:36:28 GMT, "Pete Holden" <peholden@home.com> wrote:

>I'm looking for a relatively cheap antenna to work 20m from my 5th wheel.
>I'm expecting to mount the antenna when I'm camped, then take it down for
>travel. Since my roof is rubber, not aluminum, it won't operate as an
>artificial ground (Is that a problem?).
>
>Also, never having worked mobile, what do I do for a ground?
>
>Thanks, Pete KAï¿½TZK
>

For only one band, a $25 Hamstick will do quite well, but for a little more and multiple bands, I'd recommend a Hustler 4-BTV or 5-BTV. I used the 4-BTV on my 29 foot fifth wheel for about a year and it was great. This of course has to be taken down when in motion, where the Hamstick wouldn't. I bolted a water pipe flange to the rear bumper and screwed a two-foot piece of water pipe into that for the actual mount. The fifth wheel was big enough that no separate radials or ground connection was necessary.

73, Bill W7TI

4785. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:28:15 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <b7ra4t8kk56mk4o576j7e9h55a8gkeeo44@4ax.com>
Source record: 174032

On Sat, 23 Dec 2000 10:45:02 -0600, "rb" <rbigg@pcola.gulf.net> wrote:

>What is the approximate Z of common 110v power cord? Years ago, hams used
>to run it as a twinlead type feedline for dipoles (it was called zipcord
>then), and it seems like it was around 75 ohms, or so.

If memory serves me right, 75 or so ohms is correct. The stuff is very, very lossy however. When I was a poor starving teenager I used it on 40 meters and got rid of it as soon as I could. 'Nuff said. :-)

73, Bill W7TI

4786. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:30:44 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <hcra4tc48cgra2h9ojd994pg423pjbn04m@4ax.com>
Source record: 174033

On Sat, 23 Dec 2000 21:26:27 GMT, "George, W5YR" <w5yr@att.net> wrote:

>So, what is "zipcord?"

It is a two-wire cable which is "scored" between the conductors so that you can pull them apart with a motion much like a zipper. So there. :-)

73, Bill W7TI

4787. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:45:03 UTC
From: fractenna@aol.com
Message-ID: <20001223224503.12021.00003325@ng-mn1.aol.com>
Source record: 174034

>
>Hey Yuri, don't let the asshole get you down or run you off, he's not worth
>it...!! Just set your filters, and ignore him. It works very nicely.
>
>--
>RttyMan
>
>
>"Yuri Blanarovich" <k3bu@aol.com> wrote in message
>news:20001223194316.22898.00005955@ng-fq1.aol.com...
>> Nathan Cohen, PhD wrote this crap:
>> Yuri
>> http://members.aol.com/k3bu/
>> http://members.aol.com/ve3bmv/
>>
>> Sorry NG, I can't take this shit, I am into ham radio to make friends and
>not
>> this, to be accused of being criminal, for what?
>> SK

Your advice is poorly motivated but very good in execution. For the fact of the matter is that Yuri has legal problems in 2001 if he does NOT cease his activities against me.

It matters little to me what motivates good NG behavior--but realize that this diligence to stop these attacks against me is an ongoing situation and legal matters WILL be used to stop these attacks.

Yuri--

If ALL you were interested in was 'ham radio' you would not have focused on me for personal attacks; malicious libel; incorrect and misleading statements and characterizations; incorrect and ignorant comments to a New York Times reporter; and so on.

You have had 3 years to voluntarily end this behavior; the voluntary option indeed disappears with the new year.

It is 'up to you' only for a short time more, and with NO--repeat NO-- further attacks against me on this public forum.

Nathan Cohen, Ph.D.

73
Chip N1IR

4788. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:48:36 UTC
From: fractenna@aol.com
Message-ID: <20001223224836.12021.00003326@ng-mn1.aol.com>
Source record: 174036

>
>>From: fractenna@aol.com (Fractenna)
>
>>Yuri, K3BU has made the assertion that he was escaping a 5year prison
>>sentence when he left Europe.
>
>>I asked him what the offense was and he refused to elaborate.
>
>>Several people here are making the ASSUMPTION that this was some political
>>issue, but Yuri is either incapable or unwilling to verify that.
>
>>Here are the facts: <snippage>
>
>One can interpret words that are not said to mean anything at all.
>
>73,
>Ed Hare, W1RFI
>

Exactly my point. I asked for details and received none. Just more malice stating that I have no credibility; my antennas don't work; and so on.

If you read Yuri's comments alone you'd get the impression that--I-- was sentenced to prison for 5 years instead of him!

Yuri has elected to get off this NG. That is irrelevant to me. But he WILL stop his attacks.

Chip

4789. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:48:39 UTC
From: "M. Schneider" <markinokla@juno.com>
Message-ID: <Gme16.7292$wE3.6029@newsfeed.slurp.net>
Source record: 174035
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Set'em up Joe" <cathexis@erols.com> wrote in message
news:3a456183.255497500@news.erols.com...
> On Thu, 21 Dec 2000 12:37:42 -0500, "Steve Casey"
<Steven_casey@hotmail.com>
> wrote:
>
> >I hope your dog is not wearing the collar when you attach the coax.
>
> Would fido be vertically polarized or horizontally polarized ??

That would depend on the length of the tail and how the dog holds it, down,
straight back or up. A husky with a curly tail ought to give you circular
polarization, great for sat. work. ;<)

> >
> >Delbert McCord wrote in message <3a419e6f.13055916@news.usol.com>...
> >>I have a R8 that is less than 6 months old and I am having problems
> >>witht he antenna also. It was working Great and then all of a sudden
> >>its like having a dummy load on the end of the coax!
> >>
> >>I checked the coax (Which is also new) and Its not shorted and gives
> >>me a perfect SWR when I connect a dummy load out there on the end of
> >>the coax. Cushcraft (After a bunch of phone tag) had me send them the
> >>matching box back to them, they tested it and returned it saying its
> >>fine. I used to get better than a 2 on every band with out my tuner
> >>now I get over a 8 swr and I can receive better if I connect the coax
> >>to my dogs collar!
> >>
> >>I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
> >>ever get from me!
> >>
> >>Worked great, Looks Great, Does not last
> >>I can not afford almost 100$ a month for an antenna!
> >>
> >>Delbert McCord
> >>KA8OCN
> >>
> >>
> >>
> >>
> >>
> >>On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
> >>
> >>>Hello to all,

> >>>
> >>>First let me say that up until now I've been a happy camper
> >>>using Cushcraft products. However, I've just learned something
> >>>that may be of interest to anyone considering purchasing a
> >>>new Cushcraft antenna.
> >>>
> >>>I recently bought an R-8 vertical. It was just damaged by
> >>>lightning and I e-mailed Cushcraft tech support regarding
> >>>parts availability....the answer was 2 sentences that suggested
> >>>I buy a new antenna and try to collect on insurance. Needless
> >>>to say, I was not happy with that so I wrote a letter to the
> >>>Cushcraft manager of amateur products. This gentleman was kind
> >>>enough to telephone me today. Essentially, the conversation
> >>>focused on the fact that the parts I needed would be so expensive
> >>>as to make buying a new antenna more practical. However, one
> >>>interesting fact did come to light. Parts for the R-8 vertical
> >>>had not been "priced" yet and were thus unavailable. Further,
> >>>Cushcraft does not "price" replacement parts until the product
> >>>has been out for 9 to 12 months. I'd suggest you keep this
> >>>in mind....if you drop your new R-8 or new whatever, you may
> >>>not be able to get parts for it for up to a year!!
> >>>
> >>>thanks & 73,
> >>>Phil
> >>>W5BVB
> >>
> >
> >
>

4790. Re: An interesting antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 03:50:07 UTC
From: fractenna@aol.com
Message-ID: <20001223225007.12021.00003327@ng-mn1.aol.com>
Source record: 174037

>
>Fractals:
>
>Fractals - simply the visible tracings of the limit cycles emitted by
>non-linear processes and systems, sometimes observable, sometimes
>controllable, sometimes not, but always beautiful.
>
>"But only God can make a tree!"
>
>We will all have to admit that trees certainly have forms reminiscent of
>fractal geometry.
>
>I believe that Mother Nature produces many of her most beautiful creations
>using fractal methods.
>
>And so... I believe that the forms of trees qualify to be called fractals.
>
>Anyone ever measure the bandwidth and number of resonances of a big old Oak
>tree? How about a Sycamore, or Cypress?
>
>-Peter K1PO
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001220100554.17365.00009750@ng-cg1.aol.com...
>> Despite W8JI's claims, I never, never, ever, said that a 'tree antenna'
>> "radiates well" from its "fractal shape".
>>
>> I invite W8JI to quote directly from this article to support his false
>> statement.
>>
>> He won't because he can't.
>>
>> Am I the ONLY one here who notices that W8JI insists on weaving a web of
>> fractal insuation and false information?
>>
>> Ask why he is doing this.
>>
>> NC
>

If either your or Thomas Rauch had read the article, neither of you would try
to put these two together. I didn't.

NC

4791. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 04:04:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4575EA.8DF6F97F@IEEE.org>
Source record: 174038

W1RFI wrote:
> One can interpret words that are not said to mean anything at all.

How dare you not say such a thing!
--
http://www.mindspring.com/~w6rca

4792. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 04:10:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A457733.2F7AC464@IEEE.org>
Source record: 174039

Bill Turner wrote:
> That's a great picture, Cecil! What does your ex-wife think about it?

"Here's a quarter, call someone who cares." :-)
--
http://www.mindspring.com/~w6rca

4793. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 04:14:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A457836.37E385AC@IEEE.org>
Source record: 174041

Alan Biocca wrote:
> I'm experimenting with two different directions - one is to automate
> the tuning of the Screwdriver, and the other is to do experiments with
> a center fixed-loaded antenna and an autotuner at the base.

K7JEB uses an SGC-230 with a base-loaded bugcatcher coil. It works
well for changing frequencies within a band. He still has to manually
change bands by changing the tap on the coil.
--
http://www.mindspring.com/~w6rca

4794. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 04:23:54 UTC
From: Anonymous <anonymous@anonymous.anonymous>
Message-ID: <3a4579f6_4@anonymous>
Source record: 174040
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I have had a Cushcraft ground mount HF in place for six years now. It still works flawlessley on all bands, including six meters and, surprisingly, two meters!
When I put this antenna together I did stray from their instruction a bit. I liberally coated all the contact points with a compound called De-Ox. This eleminates oxidation due to things such as acid rain and other elements.
I do check the antenna every two years with an MFJ antenna analyzer and I have had to readjust a couple of the coils...usuallly the 17 meter one. This antenna does flex in the wind and despite making all the connections tight, they do tend to "migrate" a little.
Suggestion: once you get the antenna set, mark the location of the coil clamps with a number two lead pencil. You can then loosen the clamps and slide them back into position and the markings seem to stay in place despite rain, snow, etc.
The only gripe I have with Cushcraft is that they charged me sixteen dollars for the six meter add-on. This consisted of nothing but two little aluminum clamps and a length of coated wire. That was kind of a rip-off and I let them know. They did not respond.
One last suggestion. Install radials under the antenna! This is important. I buried a couple dozen lengths of #12 coated household wire about two or three inches under the soil. These reflectors need not be of any specific length, though some purists may argue that point. It is important that you do this for the antenna to work well.

Name and call not given.

--------== Posted Anonymously via Newsfeeds.Com ==-------
Featuring the worlds only Anonymous Usenet Server
-----------== http://www.newsfeeds.com ==----------

4795. Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 04:35:55 UTC
From: Eric Struble <estruble@jps.net>
Message-ID: <p%e16.13584$y91.1061489@nntp2.onemain.com>
Source record: 174042

I was wondering about peoples experiences with Hamsticks. I have a 20M mounted to a metal railing and I would say it's so-so. Although it's hard to compete with the 1KWs and beams. There are numerous postings talking about Outback vs. Screwdrivers and the likes, how about the Hamstick.

Thanks,
Eric, N6PYF

4796. holidays

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 05:14:29 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <3A458635.4A900361@fgi.net>
Source record: 174043

Happy holidays to all
Art Unwin KB9MZ

4797. H.C. VanValzah Co

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 05:21:23 UTC
From: schulzr@aol.com
Message-ID: <20001224002123.11953.00004559@ng-ci1.aol.com>
Source record: 174044

Came across a 1986 antenna catalog of my father's. Is the company still in business? Didnt seem to pick it up on Yahoo or Altavista searches...

Roland
N2FHX
Roland Schulz
schulzr@aol.com

4798. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 05:22:22 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A45880E.40ACDF24@netscape.net>
Source record: 174045

Tom W8JI wrote:
>
> On Sat, 23 Dec 2000 18:03:09 -0700, Jim Fuller <jefuller@netscape.net>
> wrote:
>
> >
> >And all of this is just the DC characteristics....
> >
> >--
> >Jim Fuller
>
> Amen. It has nothing to do with the RF charcteristics.
>
> 73 Tom

But it has everything to do with what one measures using DC (or near
DC) instrumentation. That is the point.

--
Jim Fuller

4799. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 05:42:07 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t4b35fijofmof8@corp.supernews.com>
Source record: 174046

Peter O. Brackett <ab4bc@ix.netcom.com> wrote:

: Nathan assuming that he is a "authority figure"! Heh, heh... Meglomania of
: the highest order...

Yes, so it seems... an authority figure, yes, but certainly not a
public figure. Don't know how he figures that. But, then, he
figures Yuri is an escaped criminal.

...won't say any more. Still so outraged about his latest lowball
attack on Yuri that I must invoke "If you have nothing nice to say,
say nothing at all."

--Jim WB5UDE

4800. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 06:19:40 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9244hsknq0@208.207.71.156>
Source record: 174048

Tom W8JI wrote:
>
> Hi Mark,
>
> On Sat, 23 Dec 2000 17:59:48 -0600, Mark Keith <nm5k@wt.net> wrote:
>
> >I think I know how he will go about it as I have his earthres program. I
> >had remembered that a little while ago and checked it out again. But the
> >only thing is here, I keep getting varied results trying to use
> >different metering. Seems you need quite a bit of voltage and current to
> >get an accurate reading. If I use my power line ground as a zero
> >reference point, as one method, and try to use different meters to
> >measure, I get different readings with each meter depending on the
> >voltage used for ohms measuring, etc. I have a 45 volt Bell telephone
> >ohm meter with reversable polarity, but it's resolution is too low for
> >the ham use it seems.
>
> If you are measuring the resistance at 60 Hz, you are deluding
> yourself if think it will mean anything at 2 MHz.

Tom wouldn't that be more in line with checking ground conductivity
with a view toward installing a ground system for lightning protection?
Don't they commonly use a Megger for that? Last hamfest I picked up a
late model like new Megger that had no probes, cables nor manual. Can
you give a few short hints on how to set it up and use it? Years ago I
watched a crew using one but don't remember the details.

Thanks, Dick

4801. Re: wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 08:06:20 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A45AE7C.1887154C@haertig.com>
Source record: 174049

The problem, always, with shortwave and AM reception, isn't getting enough signal, it's minimizing the man made noise. Don't worry about getting a lot of wire up, or what shape the antenna is, concentrate on keeping it away from local noise sources. The biggest source of noise is the AC wiring in your (and your neighbor's) house, it conducts noise from more distant sources right to the area where your antenna might be. In your house, the biggest noise sources are your television (and computer monitor), your computer, light dimmers, touch control lamps, motors with brushes, neon signs.

You are generally better off putting up less wire, but getting it out in open as much as possible. You should use coax to run from the antenna to the receiver. You could use your cablevision system to distribute the signal around the house, however the splitters won't work at these frequencies, so you will have to hard connect the coaxes together to get where you want to. I wouldn't use T's because the unused legs are a possible entry points for noise. This means that just one outlet would be active at a time.

You also have to be very careful not to conduct noise back out to the antenna on the outside of the outer conductor of the coax. I try to take the coax straight down from the antenna to the ground and run it on the ground back to the house (buried or in buried conduit is even better). Elevated runs tend to turn your coax into part of the antenna. Ground the shield of the coax where it enters the house and where the coax meets the ground under the antenna. I also float the radio and anything connected to it by using an AC ground lifter with the ground terminal unconnected.

You might also look into loop antennas, especially for AM reception. They have the advantage of being able to null out a signal in one direction (actually two directions 180ï¿½ apart). One of the best made AM loop antennas is made by Kiwa, of Yakima, Washington.

I use a homebrew amplified whip antenna for LF and SW dx'ing. There are a number of similar commercial antennas available. They have the advantage of being generally small in size, so they are more easily located in an area of low local noise.

You can also take a portable radio, tune it to a relatively quiet AM channel, and go around your back yard "sniffing" for relatively quiet spots. Be sure to do this several times at different times of day and on both weekdays and the weekend so that you get an idea of how the noise situation changes.

Good luck and let us know how things turn out for you.

Gray

mrhuntnpeck wrote:
>
> I would like to build a simple antenna to pick up am and short wave
> stations so that I can listen to some of my vintage (1930's) radios.
>
> I was thinking that I could use cablevision wire and outlets inside
> the house and run it from the top of the roof to one of the trees in
> the yard about 40 feet away, or to hang it a foot or so above the peak
> of the roof.
>
> I am in the city. just outside Vancouver . B.C. Canada.
>
> I am wondering if multistrand wire is better, or if single strand
> wire is enough, and how heavy a guage I should use , and if it needs
> to be bare wire, or if insulated wire is ok. I understand that a
> ground wire should be near the antanna just in case it gets struck by
> lightening, I could use some info on just how the best way to rig
> this would be. I have plenty of insulators
>
> I am also wondering how much wire is best to use. I could make kind of
> an L shape by going to a nearby clothsline pole as well. would running
> it back and fourth to use more wire help, or make it worse?
>
> I have a piece of bronze mesh from part of a paper mill here it is
> about 2 feet by four feet, and is made with lots of wire, I was also
> considering using this as well or instead. I have it hooked to my
> radio in the basement which gets me local stations, but not too much
> else. can I expect to pick up much more with a better antanna? are
> there very many short wave stations anyway? I only get a couple now.
>
> any help , or tips would be greatly appreciated .
> Phil

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4802. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 11:13:41 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A45DA64.57E10378@ipeg.com>
Source record: 174050

W1RFI wrote:

> >From: Brian Kelly kelly@dvol.com
>
> >I don't know of any published data which indicates that trees have any
> >noticeable effect on verticals at HF freqs.
>
> I recall seeing a study done by the US military on HF. As I recall, when I made
> some assumptions about the spacing between trees and their figures for the
> attenuation in dB/mile of deducious forest, I estimated about 0.01 dB/tree.
>
> 73,
> Ed Hare, W1RFI

Some years back, W1JR published an article on absorption at VHF/UHF. I suspect he has some information on HF as well.

marty...
N7MX

4803. MFJ web site sought !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 12:10:20 UTC
From: Eldred <egdv@mjvn.co.za>
Message-ID: <3a45e90f$0$232@hades.is.co.za>
Source record: 174051

Can anyone please tell me if there is a web site for the company "MFJ" ?
Or if not, then a business that stocks a variety of MFJ ATU's (Antenna Tuning Units).
Thanks in advance.
Season's greetings to all of you and your loved ones.
Regards
Eldred

4804. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 12:23:35 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A45EAC7.556C@wt.net>
Source record: 174052

Tom W8JI wrote:

>
> If you are measuring the resistance at 60 Hz, you are deluding
> yourself if think it will mean anything at 2 MHz.
>
> Totally.
>
> 73 Tom

I was wondering exactly that yesterday. Wasn't sure if the conductivity
at that freq would apply to higher freq rf or not. Reg has a few notes
about that in his program, but I'll let him explain those. MK

--
http://web.wt.net/~nm5k

4805. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 12:34:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A45ED60.25A4@wt.net>
Source record: 174053

Eric Struble wrote:
>
> I was wondering about peoples experiences with Hamsticks. I have a 20M
> mounted to a metal railing and I would say it's so-so. Although it's hard to
> compete with the 1KWs and beams. There are numerous postings talking about
> Outback vs. Screwdrivers and the likes, how about the Hamstick.
>
> Thanks,
> Eric, N6PYF

Basically an outbacker and a ham stick are about equal I would think.
Tne outbackers are just hamsticks with the abilty to change taps. A good
screwdriver should outdo either one. But you can improve the hamsticks.
How long is the stinger whip on your antenna? If it's short, you can
definitely improve the antenna by using a longer stinger, and reducing
the amount of windings. Or you can just take a 10-15 meter stick and use
the longer whip to tune for 20m. A 10m stick on 20m, is lot better than
a 20m stick on 20m. It's always better to use capacitive loading than
inductive loading if it's possible. Also the helical sticks need the
capacitance on top to work decently. A helical stick with a little
stubby short stinger is going to be lousy almost every time. A top
loaded 10m stick can be tuned to 20m with about 2 ft of stinger. Also
your metal railing mount probably leaves alot to be desired I bet. Make
sure its grounded to the frame real good. I assume you are talking about
a mobile. MK
--
http://web.wt.net/~nm5k

4806. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 12:59:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <924u3u$3l0$1@neptunium.btinternet.com>
Source record: 174057

Dear Tom,

Please stop putting out your smoke screen. It is not "ground loss" we are discussing the measurement of. It is the "input resistance" of a radial. It is measured in ohms. I'm sure you have an impedance bridge of some sort. At a pinch you could make use of your SWR meter.

The radiation resistance of a 1/4-wave vertical is 37 ohms. Do you agree ?

If a 1/4-wave vertical antenna has only one radial and the input resistance of that radial is 37 ohms (a common sort of value) then the radiating efficiency is 50 percent and field strength will 3 dB down relative to the ideal system.

If your soil is poor and the input resistance of the one solitary radial is 111 ohms, then field strength will be 6 dB down, or one S-unit, relative to the ideal system.

According to John Cleese I should now be granted a Cambridge 1st-class honors degree in the art of stating the bleeding obvious.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Tom W8JI <2w8ji@contesting.com> wrote in message news:3a45207a.92000269@news.akorn.net...
> On Sat, 23 Dec 2000 16:43:34 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Tom, you are like that trio of 1937 experimenters, not one
> >of whom sufficiently understood what they were investigating
> >to take the elementary precaution of measuring the
> >conductivity of the soil in which they laid their 113
> >radials.
>
> Hi Reg,
>
> I take it you are an experienced low-band operator. A

person who has
> many antennas to compare, and who does so frequently.
>
> Please, as a demonstation of how accurate and thorough you
are, tell
> me how to measure ground loss with an antenna analyzer.
>
> Maybe you could also tell me how to accurately measure
soil
> conductivity in a small area wher the radials sit.
>
> 73 Tom

4807. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:21:02 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45f6cd.146875623@news.akorn.net>
Source record: 174054

On 24 Dec 2000 06:19:40 GMT, Dick Carroll <dixie@townsqr.com> wrote:

> Tom wouldn't that be more in line with checking ground conductivity
>with a view toward installing a ground system for lightning protection?
>Don't they commonly use a Megger for that? Last hamfest I picked up a
>late model like new Megger that had no probes, cables nor manual. Can
>you give a few short hints on how to set it up and use it? Years ago I
>watched a crew using one but don't remember the details.
>
>Thanks, Dick

Hi Dick,

Lightning has significant energy from a few dozen Hz to many MHz, with
peak energy at a few hundred kilohertz.

The best idea is to just design the system correctly with that and
mind.

That aside, I'm sure a dc resistance test is a lot more useful for
lightning than a 2 MHz and higher transmitter...although it still may
mislead you into a false sense of security.

For example, what if I had a 600 foot deep "ground rod" in normal
soil?

At DC it would look very good, yet most of the energy in lightning
wouldn't even see anything but the forst few feet of the "rod".

73 Tom

4808. Re: MFJ web site sought !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:23:58 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A45F8EE.3090406@hiwaay.net>
Source record: 173928

try this link:

http://www.mfjenterprises.com

This will lead you also to Ameritron and their other subs that make tuners.

Good luck- es happy season!- Bill-W4BSG

Eldred wrote:

> Can anyone please tell me if there is a web site for the company "MFJ" ?
> Or if not, then a business that stocks a variety of MFJ ATU's (Antenna
> Tuning Units).
> Thanks in advance.
> Season's greetings to all of you and your loved ones.
> Regards
> Eldred

4809. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:30:10 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45f81d.147211510@news.akorn.net>
Source record: 174055

On Sun, 24 Dec 2000 06:23:35 -0600, Mark Keith <nm5k@wt.net> wrote:

>I was wondering exactly that yesterday. Wasn't sure if the conductivity
>at that freq would apply to higher freq rf or not. Reg has a few notes
>about that in his program, but I'll let him explain those. MK

First, let me say I hate to disagree with my friend Reg. I admire
Reg's confidence and superior attitude, and especially his ability to
retain it when he doesn't know what he is talking about.

Putting my praise of Reg aside, soil characteristics vary widely with
frequency. What you measure at 60 Hz has nothing to do with 2 MHz.

One poor fellow in SW Michigan was always busy measuring people's
ground conductivity using the light bulb thing in the Handbook. He
concluded that his friend's soil was almost 200 mS/m while his, a few
miles away, was about 1 mS/m.

Bizarre tests = bizarre results.

73 Tom

4810. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:31:05 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45fa47.147765793@news.akorn.net>
Source record: 174056

On Sat, 23 Dec 2000 19:02:25 -0800, Bill Turner <w7ti@jps.net> wrote:

>On Sat, 23 Dec 2000 18:29:32 GMT, tom_bruhns@agilent.com wrote:
>
>>for instance, 60-40 starts to melt at the same temp, with solid and
>>liquid existing together over a range of temps.
>____
>
>Right, and this is what you don't want - a range of temps with liquid and solid
>existing together. 63/37 doesn't have this and that's why it is preferred.
>
>Don't feel bad if this is a little puzzling. The solder industry took a long
>time to figure it out too.
>
>73, Bill W7TI

Are you supposed to solder connections?

4811. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:36:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <924u40$3l0$2@neptunium.btinternet.com>
Source record: 174058

Everybody knows that soil conductivity is liable to increase
or decrease with the depth of the various layer
compositions. Its obvious. So what ?

If your measuring electrodes are only a few feet apart, and
only a few feet deep, then the measured soil resistivity
will be that of the volume of soil you are REALLY interested
in - ie., down to the few feet of the HF skin depth.

Furthermore, if measurements are made at RF or HF then the
relative importance of the conductivities of the various
shallow layers, if there are more than 1, is automatically
sorted out.

A practical analysis of what is involved is more simple than
an academic, armchair, gazing up at the ceiling, study might
indicate.

There's no need to complicate matters by testing between
giant electrodes spaced miles apart where the conductivity
of the Earth's molten core might have some effect.

It may be of mild interest I have measured the impedance and
voltage between electrodes spaced 2500 miles apart, on
either side of the Atlantic. But I can assure you the
results have no bearing on the present discussion topic.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Jim Fuller <jefuller@netscape.net> wrote in message
news:3A454B4D.4130EFFD@netscape.net...
> Mark Keith wrote:
> >
> > .... Seems to me, I could just
> > use the power ground as a ground reference point and run
a light bulb
> > off 110v and then measure the current and voltage. Then
stick a rod out
> > in the yard, and measure again, except use the ground
rod as the ground
> > return and measure the voltage drop....
>

> What you are approaching is known to geophysicists as
Vertical
> Electric Soundings, or just "resistivity" measurements.
The
> complicating factor is that the apparent resistivity (and
measured
> resistance) on the surface is affected by the
resistivities of
> various layers of soil and rock to a surprising depth.
>
> Field data are collected using a logarithmically spaced
array of
> electrodes, and the interpretation is a fairly arcane art.
The old
> traditional method is to plot the measured values on log
log paper,
> then use books of overlay curves to find matches to
various parts of
> the measured curve, eventually coming up with a layered
earth model
> with each layer's resistivity and thickness.
>
> There is no way to go from the field data (measurements)
to a model;
> there is a way to go from a model to the measurements that
you would
> see. Computer analysis involves starting with a
guesstimate for the
> model, then calculating the measurements that would
result, comparing
> those calculated values with the real values, and
perturbing the
> model for a better fit in an iterative method of
successive
> approximations until you get a solution that is within
your specified
> limits of uncertainty, usually expressed as an RMS error
(difference)
> between the calculated model results and the actual field
data.
>
> Many years ago, I developed a program to do just that, but
that was
> many years ago, and HP doesn't even make the workstations
on which it
> ran anymore (I don't think that they even remember making
them...).
>
> The values that you will measure at the surface are
affected by

> various layers including the surface soil, the deeper
soil, the
> underlying rock and/or deep soil layers, and so on, and
the effects
> are surprisingly strong. In general, a layer will affect
readings at
> electrode spacings considerably shorter than the layer's
depth,
> depending upon the resistivity contrasts between various
layers.
>
> Undersoil topography will also affect the surface readings
quite a
> bit.
>
> It is a fairly complex subject. Most engineering
geophysics texts
> will discuss it.
>
> This whole concept is the original contribution of the
Schlumberger
> brothers, who were very interested in the electrical
properties of
> the Earth, and who took time from the family vineyards to
experiment.
>
> And all of this is just the DC characteristics....
>
> --
> Jim Fuller

4812. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:37:04 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45fada.147912728@news.akorn.net>
Source record: 174059

On 24 Dec 2000 03:45:03 GMT, fractenna@aol.com (Fractenna) wrote:

>If ALL you were interested in was 'ham radio' you would not have focused on me
>for personal attacks; malicious libel; incorrect and misleading statements and
>characterizations; incorrect and ignorant comments to a New York Times
>reporter; and so on.
>
>You have had 3 years to voluntarily end this behavior; the voluntary option
>indeed disappears with the new year.
>
>It is 'up to you' only for a short time more, and with NO--repeat NO-- further
>attacks against me on this public forum.
>
>Nathan Cohen, Ph.D.

Hi Nathan,

Just wanted to remind you, you are not only a chronic liar you are
totally insane.

Have a nice New Year.

73 Tom

4813. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:42:35 UTC
From: 2w8ji@contesting.com
Message-ID: <3a45fc22.148240396@news.akorn.net>
Source record: 174060
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 23 Dec 2000 23:23:54 -0500, Anonymous
<anonymous@anonymous.anonymous> wrote:

>The only gripe I have with Cushcraft is that they charged me sixteen dollars
>for the six meter add-on. This consisted of nothing but two little aluminum
>clamps and a length of coated wire. That was kind of a rip-off and I let
>them know. They did not respond.

Years I did a cost analysis of what it takes to ship an empty box. It
was less the actual postage charges, but included taking the order
and all the paper work.

It was about $18.

I suppose if you throw in the time to answer complaints or questions
from cheap whining hams, the cost would be even higher.

73 Tom

4814. Re: MFJ web site sought !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:43:38 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <VP1FOuno8R=czvJGqgx1zgjoudR5@4ax.com>
Source record: 174062

"Eldred" <egdv@mjvn.co.za> wrote:

>Can anyone please tell me if there is a web site for the company "MFJ" ?
>Or if not, then a business that stocks a variety of MFJ ATU's (Antenna Tuning Units).
>Thanks in advance.
>Season's greetings to all of you and your loved ones.
>Regards
>Eldred

Try http://www.mfjenterprises.com/index.htm

Bob
k5qwg

4815. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:44:57 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A45FDD9.97D0DB1@mwci.net>
Source record: 174061

> Tom W8JI wrote:
>
> >
> > If you are measuring the resistance at 60 Hz, you are deluding
> > yourself if think it will mean anything at 2 MHz.
> >
> > Totally.
> >

If it reads open circuit at 60 Hz, does that give a clue about what it might mean at 2 MHz? I think it does. If so, can the capacitance to ground alone at 2 MHz be enough to assure a good ground? I think not.

If it reads a very low value, say 10 ohms, at 60 Hz, does that give some indication about the basic quality of the ground connection at HF? I think it does. Especially if the lead wires are short, low inductance straps.

Based on experience, I think a low 60 Hz measurement does not tell the whole story from 2 to 30 MHz, but if there is no further info, it is still worth something, and not worthless.

We don't always have to be rigorously scientific about everything, especially when characterizing ground conductivity, even approximately, over a wide frequency range means more trouble than hardly any Amateurs want to get involved with.

Bill W0IYH

4816. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 13:52:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <924v2p$51j$1@neptunium.btinternet.com>
Source record: 174063

Tom sed -
> If you are measuring the resistance at 60 Hz, you are
deluding
> yourself if think it will mean anything at 2 MHz.
==========
Tom, how do you know ? That's a damning statement.

Have you ever measured earth resistivity at 60 Hz and at 2
MHz and studied the relationships ?

Or 30 MHz ?

As I recollect, your preferred method of determining ground
conductivity is to set up at great expense an LF or MF high
power broadcasting station and then take ground-wave field
strength measurements at distances of every mile from 1 up
to a 1000.

Reg, G4FGQ

4817. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 14:11:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A460406.EC82F07A@IEEE.org>
Source record: 174064

Mark Keith wrote:
> Basically an outbacker and a ham stick are about equal I would think.

True on the higher bands, but on 75m an Outbacker is about 3dB
better than a hamstick. On 75m, an Outbacker is about 9dB down
from a good bugcatcher or screwdriver. On 75m, a Hamstick is
about 12dB down from a good bugcatcher or screwdriver.
--
http://www.mindspring.com/~w6rca

4818. Effect of snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 15:00:50 UTC
From: kleinNO@SPAMgilhousen.net
Message-ID: <3a470f7d.153677586@news>
Source record: 174065

Has anyone ever determined the effect, if any, of snow on the
properties of the ground as it effects vertical antennas?

Klein Gilhousen, WT6G
Bozeman, MT

4819. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 15:21:37 UTC
From: Jim Fuller <jefuller@netscape.net>
Message-ID: <3A461481.4C879F89@netscape.net>
Source record: 174066

Reg Edwards wrote:
>
> Everybody knows that soil conductivity is liable to increase
> or decrease with the depth of the various layer
> compositions. Its obvious. So what ?

So far, it has been my experience that things which "everybody" just "knows" are usually wrong.

> If your measuring electrodes are only a few feet apart, and
> only a few feet deep, then the measured soil resistivity
> will be that of the volume of soil you are REALLY interested
> in - ie., down to the few feet of the HF skin depth.

No, that's not true. The depth and the extent of the soil that affects your measurement is more than you think, and the effect is more complicated.

To find the resistivity of that surface layer, you have to measure at several spacings, then do the exercise to resolve the layers. That's the only way to get there, and it is not nearly so simplistic as you make it out to be.

> Furthermore, if measurements are made at RF or HF then the
> relative importance of the conductivities of the various
> shallow layers, if there are more than 1, is automatically
> sorted out.

Measuring at the frequencies of interest is good.

> A practical analysis of what is involved is more simple than
> an academic, armchair, gazing up at the ceiling, study might
> indicate.

My point exactly. And I have done a lot of practical, applied, in the dirt resistivity surveys. So, you really should get awsay from your armchair and plant some electrodes.

> There's no need to complicate matters by testing between
> giant electrodes spaced miles apart where the conductivity
> of the Earth's molten core might have some effect.

When the discussion degenerates to wild straw men from the hinterplanets, it is time to leave.

If you take the time and make the effort to leave the armchair, then you will find that there is a large, rich body of knowledge and expertise in the field of measuring and determining soil

resistivity,-- real, in the dirt, practical expertise and applications. I pointed you in that direction. It does not depend upon your visitng it for its practicality and validity. But the practicality and validity of your results depend upon your visiting that body of knowledge and understanding at least part of it.

--
Jim Fuller

4820. Trees Absorbing RF, Fractals, Seasonal Goodwill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 15:41:04 UTC
From: Bill <bill@g4zrb.demom.co.uk>
Message-ID: <977672413.13304.0.nnrp-01.c2de39c9@news.demon.co.uk>
Source record: 174067

I thought I would connect a few recent themes with a dash of seasonal good will.

I recently constructed a scale model of a fractal antenna for 70cms - i.e. I bent a piece of wire a few times. I put this down to help decorate the house for the festive season and when I returned I couldn't find the aerial anywhere at first.

And then I saw that my son had fixed it to the top of the "Christmas" tree! I have to say it makes quite a neat "secular" kind of star. [I guess that puts it in the public domain, so no patent rights for me...]

But it raises quite a few questions about the effect of the nearby branches [and for that matter, other nearby Christmas trees]. Will it still have the alleged gain associated with this design?

And if you're in a house of some opulence, is it worth stacking two Christmas trees for a 3db gain?

For those who don't seem to believe in fractal aerials any more than they believe in Santa Claus, I open the possibility of using this mounting for more conventional vertical designs. In this case the fairy light wiring can provide useful elevated/drooping radials.

If nothing else: just let your neighbour try complaining to anyone that he believes your Christmas tree is breaking through on his television...

Wishing you all the best greetings of the season,

Bill, G4ZRB

4821. Re: Effect of snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 15:41:54 UTC
From: Kevin Alfred Strom <kevin.strom@innocent.com>
Message-ID: <3A461942.39E956F0@innocent.com>
Source record: 174068

Klein Gilhousen wrote:
>
> Has anyone ever determined the effect, if any, of snow on the
> properties of the ground as it effects vertical antennas?
>
> Klein Gilhousen, WT6G
> Bozeman, MT

In northern Virginia, where I did many mediumwave proofs of performance, the snow was generally of the "wet" variety, with significant melt and ground wetting within a few days at most.

Snow always meant significantly increased conductivity and ground wave field strength in my experience there.

I have no experience with measurement during dry, powdery snow conditions which dominate some climates in the Winter.

With all good wishes,

Kevin, WB4AIO.
--

Kevin Alfred Strom.

News, links, and pictures: http://www.kevin-strom.com

4822. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 15:47:16 UTC
From: Keith K5WX <keithz_nozpam@austin.rr.com>
Message-ID: <3A461A85.55C4D39F@austin.rr.com>
Source record: 173919

Dear Yuri,

Just wanted to wish you a Merry Christmas.

I'm sorry you have suffered from some of the words on the antenna news group. When I was a teenager, I sent a couple of dollars to try to support Lubomir Kavalek. He was a chess grandmaster in Czechoslovakia. He suffered greatly reaching for freedom.

Take care,

Keith Zimmermann, K5WX

Yuri Blanarovich wrote:

> Nathan Cohen, PhD wrote this crap:
>
> >Yuri has asserted that he was to be JAILED for 5 years. Notice he never said
> >why; it is only crass assumptions and speculations that ascribe this to
> >'freedom fighters'.He never, ever, said this.
> >
> >I asked a Czaech friend of mine, who escape with his family during the 68
> >invasion. He knew quite a few hams and his father was an engineer then. What
> >he said was very curious--.
> >
> >"This Yuri fellow has a Russian name. Did he defect?"
> >
> >I also asked a Russian co-worker. He said:
> >
> >"Yes Chip. He is Russian name. Ask where he came."
> >
> >So, Yuri, again we wonder: what is it exactly you were arrested for and
> >sentenced for? Who did the sentencing? What is your status in the US and
> >Canada?
> >
> >What passport do you travel under?
> >
> >73
> >Chip N1IR
>
> You piece of low life crap!!
>
> What the hell are you? GESTAPO? KGB? MOSSAD? CIA? FBI?
> What right do you have to ask those questions or snoop into my background?
> Calling me a criminal? Ask your lawyer what that is called!
>

> First you are playing superiority contest card and accusing me of things that
> you have no clue about. when you get an egg in the face then you start
> investigating me? What gives you pleasure to try to screw people?
>
> Answer to your uncalled for and stupid questions has been for years on my home
> pages. You making criminal out of me in the public forum. Memory of my murdered
> father and sister and suffering that we went through will haunt you and your
> children and you will be "rewarded" for that!
> You can't even read and comprehend a sentence and you are professing to be an
> authority on something?
> I was never arrested you piece of shit, I do not have a Russian name, I was
> never in Russia, and it is non of your frucking business what passport I have
> or what I eat. You stick your nose into your wife's ....
>
> Do us all favor and get the hell out of this NG and seek help. You are becoming
> dangerous, besides being pathetic.
>
> 73 and have a happy holidays!
>
> Yuri
> http://members.aol.com/k3bu/
> http://members.aol.com/ve3bmv/
>
> Sorry NG, I can't take this shit, I am into ham radio to make friends and not
> this, to be accused of being criminal, for what?
> SK

4823. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 16:06:58 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <pap16.7804$wE3.7395@newsfeed.slurp.net>
Source record: 173920

Interpret all that yet?

--

73, Dave, K3BHJ

4824. Re: Carolina Windom 160

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 16:31:54 UTC
From: rm10161@aol.com
Message-ID: <20001224113154.18066.00013383@ng-fi1.aol.com>
Source record: 173921

Hi Emory,

I have the (I think 160 cw model) cut for 80m but the catalog says you can use it for 160m as well. The antenna works quite well even compared to my yagi and Inverted L. The only thing I didn't like were the crimped on PL 259 connectors. I was getting intermittent poor SWR and it was traced to poor electrical contact of the shield on the crimp connector. Fifteen minutes later a new connector was soldered re-attached and the antenna is FB. I think they are good performers. I use it on all bands up to 10m with a Tuner.

73
Faris N2FH

4825. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 16:43:17 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92593q$bs7$1@iac5.navix.net>
Source record: 173923

Idiot! Go two his web sight where he outlenes in detale the evnets. I wood tell you the web sghite, howeevr you wood learn nuthing if you did not serrch on your own. It is not my place to edukate those that will make no effort on their own to be infirmed.

Pleze note, that in order to convey the infermation I have used the type of spelling and sensun stuksure you are more accumsted two.

"Fractenna" <fractenna@aol.com> wrote in message > So, Yuri, again we wonder: what is it exactly you were arrested for and
> sentenced for? Who did the sentencing? What is your status in the US and
> Canada?
>
> What passport do you travel under?
>
> 73
> Chip N1IR

4826. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 16:51:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A46297D.6BA6@wt.net>
Source record: 173924

William E. Sabin wrote:

>
> Based on experience, I think a low 60 Hz measurement does not tell the
> whole story from 2 to 30 MHz, but if there is no further info, it is still
> worth something, and not worthless.
>
> We don't always have to be rigorously scientific about everything,
> especially when characterizing ground conductivity, even approximately,
> over a wide frequency range means more trouble than hardly any Amateurs
> want to get involved with.
>
> Bill W0IYH

I tend to agree there. It's nice to know I guess, but from a practical antenna standpoint I assume the worst and go from there. I think thats a safe way to go if you want consistant results. Thats why they still run 90-120 radials in this area of good conductivity. I'd rather be overkill than underkill. Take a survey of all the people runnng antennas with underkill radial systems on the low bands, and most say they don't work well. Almost to a person. Take a survey of the overkill bunch, and the opposite seems to be true. To me, using the bandwidth as an indicator of radial effectiveness should be pretty accurate. Normally, when you approach saturation, adding more radials will cause very little reduction of bandwidth. Being as this test is done at the operating frequency, I don't see how you can go wrong. I have no problems with Reg's math. But I don't share his assumption that most ground is good enough to get away with 2 radials and have good DX performance.
Take this excerpt as an example:

<If your soil is poor and the input resistance of the one solitary radial is 111 ohms, then field strength will be 6 dB down, or one S-unit, relative to the ideal system>

Now, I have no trouble with the theory of that at all, but if thats a "poor" ground and you only see 6 db difference, that means most of the people in the US must have HORRIBLE ground conditions. Tom for example saw about 10 db from 2 to 60 radials. Thats means Tom's ground must really be the pits going by Reg's example. So you see my problem here. While Reg's math is correct in theory, it doesn't really seem to match the conditions and results we see here in most cases. I wish I had 60 radials ready to go so I could test against two here.But I don't at this time, and also my radial system will be a bit lopsided as the antenna is on one end of the yard. I can only cover about 270 degrees. The next door house is in the way of the other 90 degrees. So anyway, to each his

own I guess, but I think I will stay with the overkill route and not have to worry about "what if????" That antenna's main job as designed is to work low angles on 160m. I don't want to cripple it by being chinchy on wire. Also if you use a shortened vertical the ground system becomes even more important. My inv L is probably more on the order of 10-15 ohms radiation resistance rather than 37. And my antenna still full length.
Get one of these real short verticals running 5 ohms or less and the ground system is very critical. I guess my whole "bafflegab" on verticals stems from the people that I hear that try them and say they don't work, but they don't bother to put in a decent radial system, or use the proper amount of radials on an elevated system.
There is no free lunch. If they want a "good" vertical , they have to do the work involved to make a complete antenna. If they are satisfied with a "so-so" vertical, then yes, I guess they can get by with less, but place the blame where it belongs when it doesn't work up to expectations. MK

--
http://web.wt.net/~nm5k

4827. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 17:00:49 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A462BC1.22D2@wt.net>
Source record: 173925

Cecil wrote:
>
> Mark Keith wrote:
> > Basically an outbacker and a ham stick are about equal I would think.
>
> True on the higher bands, but on 75m an Outbacker is about 3dB
> better than a hamstick. On 75m, an Outbacker is about 9dB down
> from a good bugcatcher or screwdriver. On 75m, a Hamstick is
> about 12dB down from a good bugcatcher or screwdriver.
> --
> http://www.mindspring.com/~w6rca

How long was the stinger on that 80m hamstick you tried? They make alot of different varieties. Some much better than others. They make a "bigger coil" version stick with a fairly long stinger I bet would fare well against the outbacker, but if it were one of the standard "slim stick" versions with a short stinger I could see it being lousy. MK
--
http://web.wt.net/~nm5k

4828. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 17:23:07 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Nhq16.8722$wE3.7580@newsfeed.slurp.net>
Source record: 173926

Hi, Reg:

I'm not too proud, or pleased, to state that the obvious escapes me from time to time.

Reg, eleison. I've never understood the syntactical usage of the second aorist passive optative in certain obscure Homeric odes, either.

I agree that the RsubR of a 1/4-wave vertical is 37 ohms.

You agree (I hope) that I can not measure field strength with a Z-bridge, or swr meter.

I'll now restate what I thought was the bleeding obvious question, in another fashion:

Given those stipulations, and that the soil k = = constant, with what procedure do I discover that the input resistance of one radial is, or may be, a common sort of value, say, 37 ohms, (or 111 ohms) using my Z-bridge, or, in a pinch, my SWR meter?

Thanks!

Merry Christmas and HNY.

--

73, Dave, K3BHJ

4829. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 17:29:51 UTC
From: k1bqt@aol.com
Message-ID: <20001224122951.01478.00002776@ng-mb1.aol.com>
Source record: 173927

Yuri--

How does one explain why one child unfortunate enough to be born into hellish circumstances struggles, grows, escapes, and thrives---while another child born of privlege and wealth works tirelessly to conjure demons, destroy gifts, and tempt misfortune? It's a goofy world.

Happy holidays.

Rick K1BQT

4830. Re: H.C. VanValzah Co

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 18:14:18 UTC
From: Eddie Bryant N4UMJ <N4UMJ@carolina.rr.com>
Message-ID: <_1r16.115028$4K4.19396044@typhoon.southeast.rr.com>
Source record: 173929

I bought a couple of antenna accesories from him at the Shelby, NC
Hamfest probably over 5 years ago. Have not seen or heard from
that company since.

Eddie N4UMJ
Bryant

SCHULZR <schulzr@aol.com> wrote in message
news:20001224002123.11953.00004559@ng-ci1.aol.com...
> Came across a 1986 antenna catalog of my father's. Is the company still
in
> business? Didnt seem to pick it up on Yahoo or Altavista searches...
>
> Roland
> N2FHX
> Roland Schulz
> schulzr@aol.com
>

4831. Re: Effect of snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 18:21:41 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A463EB6.9E57109F@haertig.com>
Source record: 173932

Dry snow has virtually no effect on MW ground conductivity and hence
groundwave field strength. No experience at HF, though I expect that
the effect there is minimal, as well.

Gray

Kevin Alfred Strom wrote:
>
> Klein Gilhousen wrote:
> >
> > Has anyone ever determined the effect, if any, of snow on the
> > properties of the ground as it effects vertical antennas?
> >
> > Klein Gilhousen, WT6G
> > Bozeman, MT
>
> In northern Virginia, where I did many mediumwave proofs of
> performance, the snow was generally of the "wet" variety, with
> significant melt and ground wetting within a few days at most.
>
> Snow always meant significantly increased conductivity and ground
> wave field strength in my experience there.
>
> I have no experience with measurement during dry, powdery snow
> conditions which dominate some climates in the Winter.
>
> With all good wishes,
>
> Kevin, WB4AIO.
> --
>
> Kevin Alfred Strom.
>
> News, links, and pictures: http://www.kevin-strom.com

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4832. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 18:50:12 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4643c7.166584784@news.akorn.net>
Source record: 173930

On Sun, 24 Dec 2000 12:59:57 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Dear Tom,
>
>Please stop putting out your smoke screen. It is not
>"ground loss" we are discussing the measurement of. It is
>the "input resistance" of a radial. It is measured in ohms.
>I'm sure you have an impedance bridge of some sort. At a
>pinch you could make use of your SWR meter.

Dear Reg,

You are the one who stated, or implied, you could determine the earth
loss in a vertical antenna system using a hand held analyzer, not me.

It's you who are spewing out the smoke old man.

I'd wager a lot of other people who have worked with the problem all
know (or at least they should know) what is measured at the base of a
vertical does not tell you the whole story, or even half of the story.

Of course that would mean you'd have to say "I don't know" or "the
problem is complex", two phrases you haven't learned.

73 Tom

4833. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 18:52:54 UTC
From: 2w8ji@contesting.com
Message-ID: <3a464547.166968509@news.akorn.net>
Source record: 173931

On Sun, 24 Dec 2000 12:23:07 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>Given those stipulations, and that the soil k = = constant, with what
>procedure do I discover that the input resistance of one radial is, or may
>be, a common sort of value, say, 37 ohms, (or 111 ohms) using my Z-bridge,
>or, in a pinch, my SWR meter?

Dave,

You can measure the resistance presented at the common point by one or
by many radials....but that impedance does not tell you how much power
is dissipated and how much is radiated.

That's why FS measurements are necessary to prove a system works as it
is supposed to.

73 Tom

4834. An Omnidirectional Greeting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 19:45:25 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A465249.6F50A897@home.com>
Source record: 173934

Merry Christmas and Happy Hanukah to all on the newsgroup
which I look forward to reading every day. May your
antennae, however humble they may be, bring you hours of
operating pleasure. 73 and Good Propagation!

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4835. Need Antenna Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 19:49:47 UTC
From: Bill <bill@hovac.com>
Message-ID: <925jku$1579$1@box6.cho.cstone.net>
Source record: 173936

Hi to everyone and Happy Holidays!

I recently aquired a 4 element tribander which looks much like the Cushcraft AH4, that the previous owner says is a Telex. I don't have a manual for it and can't find one. So I downloaded the manual for the Cushcraft hoping it would be the same. However the elements on my antenna are about 2 feet longer than the manual says the Cushcraft would be.

I have the measurements from when I took the antenna down but would like to find a manual. Any help on locating one would be great. Sorry I don't even know the model number but like I said, it looks just like the Cuscraft AH4 (picture at :

http://www.cushcraft.com/amateur/hamcat.pdf).

Thanks for all the help in advance.

Bill N4DXR

4836. Re: Do Trees Absorb RF ?? (Re-visited)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 19:50:41 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A465391.E7BC9052@oio.net>
Source record: 173935

Peter,
Not a stub! It's called a 'stump'.
'Doc

4837. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 19:53:12 UTC
From: Ted Bruce W2ICV <>
Message-ID: <chkc4tc9bfrsrrnfojn54tkk2efg6rmqoa@4ax.com>
Source record: 173933

My brain hurts. This isn't quantum mechanics. I just read Les Moxon's (G6XN) RSGB book. Bunch of radials, any length. Or, as Les says, dig a quarter wavlength hole in the ground, stick one end of your half wave dipole in the ground - don't touch that dirt! - and bingo! You've got it.

Also, my dirt isn't a quarter wavelength of anything. Neither are my 16.335675 foot radials laying in contact with ever-changing ground conductivity characteristics except at any single point in time.

4838. Converting HV7A Mobile to Base Operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 20:30:54 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A465CFE.2B79602A@rchrd.com>
Source record: 173937

I'd like to use my Diamond HV7A 10/6/2/.70 multiband mobile antenna as a portable base antenna. My guess is that I'd need some radials and some kind of support mount. I'd like to mount it off a porch railing on a high pole and operate "portable" on my porch, mainly on 6/2/.7m with my new IC-706MK2G transceiver.

Before I research the matter in the antenna books, I was wondering if anyone has done something similar and might share their experience.

Thanks in advance.
--
-=-=-=

4839. Re: H.C. VanValzah Co

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 20:36:26 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A465E41.101C8A9A@GTE.net>
Source record: 173938

SCHULZR wrote:

> Came across a 1986 antenna catalog of my father's. Is the company still in
> business? Didnt seem to pick it up on Yahoo or Altavista searches...
>
> Roland
> N2FHX
> Roland Schulz
> schulzr@aol.com

Although Howard is still around, I do not believe his company is still in
business.

Dale W4OP

4840. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:10:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A46743E.734F5633@IEEE.org>
Source record: 173939

Ted Bruce W2ICV wrote:
> Or, as Les
> says, dig a quarter wavlength hole in the ground, stick one end of
> your half wave dipole in the ground - don't touch that dirt! - and
> bingo! You've got it.

"As the monopole radiates power only in the region above the conducting
plane, the total radiated power is one-half that of the corresponding dipole."
Electromagnetics, by Joseph A. Edminister
--
http://www.mindspring.com/~w6rca

4841. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:16:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4675CB.6EC3C3A5@IEEE.org>
Source record: 173940

Mark Keith wrote:
> ... if it were one of the standard "slim
> stick" versions with a short stinger I could see it being lousy. MK

It was probably a Lakeview Hamstick, about seven feet long overall.
--
http://www.mindspring.com/~w6rca

4842. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:29:05 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A46A30B.F05C0B98@earthlink.net>
Source record: 173941

Yuri Blanarovich wrote:

> Here is the fresh one for all those scaremongers like FCC, ARRL, N6NB and all
> those who came up with RF safety "standards":
>
> http://www.washingtonpost.com/wp-srv/aponline/20001219/aponline160124_000.htm
>
> Kepp making them up, starve the children, eat your grand parrents, RF kills,
> freaktenna will sue your butt, etc....
>
> Now you can take your lead suits off!
>
> 73 & MX
> Yuri, K3BU/m

Yes I believe everything the w-post has in it. I do believe that agenda driven science never has erroneous conclusions either. The Cell phone industry brought congress, turning radio's into swiss cheese so the industry could sell a fake notion of privacy, It's not to difficult to buy a few researchers and stuff their mouth with the brought and paid for script. Joe Blow with a scanner was never a threat, Big Brother defiantly is. While I was employed in electronics I would not put remote units under the table with the antenna sticking into my crotch as I many times had observed being done They know better though and would tell you so. If you want to use a cell phone, fine your decision I won't and many times I turned off paging transmitters in the same room I was working in.

When humans have learned all there is to know and have forgotten greed then maybe I will believe the latest "hot flash" but in the States public safety and health has always taken a back seat to profit and will continue to do so as long as a dumbed down population believes everything big brother and big money force feeds them.

I believe that although the energy from cell phones will not cause immediate problems there are long term effects to be taken into consideration and it you want years of tissue heating

to your head to enhance corporate profits, Fine your choice, I don't and have a hard time
with putting profit above people and lying to a largely gullible public with bad and agenda driven sciences.

Steve WB3AMG
.

4843. Antenna called "Thumper"? Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:42:31 UTC
From: jpoulin@honk.org
Message-ID: <3a467bf2.1727293@news.flfrd1.on.wave.home.com>
Source record: 173942

Greetings Everyone,

I have been hearing some talk about a home brew antenna
called the "Thumper". Its a 3 or 4 element beam that
has a 1 foot boom.

Has anyone heard about this before?

If so, does anyone have the specs and measurments?

Thanks for all your help.

73
de VA3JPX

James

4844. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:44:34 UTC
From: jpoulin@honk.org
Message-ID: <3a467c39.1799107@news.flfrd1.on.wave.home.com>
Source record: 173943

On Mon, 04 Dec 2000 09:58:37 -0600, Dennis <dennis1449@dcwis.com>
wrote:

>Will it work?

Yes, however your tuner will absorb most of your power outside the
real tuned band of the A99.

I have used the A99 on 6m with success too.. :)

VA3JPX
James

4845. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 22:57:30 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A46A9B4.DEF05DEF@earthlink.net>
Source record: 173944

Fractenna wrote:

> Yuri, K3BU has made the assertion that he was escaping a 5year prison sentence
> when he left Europe.
>
> I asked him what the offense was and he refused to elaborate.
>
> Several people here are making the ASSUMPTION that this was some political
> issue, but Yuri is either incapable or unwilling to verify that.
>
> Here are the facts:
>
> 1) based on his responses, K3BU has real issues with authority figures. For
> example: in the last day has managed to attack President Clinton; Vice
> President Gore; Attorney General Janet Reno; various European groups, and me.
> For the latter, I presume this is because I represent an authority on a
> technical subject of interest to this NG;
>
> 2) I am not politician, and I am not a public figure.
>
> 3) Yuri has used, and continues to use, malicious libel and attack me.
>
> If Yuri would like to elaborate rather than make personal attcks, this may be
> useful in understanding his position. Frankly, his responses strike me as
> childish, irrational, disjointed, and not of high moral character or integrity.
> That is my impression, and I would be happy to afford him the opportunity to
> clarify his statements and have me put these impressions to rest.
>
> Sincerely,
>
> Nathan Cohen Ph.D.

Forgive my ignorance on the subject but we all should question authority figures.
I was down for a while and did not see the post you are referring to but being
politically
active and taking part in the political processes is the only way to preserve our
republic. I am not legitimizing personal attacks nor would I attempt to but I am
also
saying that the public figures mentioned are nothing less than a disgrace and
brought shame
upon our republic. I may disagree with everything someone has to say but respect
their activity

and attempt to be active.

Steve WB3AMG

4846. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:05:19 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A46812F.13C1@pacbell.net>
Source record: 173951

Cecil wrote:
>
> Reg Edwards wrote:
> > Jim, give us some numbers instead of waffle.
>
> Here's some of my favorite: 1, 2, 4, 8, 16, 32
> --
> http://www.mindspring.com/~w6rca

Hi, Cecil,
but is this part of a denumerably infinite set?
It don't mean nothin' unless it's denumerably infinite.

Tom Donaly KA6RUH

4847. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:11:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <925vr7$op0$1@neptunium.btinternet.com>
Source record: 173945

More smoke ?

There are none so blind as those who do not wish to see.

4848. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:16:25 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4683C9.A886603E@IEEE.org>
Source record: 173947

Reg Edwards wrote:
> Jim, give us some numbers instead of waffle.

Here's some of my favorite: 1, 2, 4, 8, 16, 32
--
http://www.mindspring.com/~w6rca

4849. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:16:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92604hpak1@neptunium.btinternet.com>
Source record: 173946

Jim, give us some numbers instead of waffle.

4850. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:34:35 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <fKv16.320$iK.45260@monger.newsread.com>
Source record: 173948

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Joe Schlatter" <joe@schlatter.org> wrote in message
news:920eav$qv1$1@nnrp1.deja.com...
> In article <20001222113147.21269.00005633@ng-co1.aol.com>,
> fractenna@aol.com (Fractenna) released a brain fart when he wrote:
> > Yuri, K3BU has made the assertion
>
> [[nothing of consequence snipped]]
>
> > have me put these impressions to rest.
> >
> > Sincerely,
> >
> > Nathan Cohen Ph.D.
> >
>
> For the most part I lurk on this NG, reading the traffic and not saying
> much. From time to time, though, the "dialogue" reminds me of the odor
> and the mess when Grandpa fell through the outhouse floor.

The following is definately NOT an urban legend.

Many, many, years ago (and I do mean many) a number of the local teen agers
would go out on Halloween and tip over outhouses.

On one such occasion they discoverd that the outhouse thay had just tipped
over was occupied. (due to all the cussin' from within).

How do you get out of an outhouse when it's laying on its door? Think about
it.

The next year they went back to tip the same one over again...Only to
discover (in the dark) that the farmer had moved it three feet forward.
Watch that last step guys!

Roger (K8RI)
>
> --
> Regards,
> Joe Schlatter
>
> Respond to: joe@schlatter.org
>
>

> Sent via Deja.com
> http://www.deja.com/

4851. X7 Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:36:50 UTC
From: nospam@libero.it
Message-ID: <3a468563.14315998@News.CIS.DFN.DE>
Source record: 173949

HI All,
I have a X7 antenna by CushCraft. It's a 7 elements beam for 10-15-20 mt with a log-cell driven (4 elements), 2 reflectors and 1 director with traps.
I would like to analyze this antenna with an antenna modeling software. I tried with AO by K6STI, but the result has been very strange. Brian said me that the log-yagi needs more care in the modeling-software analysis.
The target of this job is to build the theoretical H-plane and V-plane radiation patterns of this antenna.
CushCraft did not supply any precise radiation pattern :-(
Anyone can help me, please ?
Best 73

Arturo IK7JWY
www.qsl.net/ik7jwy
www.qsl.net/ari-lecce

4852. Re: mod question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:42:29 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <FRv16.321$iK.45326@monger.newsread.com>
Source record: 173950
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"D. Stussy" <kd6lvw@bde-arc.ampr.org> wrote in message
news:Pine.LNX.4.10.10012222025560.13707-100000@exp.bde-arc.ampr.org...
> On Fri, 22 Dec 2000, Cecil wrote:
> > I have a ten year old AM/FM receiver, Optimus STAV-3000, that I
> > got from Radio Shack. My favorite AM station is on 1620. This
> > darned AM receiver only goes up to 1610. Anybody know of any
> > sources of mods for AM/FM receivers?
>
> Try asking on "rec.radio.amateur.equipment." That's where modification
> questions belong.
>
> I don't have an answer for you. Most of the old equipment simply wasn't
> designed to go into the 1620-1710 range that was recently added to the AM
> broadcast band in the U.S.

Just a bit of tweaking on the alignment caps and most of them would cover
the entire 160 meter band. Image rejection wasn't very good up there
though.

Roger (K8RI)

>

4853. Re: Trees Absorbing RF, Fractals, Seasonal Goodwill

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:57:45 UTC
From: cathexis@erols.com
Message-ID: <3a468b27.331706136@news.erols.com>
Source record: 173952

On Sun, 24 Dec 2000 15:41:04 -0000, "Bill" <bill@g4zrb.demom.co.uk> wrote:

>I thought I would connect a few recent themes with a dash of seasonal good
>will.
>
>I recently constructed a scale model of a fractal antenna for 70cms - i.e. I
>bent a piece of wire a few times. I put this down to help decorate the
>house for the festive season and when I returned I couldn't find the aerial
>anywhere at first.
>
>And then I saw that my son had fixed it to the top of the "Christmas" tree!
>I have to say it makes quite a neat "secular" kind of star. [I guess that
>puts it in the public domain, so no patent rights for me...]
>
>But it raises quite a few questions about the effect of the nearby branches
>[and for that matter, other nearby Christmas trees]. Will it still have the
>alleged gain associated with this design?
>
>And if you're in a house of some opulence, is it worth stacking two
>Christmas trees for a 3db gain?
>
>For those who don't seem to believe in fractal aerials any more than they
>believe in Santa Claus, I open the possibility of using this mounting for
>more conventional vertical designs. In this case the fairy light wiring can
>provide useful elevated/drooping radials.

Possible improvements to the " Frac-Pinetenna":
1. Use of tinsel on drooping radials-- offset short radial length with
multitudes of mini-radials.

2. Fill water dish with salt water for "perfect ground". Albeit, short lifetime.

3. Use of metalic garland to create "helical coil" for multi-banding.

Andrwe/ KG4JBM

>
>If nothing else: just let your neighbour try complaining to anyone that he
>believes your Christmas tree is breaking through on his television...
>
>Wishing you all the best greetings of the season,
>
>Bill, G4ZRB
>
>

4854. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-24 23:58:02 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A468CCB.CB5F6115@earthlink.net>
Source record: 173953

I used a setup similar to what you describe, Cecil, though I put the autotuner inside the hatchback on my little car. It worked very well for QSY inside the band. But so did a homemade L-match in the front seat with shunt L matching at the antenna. THAT lacked only an audible SWR minimum to be convenient. And it was much cheaper!

Cortland

Cecil wrote:

> Alan Biocca wrote:
> > I'm experimenting with two different directions - one is to automate
> > the tuning of the Screwdriver, and the other is to do experiments with
> > a center fixed-loaded antenna and an autotuner at the base.
>
> K7JEB uses an SGC-230 with a base-loaded bugcatcher coil. It works
> well for changing frequencies within a band. He still has to manually
> change bands by changing the tap on the coil.
> --
> http://www.mindspring.com/~w6rca

4855. Newbie Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 00:24:14 UTC
From: Kybalon <kybalon@earthlink.net>
Message-ID: <Osw16.5971$3B5.157627@newsread2.prod.itd.earthlink.net>
Source record: 173954

I have a BC 3000 xlt and need an outdoor antenna. I live in Chester PA 30 miles outside Philadelphia.

What type of antenna would increase reception.
thanks in advance
Abe

Kybalon@yahoo.com

4856. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 00:33:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4695EE.6EB5AA2F@eznec.com>
Source record: 173955

Cecil wrote:
>
> "Rodger N. Bird" wrote:
> > I have one on my car and it works great!
>
> "Works great" is very subjective. According to actual 75m
> mobile antenna shootout measurements, an Outbacker radiates
> 88% less power than a good bugcatcher or screwdriver. That
> means if a good bugcatcher radiates 100 watts on 75m, the
> Outbacker radiates 12 watts. How can that possibly "work
> great" on 75m? IMO, the Outbacker is just about the *least*
> bang for the bucks in mobile antennas.
>
> For instance, the 1dB improvement that the Outbacker has over
> a Hamstick on 75m costs $200. Anybody want to pay me $200 per
> dB?
> --
> http://www.mindspring.com/~w6rca

Let's see, the Ameritron AL-80B, at 1 kW output, is $1299. The AL-82, 1.5 kW, is $2295. That's 1.76 dB difference for $996, or $566 per dB. The AL-82, overall, adds 11.76 dB to a 100 watt rig, at a cost of $195 per dB. I'm sure there are lots of linears out there that come in at quite a bit less than one dB per $200. And there doesn't seem to be a lack of people buying them.

Roy Lewallen, W7EL

4857. Re: K3BU Prison Sentence

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 00:57:16 UTC
From: k1bqt@aol.com
Message-ID: <20001224195716.10914.00003695@ng-cu1.aol.com>
Source record: 173956

>Exactly what was the % alcohol content of that beer? I could use some....Happy Holidays!<

What? That case of primo Winterfest is gone already? You're fast! In case you didn't notice, I write like this all the time--even on crunchy granola bars and weak coffee at 9 AM! It's sick, but it's true.

Have a very happy holiday--and best wishes to your and yours from Terry and me at Hollow Point Lodge on the shores of beautiful Medums Pond.

Rick K1BQT

4858. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 03:27:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A46BEB3.D9F45D38@IEEE.org>
Source record: 173957

Roy Lewallen wrote:
> I'm sure there are lots of linears out there that come in at
> quite a bit less than one dB per $200. And there doesn't seem to be a
> lack of people buying them.

Yep, but how many 1dB $200 amplifiers are there?
--
http://www.mindspring.com/~w6rca

4859. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 03:34:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A46C028.5DA3E72E@IEEE.org>
Source record: 173959

```
Donaly wrote:
>
> Cecil wrote:
> >
> > Reg Edwards wrote:
> > > Jim, give us some numbers instead of waffle.
> >
> > Here's some of my favorite: 1, 2, 4, 8, 16, 32
>
> Hi, Cecil,
> but is this part of a denumerably infinite set?
> It don't mean nothin' unless it's denumerably infinite.

I do believe the highest power of two is Aleph(null).
--
http://www.mindspring.com/~w6rca
```

4860. Re: Newbie Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 03:43:25 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A46C25B.274B7BCB@home.com>
Source record: 173958

Kybalon wrote:

> I have a BC 3000 xlt and need an outdoor antenna. I live in Chester PA 30
> miles outside Philadelphia.
>
> What type of antenna would increase reception.
> thanks in advance
> Abe
>
> Kybalon@yahoo.com

Abe,
You don't say what a BC 3000 xlt is, but I am assumming that it is a scanner which covers VHF. Radio Shack sells a discone which would probably due the job for most
of what you are after. You should set it as high as possible to get the maximum coverage from all directions. You could go for a directional antenna, but that might be defeating the purpose of the scanner. Hope this helps...

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4861. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 03:57:02 UTC
From: X@Y.Z.net
Message-ID: <slrn94dhcd.svc.X@animas.frontier.net>
Source record: 173961

On Sun, 24 Dec 2000 16:33:50 -0800, Roy Lewallen scribbled:
>Cecil wrote:
>> <-snip->
>> For instance, the 1dB improvement that the Outbacker has over
>> a Hamstick on 75m costs $200. Anybody want to pay me $200 per
>> dB?
>
>Let's see, the Ameritron AL-80B, at 1 kW output, is $1299. The AL-82,
>1.5 kW, is $2295. That's 1.76 dB difference for $996, or $566 per dB.
>The AL-82, overall, adds 11.76 dB to a 100 watt rig, at a cost of $195
>per dB. I'm sure there are lots of linears out there that come in at
>quite a bit less than one dB per $200. And there doesn't seem to be a
>lack of people buying them.
>
>Roy Lewallen, W7EL

A fool and his money.......

Jonesy W3DHJ

4862. Happy Holidays

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 04:20:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A46CB00.124F@wt.net>
Source record: 173960

http://web.wt.net/~nm5k/xmas5.html

4863. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 04:22:55 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <qrid4tkv9qj4sst8kk61r7ru2ur61gqrtm@4ax.com>
Source record: 173963

On Sun, 24 Dec 2000 13:31:05 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>Are you supposed to solder connections?

I'm assuming you hit "send" before you were through...?

73, Bill W7TI

4864. Re: Effect of snow

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 05:00:29 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A46D46D.AB96A827@oio.net>
Source record: 173962

Klein Gilhousen wrote:
>
> Has anyone ever determined the effect, if any, of snow on the
> properties of the ground as it effects vertical antennas?
>
> Klein Gilhousen, WT6G
> Bozeman, MT

1. White dry snow, little or no affect.
2. White wet snow, some affect but very slight.
3. Gray dry snow, variable affect due to imputities.
4. Gray wet snow, same as above but more so.
5. Yellow snow... well...
'Doc

4865. antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 05:27:08 UTC
From: ehchvac <ehchvac@mediaone.net>
Message-ID: <MUA16.29360$1t.1019167@typhoon.ne.mediaone.net>
Source record: 173964

will an antenna tuner or a tuner with amp help a long wire, and if so any opinions on which one, the radio is a drake r8b.
thanks in advance

4866. Infinite cardinal numbers (was: Re: QUESTION: Can shortened radials be effective?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 06:05:38 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2412002205380001@a3a05603.sympatico.bconnected.net>
Source record: 173965

In article <3A46C028.5DA3E72E@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:

> I do believe the highest power of two is Aleph(null).

Despite the fact that it is Christmas eve, I don't believe very much (I disbelieve a lot of things and am agnostic about a lot more). That the highest power of 2 is Aleph_sub0 is one thing I am in no doubt about -- it's definitely false.

2^n < Aleph-sub0, for any finite cardinal number n, since 2^n is then also finite, but Aleph_sub0 is not. (Aleph_sub0 is the smallest infinite cardinal number.)

Aleph_sub0 answers the question "how many natural numbers are there?". (This is essentially a definition; the answer to that question cannot be a natural number N since the set {0, 1, 2, ... , N} already has N + 1 members.)
2^Aleph_sub0 answers the question "how many real numbers are there?". Cantor proved that 2^Aleph_sub0 > Aleph_sub0, or what comes to the same thing, that there cannot be a 1:1 correspondence between the set of all natural numbers {0, 1, 2, ... } and the set of real numbers. (I will be glad to outline Cantor's proof, or a proof that there are 2^Aleph_sub0 real numbers, if anyone requests it by e-mail.)

Now the open question (and it will stay open forever) is whether

(a) 2^Aleph_sub0 = Aleph_sub1 (this is called the Continuum Hypothesis), or

(b) 2^Aleph_sub0 > Aleph 1.

The third conceivable relation, that 2^Aleph_sub0 < Aleph_sub1, cannot be true, because of Cantor's result (plus the fact that, by definition, Aleph_sub1 is the first infinite cardinal number larger than Aleph_sub0).

It has been proved that if ordinary set theory is itself consistent, appending either (a) or (b) to it (but of course, not both at once) will result in a consistent enlargement. So it will never be possible to either prove the Continuum Hypothesis (because set theory + (b) is as consistent as set theory itself) or disprove it (because set theory + (a) is as consistent as set theory itself). In other words, we'll never know.

I don't think this has anything to do with antennas, but it's neat stuff anyway. Anyone who wants references, e-mail me for them.

Now there's one thing I do believe about shortened (i.e. shorter than lambda/4) radials -- I believe they cannot be more effective than ones

which aren't shortened. How's that for going out on a limb?

David, ex-W8EZE, and retired (pure, not applied) mathematics professor
(but not a logician!)

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

4867. Re: Infinite cardinal numbers (was: Re: QUESTION: Can shortened radials be effective?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 10:35:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92797popk1@neptunium.btinternet.com>
Source record: 173966

The largest possible number is the number of quarks in the
universe.

Peace on Earth. Goodwill to all men !

And women.

4868. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 10:58:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92797qopk2@neptunium.btinternet.com>
Source record: 173967

Peace (cough) on Earth (cough, cough) and Goodwill to all
Men (cough).

Reg (cough).

4869. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 11:33:36 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <7gG16.9487$wE3.10358@newsfeed.slurp.net>
Source record: 173968

Choking on your own smoke, Reg?

Otherwise, likewise wishes, I'm sure.

--

73, Dave, K3BHJ

4870. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 12:11:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3a473877.229233558@news.akorn.net>
Source record: 173969

On Sun, 24 Dec 2000 16:10:06 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Ted Bruce W2ICV wrote:
>> Or, as Les
>> says, dig a quarter wavlength hole in the ground, stick one end of
>> your half wave dipole in the ground - don't touch that dirt! - and
>> bingo! You've got it.
>
>"As the monopole radiates power only in the region above the conducting
>plane, the total radiated power is one-half that of the corresponding dipole."
>_Electromagnetics_, by Joseph A. Edminister

Actually it's worse than that Cecil. You not only waste energy from
the half of the dipole that can't radiate, you also have the earth
absorbing energy from the other half that is above the earth's
surface.

A nice radial system prevents both.

73 Tom

4871. Re: Antenna called "Thumper"? Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 12:17:49 UTC
From: 2w8ji@contesting.com
Message-ID: <3a473a84.229758703@news.akorn.net>
Source record: 173970

On Sun, 24 Dec 2000 22:42:31 GMT, jpoulin@honk.org (James Poulin)
wrote:

>Greetings Everyone,
>
>I have been hearing some talk about a home brew antenna
>called the "Thumper". Its a 3 or 4 element beam that
>has a 1 foot boom.
>
>Has anyone heard about this before?
>
>If so, does anyone have the specs and measurments?
>
>Thanks for all your help.
>
>73
>de VA3JPX

If it was on 432 MHz it would have decent gain.

If on 30 MHz it would have no gain.

73 Tom

4872. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 12:50:18 UTC
From: mauricea.nobrol@glo.be
Message-ID: <3a46050c.8985033@nntp.z052.glo.be>
Source record: 173971

On Sat, 23 Dec 2000 15:54:48 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>"Rodger N. Bird" wrote:
>> I have one on my car and it works great!
>
>"Works great" is very subjective. According to actual 75m
>mobile antenna shootout measurements, an Outbacker radiates
>88% less power than a good bugcatcher or screwdriver. That
>means if a good bugcatcher radiates 100 watts on 75m, the
>Outbacker radiates 12 watts. How can that possibly "work
>great" on 75m? IMO, the Outbacker is just about the *least*
>bang for the bucks in mobile antennas.

Hi Cecil,

Why always look at 75m performance (we prefer 80m :-))?

I use my Outbacker on 20m and up most of the time. It does work great!

I wouldn't dream of putting a bugcatcher on my car here in Europe.
Have you tried 100 Miles/Hour with a bugcatcher? I do that with the
Outbacker without problems. It makes US hams smile when I tell them
I'm cruising the German 'autobahn' at 100 M/Hr while talking to them..

It sure seems that some people are getting paid to be negative about
the Outbacker... It works great and I have the QSL's to prove it..
that's enough for me. VK, P29, JA, KL7, W6, PY, ZS, 7X from the car
can hardly be called a 'dummyload'.

Happy holidays, happy millennium.

4873. MFJ 1798? ANY GOOD?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 13:46:59 UTC
From: "D. MCG3" <mcg3@adelphia.net>
Message-ID: <ndI16.933$Fk7.65110@news1.news.adelphia.net>
Source record: 173972

ANY INPUT GREATLY APPRECIATED.
THANKS IN ADVANCE
73
KC2HCW

4874. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 14:31:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A475A3E.19AEB61C@IEEE.org>
Source record: 173973

Maurice ON4BAM wrote:
> Why always look at 75m performance (we prefer 80m :-))?

That's the band used for the U.S. mobile antenna shootouts
and the band for which we have objective measurements.
I have previously said the Outbacker is a pretty good
20m-10m mobile antenna and I guess anyone who drives
100 mph has money to burn. :-)
--
http://www.mindspring.com/~w6rca

4875. Re: Infinite cardinal numbers (was: Re: QUESTION: Can shortened radials be effective?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 14:45:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A475D9F.A85744EA@IEEE.org>
Source record: 173974

David or Jo Anne Ryeburn wrote:
>
> In article <3A46C028.5DA3E72E@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > I do believe the highest power of two is Aleph(null).
>
> Despite the fact that it is Christmas eve, I don't believe very much (I
> disbelieve a lot of things and am agnostic about a lot more). That the
> highest power of 2 is Aleph_sub0 is one thing I am in no doubt about --
> it's definitely false.

Without thinking, it seemed to me that 1,2,4,8,... (powers of two)
would be a subset of the set 1,2,3,4,... (natural numbers). Thanks for
forcing me to think even if it is before my first cup of coffee.
--
http://www.mindspring.com/~w6rca

4876. Re: Infinite cardinal numbers (was: Re: QUESTION: Can shortened radials be effective?)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 16:12:39 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <KlK16.9533$wE3.11020@newsfeed.slurp.net>
Source record: 173975

Isn't the number of Cardinals around 72?

--

73, Dave, K3BHJ

4877. Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 16:41:02 UTC
From: "David R.Gemmer" <david.r.gemmer@gte.net>
Message-ID: <yMK16.206$jr3.57146@paloalto-snr1.gtei.net>
Source record: 173976

Any thoughts on the use of a chain link fence as an antenna? I have one surrounding about an acre, but every ten feet or so a post is set in the ground, as is typical for a fence. Probably an excellent ground, but any hope of using it for the actual antenna?

4878. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 16:54:54 UTC
From: Pete <pete@etep.com>
Message-ID: <yZK16.31711$36.891736@news1.rdc1.il.home.com>
Source record: 173977

I love my Outbacker too. I have it mounted on a large 3 magnet device and
have had no problems in performance or with it moving around or coming off.
I used it on my minivan and Dakota truck and would never trade it for a flag
pole device on my cars.
My 2 cents worth.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A475A3E.19AEB61C@IEEE.org...
> Maurice ON4BAM wrote:
> > Why always look at 75m performance (we prefer 80m :-))?
>
> That's the band used for the U.S. mobile antenna shootouts
> and the band for which we have objective measurements.
> I have previously said the Outbacker is a pretty good
> 20m-10m mobile antenna and I guess anyone who drives
> 100 mph has money to burn. :-)
> --
> http://www.mindspring.com/~w6rca

4879. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 17:20:30 UTC
From: James Mosier <jimm@gatecom.com>
Message-ID: <3A4781DE.9C44A9B6@gatecom.com>
Source record: 173978

David,

On a lark, I used mine years ago when the ground was frozen solid here in the Detroit area. The tuner's random wire position worked against the house plumbing allowed me to QSO the Rocky Mtn. states well on 75m. The tuning was not predictable or repeatable from night to night as was expected. When the thaw came a few weeks later, it became an earthworm warmer. Watch out for all the stray dogs and kids in the neighborhood, as parents get upset when you fry their offspring.

Merry Christmas,

Jim KD8GS

4880. Fractral believer goes straight

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 17:55:27 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3a47897e$1_3@news.iglou.com>
Source record: 173979

Sure takes a lot less trees to hold up my antennas too.

4881. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 19:22:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A479E59.DB03A3A9@oio.net>
Source record: 173980

"David R.Gemmer",
Once upon a time, when I was still gainfully employed,
I had lots of time to play with antennas at work. Due to
my employers restrictions, what was available to play with,
and the amount of $$ I had in my pocket, some of the "make-
do" antennas were a bit unusual. A chain-link fence was
one of those that I played with.
I had/have a tuner that would 'handle' just about any-
thing. This tuner along with a set of 'jumper-cables' for
'delta' matching, made a short fence next to the station
load on 20 meters like a charm! It didn't 'talk' worth a
hoot, but was very quiet on receive. (The same set of
jumper-cables, coax, and tuner also loaded a R.R. track.)
I wouldn't recommend using a fence, but if your really
desperate enough, it'll work. One reason I wouldn't
recommend it is because if your fence is connected to your
neighbor's fence, you're going to be producing RFI all
over the neighborhood!
'Doc

4882. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 19:24:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A479EDE.6877E4B3@oio.net>
Source record: 173981

ehchvac wrote:
>
> will an antenna tuner or a tuner with amp help a long wire, and if so any
> opinions on which one, the radio is a drake r8b.
> thanks in advance

ehchvac,
If your only listening, I don't think I would bother
with a tuner. Transmitting is a different story...
'Doc

4883. Re: Newbie Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 19:26:18 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A479F5A.CCA498BA@oio.net>
Source record: 173982

Abe,
An antenna outside, and as high as you can get it, will
almost always 'beat' an indoor antenna. Height is more
important than 'size', especially for VHF/UHF.
'Doc

Kybalon wrote:
>
> I have a BC 3000 xlt and need an outdoor antenna. I live in Chester PA 30
> miles outside Philadelphia.
>
> What type of antenna would increase reception.
> thanks in advance
> Abe
>
> Kybalon@yahoo.com

4884. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 19:39:30 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A47A272.7FDD@wt.net>
Source record: 173983

Cecil wrote:
>
> Mark Keith wrote:
> > ... if it were one of the standard "slim
> > stick" versions with a short stinger I could see it being lousy. MK
>
> It was probably a Lakeview Hamstick, about seven feet long overall.
>
I looked up those, and they are the thin kind, but not totally useless as they seem to at least use a decently long stinger. But the coil is tight and thin. Not good. I'm trying to think if the brand that makes the larger coil variety, but escapes me right now...But they use a bit larger coil, and about the same length stinger. I would think it would be a good bit better on 75m. Maybe even outdo the outbacker instead of losing. My homebrew version is much the same thing. I put in the bigger coil wound on pvc. I'm getting ready to make a new "super" version all band stick as soon as I get a new radio. The new one will use the same big coil, but a good bit higher on the fiberglass stick, and I'm going to use an even longer stinger. "3 ft presently". I'd like to use a 7 ft stick with the coil about a foot below the top, and about a 4-5 ft stinger. I notice lakeview sells just the type stinger I want for those. And then to top it off, I will still have the solid 3 ft extender mast that I can use below the normal antenna to raise the coil even higher. I won't be using a hat, but I predict it will still work very well on all bands 80-10. But as I said, I gotta get a new rig first. My 730 pooped out and I can't find the part so far. So I'm looking for a new one. I think a 706mk2g probably. At first I didn't like those things, but I've kinda grown to like them now. The BC to 500 mhz coverage in one dinky box is hard to pass up. I've never worked 6m fer instance. And 2m all mode would be nice to try. Aircraft, police, it's all there. Kinda handy. MK
--
http://web.wt.net/~nm5k

4885. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 20:19:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <928qhq$9kg$1@neptunium.btinternet.com>
Source record: 173991

It is Tom's smoke screen. He resorted to it when he refused
to accept that 50% efficiency is equivalent to a 3 dB loss
relative to the ideal. His antenna farm follows different
laws of physics from everbody else's.

When it failed he propagated the untruth the smoke screen
was mine.

I would have let the matter rest but unfortunately he
appears to have deceived you with his well known and often
used tactics.

Come on Tom - have your usual persistent last word. Try to
keep it brief.

A very merry Xmas.

Reg.

****
David J. Windisch wrote
> Choking on your own smoke, Reg?
>
> Otherwise, likewise wishes, I'm sure.
>
> 73, Dave, K3BHJ

4886. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 21:56:57 UTC
From: TR <w7trx@mindspring.com>
Message-ID: <928fpv$2nf$1@slb3.atl.mindspring.net>
Source record: 173984

Mark,

> > Mark Keith wrote:
> > > ... if it were one of the standard "slim
> > > stick" versions with a short stinger I could see it being lousy. MK
> > >
> > > It was probably a Lakeview Hamstick, about seven feet long overall.
> > >
> > I looked up those, and they are the thin kind, but not totally useless
> > as they seem to at least use a decently long stinger. But the coil is
> > tight and thin. Not good. I'm trying to think if the brand that makes
> > the larger coil variety, but escapes me right now...

If you remember, pass it along. There are 3-4 companies here in the states that make a "hamstick" type antenna. All are of the skinny coil variety. The Hustler antennas are the only ones that have a large coil.

I'm getting ready to make a new "super" version all
> band stick as soon as I get a new radio.

Keep us posted here. I've been pondering such an aerial for mobile use. I had been considering something like the Icom AH-4 autotuner at the base, but with much better efficiency (and lower cost) than an 8ft steel Icom whip. My antenna knowledge is not yet up to the technical details of this yet. My hope was for a reasonably efficient, frequency agile, no getting out of the car to tune, and no eyes off the road to tune, mobile antenna. I'm not asking for much :-)

How were you planning to tune your all band "Super-Stick"?

. But as I said, I gotta get a new rig first. My 730 pooped
> out and I can't find the part so far. So I'm looking for a new one. I
> think a 706mk2g probably. At first I didn't like those things, but I've
> kinda grown to like them now.

I also have the 706G and love it. It does more than I could ask of a little rig.

Best wishes and Happy Holidays.

Tracy, W7TRX

4887. Plans for homemade BNC rubber ducky for FRS freqs (467.6..)?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 22:19:58 UTC
From: RVL <rlawhead@mail.sandi.net>
Message-ID: <iKP16.91333$I5.2321803@news1.rdc1.sdca.home.com>
Source record: 173985

The used dual bander I just bought had been modified to transmit out-of-band*. I've used it on the FRS freqs but know that I could do better with a tuned antenna for those frequencies. Any suggestions as to where I can find plans for a homemade UHF rubber ducky with BNC that I could modify for these freqs?

Thanks,

Richard, KD6JAV

*Yes, I'm aware of the illegal nature of this but I figure that FRS won't be hurting anyone...

4888. Re: Cohen idiocy

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 22:47:17 UTC
From: Harry Harms <hrbe@dingoblue.net.au>
Message-ID: <3a47cec1$0$7485$7f31c96c@news01.syd.optusnet.com.au>
Source record: 173986

Bill and the list,
At last!! I wondered what happened!!! I have my "fractenna" filter in place
so I missed out on the action!! Maybe he got fired from spending too much
time on the computer keyboard threatening all and sundry... maybe now I have
to put Cohen on my filter list!!!

Hey Chip, have a happy Christmas!!!

To the rest may you too have a happy Christmas.. and a prosperous new year

John
VK2KCE

"Fred Hambrecht" <Fred@w4jle.com> wrote in message
news:920u97$7e4$1@iac5.navix.net...
> The idiot got fired from his job at the University, and in his denial
chose
> to blame the hatred of others as the reason it happened. You must have
> missed the series of messages from his Phil persona explaining how the
world
> was out to get the most inventive ham to ever walk the planet.

> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:3A43F2CC.80907@hiwaay.net...
> > Now that Chip has succeeded in making a complete fool of himself, again,
> > I wonder what attack he will make next. Maybe we can get him interested
> > in Chads, recounts, and politics. That requires about as much
> > inteligence as he has shown on the K3BU thread.
> >
> > I still wonder what 'hate' did?- Does anyone really know?
> >
> > Hope this is a fitting end to this current crap from Belmont.
> >
> > Bill-W4BSG
> >
>
>

4889. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 23:44:54 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A47DBD6.EB948EDF@earthlink.net>
Source record: 173987
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

HA you think that is bad i had to replace a hairpin match on a mosley 6 meter vertical and it cost me $23 for the part and shipping and handling and all it wound up being was a piece of 1/8th inch aluminum rod bent into a U shape and a small loop bent into one end to go over a bolt
you guys dont know what poor customer service is till you deal with mosley it took me 6 weeks to get that little piece of aluminum rod and every time i called to check on it they gave me some story or another
a year or so a go i ordered a new 2 meter yagi from them it took 8 weeks to get it from them then too
atleast when i order parts from cushcraft and it takes longer than suggested it was shipped with no charge at all
i think we all forget that these customer service people may not be hams and may be new and dont know the antenna and we have been out fighting with it and we are short on paitents and tack so we come in here and blow off steam
so calm down and relax before dealing with people on the phone
also try email i have very good luck with customer service via email
73 de k4oxg

Tom W8JI wrote:

> On Sat, 23 Dec 2000 23:23:54 -0500, Anonymous
> <anonymous@anonymous.anonymous> wrote:
>
> >The only gripe I have with Cushcraft is that they charged me sixteen dollars
> >for the six meter add-on. This consisted of nothing but two little aluminum
> >clamps and a length of coated wire. That was kind of a rip-off and I let
> >them know. They did not respond.
>
> Years I did a cost analysis of what it takes to ship an empty box. It
> was less the actual postage charges, but included taking the order
> and all the paper work.
>
> It was about $18.
>
> I suppose if you throw in the time to answer complaints or questions
> from cheap whining hams, the cost would be even higher.
>
> 73 Tom

4890. antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-25 23:47:05 UTC
From: ehchvac <ehchvac@mediaone.net>
Message-ID: <Z%Q16.29532$1t.1057523@typhoon.ne.mediaone.net>
Source record: 173988

would it be better to have a longwire antenna 100 ft. long 20 ft. in the air
or , a 400 ft. longwire 6 ft. off the ground
that is the question of the day

4891. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 00:08:20 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <928nih$sp3$1@iac5.navix.net>
Source record: 173989

And the purpose of this antenna, along with the purposed frequency of operation would be germane.

"ehchvac" <ehchvac@mediaone.net> wrote in message news:Z%Q16.29532$1t.1057523@typhoon.ne.mediaone.net...
> would it be better to have a longwire antenna 100 ft. long 20 ft. in the air
> or , a 400 ft. longwire 6 ft. off the ground
> that is the question of the day
>
>

4892. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 00:40:07 UTC
From: Richard MacDonald <haggistoo@qwest.net>
Message-ID: <blpf4tsobpmv2gv3s5b8l58917plk0bmkb@4ax.com>
Source record: 173990

Probably about the same time (mid 1960s) I was using a Globe Scout, all of 75 watts or so, and was talking with my normal friends on 15 whwn one of them suggested that my signal wasn't up to its normal strength. He then asked if I was using another antenna, perhaps the bedsprings.

I remembered the crib springs leaning against the basement wall. I got up while others were talking, fetched them, and hooked them to the antenna terminal. The Scout had a wide range tuning network and would load into almost anything. I shifted off frequency and tuned up. When they turned it back to me, I used the springs.

The guy who had made the comment came back and asked what I did, my signal was up at least 6 dB. I told him that I took his suggestion and hooked up the bedsprings. Thus some crazy ideas aren't so bad after all.

Of course within a few days, I has added a bunch of radials under my dipole and that made everything much better.

The chain link fence wouldn't have worked. My wife hates them so we've never had one. Now, having just moved, I don't have any antenna up yet, and I no longer have any crib springs handy. Oh, well...

73,
AD0J

On Mon, 25 Dec 2000 13:22:01 -0600, 'Doc <w5lz@oio.net> scrivened:

>
>
>"David R.Gemmer",
> Once upon a time, when I was still gainfully employed,
>I had lots of time to play with antennas at work. Due to
>my employers restrictions, what was available to play with,
>and the amount of $$ I had in my pocket, some of the "make-
>do" antennas were a bit unusual. A chain-link fence was
>one of those that I played with.
> I had/have a tuner that would 'handle' just about any-
>thing. This tuner along with a set of 'jumper-cables' for
>'delta' matching, made a short fence next to the station
>load on 20 meters like a charm! It didn't 'talk' worth a
>hoot, but was very quiet on receive. (The same set of
>jumper-cables, coax, and tuner also loaded a R.R. track.)
> I wouldn't recommend using a fence, but if your really
>desperate enough, it'll work. One reason I wouldn't

>recommend it is because if your fence is connected to your
>neighbor's fence, you're going to be producing RFI all
>over the neighborhood!
> 'Doc

4893. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 01:34:34 UTC
From: David <kb9lpk@telocity.com>
Message-ID: <3A47F5AA.4D4E2687@telocity.com>
Source record: 173993

dbd dbi hi hi hi. Hey if it works for you great if not do it your way he he.

personally in my opinion 3db loss is 50% loss of the total gain potential given what
ever math you use as it is known today. A decibel is a decibel is a decibel
its just what environment and configuration can determine gain.

So Reg looks like your on the right track in my opinion not that it matters
much to anyone but myself hi hi.

Merry Christmas

Reg Edwards wrote:
>
> It is Tom's smoke screen. He resorted to it when he refused
> to accept that 50% efficiency is equivalent to a 3 dB loss
> relative to the ideal. His antenna farm follows different
> laws of physics from everbody else's.
>
> When it failed he propagated the untruth the smoke screen
> was mine.
>
> I would have let the matter rest but unfortunately he
> appears to have deceived you with his well known and often
> used tactics.
>
> Come on Tom - have your usual persistent last word. Try to
> keep it brief.
>
> A very merry Xmas.
>
> Reg.
>
> **********
> David J. Windisch wrote
> > Choking on your own smoke, Reg?
> >
> > Otherwise, likewise wishes, I'm sure.
> >
> > 73, Dave, K3BHJ

--

73 de David--kb9lpk <><

The Box said "Win95,Win98,NT40 Win2000 or better" So I installed Linux

email- kb9lpk@telocity.com
Ham email- kb9lpk@kb9lpk.ampr.org
Homepage- http://members.telocity.com/kb9lpk
TNOS BBS- http://kb9lpk.ampr.org

My Equipment Sale page is http://64.193.106.97/sale.html

Shop at our wonderful gift shop on the web! http://www.giftsheavensent.com

4894. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 01:36:23 UTC
From: 2w8ji@contesting.com
Message-ID: <3a47f5bd.9262252@news.akorn.net>
Source record: 173992

On Mon, 25 Dec 2000 20:19:23 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Come on Tom - have your usual persistent last word. Try to
>keep it brief.

Drunk again Reg?

73 Tom

4895. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 01:52:02 UTC
From: k7jy@aol.com
Message-ID: <20001225205202.00230.00000782@ng-cn1.aol.com>
Source record: 173994

Well I've received a number of great replies about my original post, but nobody's answered my question yet. I'm wondering if anyone has the db loss figures for Radio Shack RG/8 coax? There seems to be universal agreement that it's not very good, that it's stiff, that it's shield is thin, etc. What I'm looking for is the proof in the numbers. Anybody know them? Rad Shack used to sell the thick stuff a few years ago, but I haven't seen it in their stores lately. Many thanks and 73s, John, K7JY.

4896. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 02:14:59 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A47FE65.6372CCA3@earthlink.net>
Source record: 173995
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I find myself wondering why you didn't buy a piece of aluminum at Home Depot or somewhere -- or use a piece of aluminum ground wire! -- and make your own? Worth not having the hassle, from what I read here about the company. Faster, too.

Cortland

Dennis Kaylor wrote:

> you guys dont know what poor customer service is till you deal with mosley it
> took me 6 weeks to get that little piece of aluminum rod

4897. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 02:43:53 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <i31g4tcp2083l8fl1mqapid6s3j9he1c6v@4ax.com>
Source record: 173996

You could just go by the Radio Shack numbers. I see no reason to doubt them. The RG-8 has 1.9 dB loss/100 feet at 100 MHz, and 4.1 dB at 400 MHz. If you are nervous about their in-house brand, you can special order Belden 8214 or 8237 through their commercial catalog. It is interesting that the Belden 8237 has exactly the same rating as the in-house cable. I believe you can order through www.radioshack.com

73, Dick - W6CCD

On 26 Dec 2000 01:52:02 GMT, k7jy@aol.com (K7jy) wrote:

>Well I've received a number of great replies about my original post, but
>nobody's answered my question yet. I'm wondering if anyone has the db loss
>figures for Radio Shack RG/8 coax? There seems to be universal agreement that
>it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
>looking for is the proof in the numbers. Anybody know them? Rad Shack used to
>sell the thick stuff a few years ago, but I haven't seen it in their stores
>lately. Many thanks and 73s, John, K7JY.

4898. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 05:36:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92bur5pnf1@lure.pipex.net>
Source record: 173913

"Reg Edwards" wrote ...
> Peace (cough) on Earth (cough, cough) and Goodwill to all
> Men (cough).

It wasn't the coughing that carried him off,
but the coffin they carried him off in.

Unfortunately no spectacle will help those who will not see.

Since, it appear from the preceding posts, the measurement of soil resistance seems to be such a complex subject and the results to be so variable, what prospect is there of an antenna system that operates without the need for a good groundplane at the base of the antenna.

For a moment consider a point 500 miles away from the Antenna (no matter what is being used, bit of wet string if you like) Does the wave at that point really care about the ground resistance over which it is passing to make it the next 500 miles?

What would need to be done to duplicate those conditions at the launch point of a wave?

Happy Chritmuth and a nappy new year.

Gary7SLL

4899. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 05:41:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A482FA2.44EC@wt.net>
Source record: 173997

TR wrote:
>

>
> If you remember, pass it along. There are 3-4 companies here in the states
> that make a "hamstick" type antenna. All are of the skinny coil variety. The
> Hustler antennas are the only ones that have a large coil.

I think maybe the valor pro am has a "bigger coil" 80m stick. Also maybe
the same company that makes the carolina windoms might also make a
version like that. Not sure, but seems they did.
>
> I'm getting ready to make a new "super" version all
> > band stick as soon as I get a new radio.
>
> Keep us posted here. I've been pondering such an aerial for mobile use. I
> had been considering something like the Icom AH-4 autotuner at the base, but
> with much better efficiency (and lower cost) than an 8ft steel Icom whip. My
> antenna knowledge is not yet up to the technical details of this yet. My
> hope was for a reasonably efficient, frequency agile, no getting out of the
> car to tune, and no eyes off the road to tune, mobile antenna. I'm not
> asking for much :-)
>
> How were you planning to tune your all band "Super-Stick"?

You would have to get out of the car for my antenna. It will be tuned
about the same as my present one, except it'll just be taller. I'll
probably use a 7 ft 10m stick as the base antenna. Or at least the
highest band stick I can get thats 7 ft tall. I'll take off windings if
needed. So the base stick will work 10m as is.
I'll add a 80 meter coil about a ft or so below the top. There will be
one tap for 40m. The stinger will be a fixed length, so the coil will be
tuned to 80m by adjusting the number of turns. There is no tap for 80m.
I don't move around much... After I get 80m tuned, I add a tap for 40m.
I'll use a jumper to put the coil on 40m, or to bypass totally for high
band use. On 30-10 meters the coil will be bypassed, and I'll have a
different stinger for each of the high bands. By the time you get up to
ten meters the stinger will be pretty short. So that gives me 80-10 with
one antenna. But I have to get out to change bands. Takes about 2 min. I
use a quick disconnect and keep a nutdriver behind the seat for quick
stinger changing. But with this system the antenna is properly tuned for
each band. No tuner used for the antenna itself, but you will need
impedance matching. I usually use a small tuner. But this antenna with
the big coil won't be mistaken for any hamstick on the air. I'll have
bugcatcher performance in an antenna that weighs very little. My present

one works real good. "8 ft total", but you know hams, never satisfied.
The new one will be a good bit more efficient on 80m. Mainly because of
the higher coil and longer stinger. With the extender , the coil will be
appx 9 ft off the deck of the car or truck. But that will only be used
when parked usually. 12 ft is tall enough for driving...g I'm counting
on the wind flex to the rear to let me clear the 13.6 ft overpasses on
the interstates. Even if I hit, no biggie. Just slaps off whatever it
hits. The 15 ft setup for camping sites etc.
>

>
> I also have the 706G and love it. It does more than I could ask of a little
> rig.

I was kinda leary of the overall HF performance, but they seemed to have
improved since the original version. The audio sounds better to me for
one thing on the newer ones. Real clear and crisp. The original version
706 was a bit pinchy. I'd actually probably would still prefer a bigger
radio, but I can't find one that does what the 706 does without paying
twice as much. I actually like the looks of the 746 better, but no UHF.
Not that I need 440, but I wanted the receiver for public service
listening, etc. But dunno, I have others of those, so probably silly to
worry about that. Just nice to have all in the one box. So many radios,
so little time. And money too....:(MK

--
http://web.wt.net/~nm5k

4900. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 06:01:10 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A483426.7CAB@wt.net>
Source record: 173998

ehchvac wrote:
>
> will an antenna tuner or a tuner with amp help a long wire, and if so any
> opinions on which one, the radio is a drake r8b.
> thanks in advance

Well, A tuner could help a bit, but you should be able to get by without
it usually. Sometimes they can help "hotten" up the reception on a band
that the mismatch is bad. But still the overall S/N ratio shouldn't
change that much. Your S meter will just read higher. Same for a preamp.
With most any modern receiver they are a waste of time, and can actually
trash out the receiver with image problems etc. I'd stay away from
those. The drake is a good radio. Adding a preamp would just trash it
out most likely. If you have a decent random wire etc, that should be
good enough unless you are shooting for some certain area or freq. But
then you would need an antenna with gain to do any better. A good test
of receivability is just listen to the rig while unplugging the antenna
when tuned to band "white" noise. If the noise increases any when you
hook the antenna up, you are ok. S/N means alot more than pumping the s
meter up. MK
--
http://web.wt.net/~nm5k

4901. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 08:07:36 UTC
From: Stick <bjames1@hotmail.com>
Message-ID: <clY16.75855$x6.35555627@news2.rdc2.tx.home.com>
Source record: 173999

.......the wire line uses an air dialectric and because of the spaceing of the wires...low loss between the two. Coax uses various dialectric materials but because the wires(the shield and the inner conductor)are very close together, the losses are higher despite the best efforts of the manufracturer. thats that
Alex Allan <alex@g3zbe.freeserve.co.uk> wrote in message news:3A3FBCB1.F2E401D7@g3zbe.freeserve.co.uk...
> Thanks for the reply Roy,
>
> I will digest it and get back to the group and explain what prompted the
> question.
>
> Alex
>
> Roy Lewallen wrote:
>
> > Yes. In both types of line, the dominant source of loss is, by far, due
> > to conductor resistance at frequencies up to and including UHF. (In
> > coax, dielectric loss typically begins to dominate somewhere between 1
> > and 10 GHz.). In this range, open wire line has less loss simply because
> > of its higher impedance. In a flat line (one terminated with its
> > characteristic impedance), the loss is proportional to the ratio of the
> > conductor resistance (taking skin effect into account) to the
> > characteristic impedance of the line. So all else being equal, the loss
> > is inversely proportional to Z0. If you could make coax and open wire
> > line of the same impedance with comparably sized conductors, they'd have
> > very nearly the same loss up through UHF. But because of the way the
> > fields are shaped, 450 or even 300 ohm coax would be monstrously and
> > impractically huge and/or would have a microscopically thin center
> > conductor. 72 ohm twinlead used to be available -- it had large, closely
> > spaced conductors and would have loss comparable to 75 ohm coax. It
> > wouldn't be practical to make as open line, though, because of the
> > closeness of conductors and the fact that they'd have to be even closer
> > and/or larger without the dielectric the twinlead had.
> >
> > When a line is run at high SWR, the loss is magnified, so the ratio of
> > loss in coax compared to open wire line becomes greater.
> >
> > Alex Allan wrote:
> > >
> > > Hi all,
> > >
> > > Can anyone provide a definitive explanation why open wire feeder is
less

> > > lossy than coax ?
> > >
> > > Thanks
> > > Alex
> > > G3ZBE
>

4902. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 08:22:21 UTC
From: Stick <bjames1@hotmail.com>
Message-ID: <1zY16.75902$x6.35570764@news2.rdc2.tx.home.com>
Source record: 174000

A reciever generally would like to look into a nominal 50 ohm
impedence...for the max transfer of power from the antenna to ur rx, use a
pi network consisting of an inductor and two capacitors . There are
resources on web...look for pi network antenna tuners and "make" it.
Mark Keith <nm5k@wt.net> wrote in message news:3A483426.7CAB@wt.net...
> ehchvac wrote:
> >
> > will an antenna tuner or a tuner with amp help a long wire, and if so
any
> > opinions on which one, the radio is a drake r8b.
> > thanks in advance
>
> Well, A tuner could help a bit, but you should be able to get by without
> it usually. Sometimes they can help "hotten" up the reception on a band
> that the mismatch is bad. But still the overall S/N ratio shouldn't
> change that much. Your S meter will just read higher. Same for a preamp.
> With most any modern receiver they are a waste of time, and can actually
> trash out the receiver with image problems etc. I'd stay away from
> those. The drake is a good radio. Adding a preamp would just trash it
> out most likely. If you have a decent random wire etc, that should be
> good enough unless you are shooting for some certain area or freq. But
> then you would need an antenna with gain to do any better. A good test
> of receivability is just listen to the rig while unplugging the antenna
> when tuned to band "white" noise. If the noise increases any when you
> hook the antenna up, you are ok. S/N means alot more than pumping the s
> meter up. MK
> --
> http://web.wt.net/~nm5k

4903. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 08:35:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A485840.1A4D6AB8@eznec.com>
Source record: 174001

This would be true if the power into the monopole is half the power into the dipole, for example, if the author excited both antennas with the same current rather than the same power. Otherwise, this is definitely a text and author to avoid.

And guess what -- if you put three times as much power into the monopole as you do into the dipole, the monopole radiates three times the power that the dipole does. Amazing, huh?

Roy Lewallen, W7EL

Cecil wrote:
>
> Ted Bruce W2ICV wrote:
> > Or, as Les
> > says, dig a quarter wavlength hole in the ground, stick one end of
> > your half wave dipole in the ground - don't touch that dirt! - and
> > bingo! You've got it.
>
> "As the monopole radiates power only in the region above the conducting
> plane, the total radiated power is one-half that of the corresponding dipole."
> _Electromagnetics_, by Joseph A. Edminister
> --
> http://www.mindspring.com/~w6rca

4904. Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 09:46:02 UTC
From: dc6022@my-deja.com
Message-ID: <929pcq$2pk$1@nnrp1.deja.com>
Source record: 174003

Hi there,

Does any one know how to measure or evaluate the Q value of capacitor
(12pF; NPO) which is used at 1.5GHz ckt.? Please advise. Tks.

DC-6022

Sent via Deja.com
http://www.deja.com/

4905. Re: FS: Portable Dipole's

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 09:59:37 UTC
From: sabbatai_zvi@NOSPAMhotmail.com
Message-ID: <3a486b8c.904301@news-server>
Source record: 174002
Cross-posted to:
rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,alt.ham-radio.marketplace,rec.radio.amateur.swap

Dipoles and antennas, not dipole's and antenna's...

On Tue, 19 Dec 2000 16:53:27 -0500 (EST), ARS--KC8BCR@webtv.net (Bill)
scribbled:

>[Several hams have suggested I take TWO of my portable wind-up reel
>[antenna's and manufacture them together to make a portable dipole
>[system. So that's what I've done. If you'd like a portable dipole
>[system made with our wind-up reel antenna's and custom made with ANY
>[kind of plug on the end...PL-259, 1/8" phone, BNC, etc...just let me
>[know and I'll
>[be happy to do it AT NO EXTRA COST. And the shipping is free when you
>[order two of the reel antenna's, too. To see a photo and to get further
>[info on the wind-up reel antenna's, just go to http://qth.com/dwm and
>[click the "Yo-Yo-Tenna" section.
>[
>[73 and happy holidays;
>[
>[Bill, WA8MEA @ Jackson, MI QRP Club station: KC8BCR
>[

4906. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 11:35:23 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A48827B.44E02CBC@mwci.net>
Source record: 174004

dc6022@my-deja.com wrote:

> Does any one know how to measure or evaluate the Q value of capacitor
> (12pF; NPO) which is used at 1.5GHz ckt.?

One method:

Use a high-Q resonator, preferably a cavity resonator, with *extremely*
small coupling to the generator and load. Determine Qr with a 12 pF
very-high-Q air capacitor, using the 3 dB frequency response method and
using a frequency counter and an accurate spectrum analyzer. Then replace
the reference capacitor with the test capacitor and get a new Qt value.
The Qtc of the test capacitor itself is

1/Qtc = 1/Qt - 1/Qr

The test capacitor may not be what you think it is at 1.5 GHz, because of
internal and lead wire inductances (it should preferably be a chip cap).
If the cavity does not resonate close to 1.5 GHz it probably has
considerable inductance. Compare low freq C and 1.5GHz C to find this
inductance.

This test setup is not a simple exercise. Unless you *really* want to do
it, ask to see the vendor's detailed spec sheet.

Bill W0IYH

4907. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 11:45:07 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <92a0c5$7gn$1@slb1.atl.mindspring.net>
Source record: 174005

I believe you said you already own this cable.
Why not use a watt meter and measure it?
If you don't own one, I'm sure you can borrow
one. Then you will know.

If you don't already own the coax, don't buy it from
RS. Davis RF is my favorite supplier for coax.

73,
Tom Wagner - N1MM
Check out the N1MM Free Contest Logger at
http://tomwagner.home.mindspring.com/n1mm.htm

K7jy <k7jy@aol.com> wrote in message
news:20001225205202.00230.00000782@ng-cn1.aol.com...
> Well I've received a number of great replies about my original post, but
> nobody's answered my question yet. I'm wondering if anyone has the db loss
> figures for Radio Shack RG/8 coax? There seems to be universal agreement
that
> it's not very good, that it's stiff, that it's shield is thin, etc. What
I'm
> looking for is the proof in the numbers. Anybody know them? Rad Shack
used to
> sell the thick stuff a few years ago, but I haven't seen it in their
stores
> lately. Many thanks and 73s, John, K7JY.

4908. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 12:16:29 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <k_%16.10107$wE3.15043@newsfeed.slurp.net>
Source record: 174006

Hi, Reg:

Matters not whose smoke it is -- inquiring minds still wonder how Reg, G4FGQ, measures input resistance of radials, using antenna analyzer, SWR meter, what ever.

Would you be kind enough to answer that question, please, Reg?

Thanks!

--

73, Dave, K3BHJ

4909. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 13:31:11 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <92a60a$2ne7$1@newsreader.cetlink.net>
Source record: 174007

Several years back, about the time RG-8X came out Radio Shack had some cable advertised and there was a magazine artical on some of their coax. The stuff did not meet the loss they advertised. Can't remember which magazine it was in but probably was in either QST or 73 Magazine. Also there has been several articals and comments about their lossy coax adapters.

"Dick Hughes" <rhughes33@cableone.net> wrote in message news:i31g4tcp2083l8fl1mqapid6s3j9he1c6v@4ax.com...
> You could just go by the Radio Shack numbers. I see no reason to
> doubt them. The RG-8 has 1.9 dB loss/100 feet at 100 MHz, and 4.1 dB
> at 400 MHz. If you are nervous about their in-house brand, you can
> special order Belden 8214 or 8237 through their commercial catalog.
> It is interesting that the Belden 8237 has exactly the same rating as
> the in-house cable. I believe you can order through
> www.radioshack.com
>
> 73, Dick - W6CCD

4910. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 13:38:26 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <92a6e7$2nkn$1@newsreader.cetlink.net>
Source record: 174008

Unlike an antenna tuner not helping out on transmitt losses in the coax, it will help out some in the receiver. This is because you are actually matching the receiver to the line and that is the load. Depending on the band and swr looking back to the receiver from the antenna and cable loss it could help alot on the S/N ratio.

"Mark Keith" <nm5k@wt.net> wrote in message news:3A483426.7CAB@wt.net...
> ehchvac wrote:
> >
> > will an antenna tuner or a tuner with amp help a long wire, and if so
any
> > opinions on which one, the radio is a drake r8b.
> > thanks in advance
>
> Well, A tuner could help a bit, but you should be able to get by without
> it usually. Sometimes they can help "hotten" up the reception on a band
> that the mismatch is bad. But still the overall S/N ratio shouldn't
> change that much. Your S meter will just read higher. Same for a preamp.
> With most any modern receiver they are a waste of time, and can actually
> trash out the receiver with image problems etc. I'd stay away from
> those. The drake is a good radio. Adding a preamp would just trash it
> out most likely. If you have a decent random wire etc, that should be
> good enough unless you are shooting for some certain area or freq. But
> then you would need an antenna with gain to do any better. A good test
> of receivability is just listen to the rig while unplugging the antenna
> when tuned to band "white" noise. If the noise increases any when you
> hook the antenna up, you are ok. S/N means alot more than pumping the s
> meter up. MK
> --
> http://web.wt.net/~nm5k

4911. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 13:50:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A48A21F.D802F844@IEEE.org>
Source record: 174010

Roy Lewallen wrote:
> This would be true if the power into the monopole is half the power into
> the dipole, for example, if the author excited both antennas with the
> same current rather than the same power.

It appears to be the same current. It says the E and H fields for
a monopole are identical to 1/2 of a dipole.
--
http://www.mindspring.com/~w6rca

4912. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 13:56:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92a84k$sa2$1@uranium.btinternet.com>
Source record: 174009

Dear Dave,

Tom knows how to measure the input resistance of radials as
well as most folk. He asked the question rhetorically, as a
diversionary tactic, part of the unsuccessful smoke screen.
It was not worthy of an answer.

But the answer can surely be found in ARRL publications.
Sorry I don't have the full up-to-date set or the time to
wade through them to provide you with the exact
reference(s). The answer very likely can also be found in
Spanish, French, German, Russian, Japanese, Chinese and
Indian publications.

So to obtain the input resistance of one or a number of
radials associated with a 1/4-wave vertical antenna,
carefully follow these instructions :-

(1) Using alligator clips connect your antenna analyser
between the bottom end of the antenna and the near end of
the radial.

(2) Switch on the analyser.

(3) Vary frequency for minimim impedance reading at 1/4-wave
resosnance.

(4) Subtract 37 ohms from the minimum impedance reading and
there you have it.

(5) Switch off the analyser to save batteries. They are
power hogs. But the best things since sliced bread.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
David J. Windisch <davidw@copper.net> wrote in message
news:k_%16.10107$wE3.15043@newsfeed.slurp.net...
> Hi, Reg:
>
> Matters not whose smoke it is -- inquiring minds still
wonder how Reg,
> G4FGQ, measures input resistance of radials, using antenna

analyzer, SWR
> meter, what ever.
>
> Would you be kind enough to answer that question, please,
Reg?
>
> Thanks!
>
> --
>
> 73, Dave, K3BHJ
>
>

4913. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 13:57:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A48A3E3.F119B8D8@IEEE.org>
Source record: 174011

Stick wrote:
> A reciever generally would like to look into a nominal 50 ohm
> impedence...

With the dynamic range a good commercial receiver has, that is
not very important. My IC-706 only requires 0.16 uV for 10dB S/N.
--
http://www.mindspring.com/~w6rca

4914. Re: Which Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 14:03:24 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <92a8nk$7js$1@newpoisson.nosc.mil>
Source record: 174012

Curt M. Breneman <brenec@rpi.edu> wrote in message
news:3A43C151.13EC@rpi.edu...
> Jim Rodenkirch wrote:
snip ... Try something like that...it's fun and informative AND
> > inexpensive...regards, Jim R. K9JWV

How to you tune the antenna? Do you have a motor on the vacuum cap, or do
you have some preset positions for each band?

Curt Breneman
RPI Chemistry
KC2EBP

Curt: for now, a single vacuum cap setting accommodates 30, 20, and 12 while
for 40 I'd remove the cap and add the L in series.

If I want to use the system on 17, 15, and 10 I remove the vacuum cap and
insert a variable mesh type capacitor.

Not very elegant but it works...of course, living in Charleston, S.C.
helps - if I resided at my old QTH back in Wisconsin we wouldn't be talking
about switching 'nuthin around this time of the year...LOL!

There is a fella out in the midwest who advertises a switcheable capacitor
box, in QST. I called him some months back and found out he's got a weather
proofed version from 3 up to 200+ mfd and I've been considering buying that
and trying it. Would be great to have set switch positions I could go out
and change for the different bands...believe the cost was around $45.00.

Regards, Jim R.

4915. Hams Helping SWLs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 15:10:47 UTC
From: Sandy <SandyBur@flashbad.net>
Message-ID: <Xx226.23322$bw.1585793@news.flash.net>
Source record: 174013

I see quite a few posts here from SWLs requesting assistance from hams about antennas and I'm glad to see they are getting it. Although there is a news group for SWLs, the quality of response here appears to be a bit sharper and a touch more technical. If an SWL gets the assistance he needs, his view of the ham group improves and he/she is more likely to look into ham radio.

I started out as an SWL, got my ham license, then decided I prefer SWLing. I still consider ham radio as a great potential hobby and I use this group as my main source for newsgroup type information.

Lets keep the friendly attitude between hams and SWLs rolling on.

Thanks.
Al
KA5JGV

4916. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 15:21:16 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A48B76C.AC403D02@dvol.com>
Source record: 174014

K7jy wrote:

> Well I've received a number of great replies about my original post, but
> nobody's answered my question yet. I'm wondering if anyone has the db loss
> figures for Radio Shack RG/8 coax? There seems to be universal agreement that
> it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
> looking for is the proof in the numbers. Anybody know them? Rad Shack used to
> sell the thick stuff a few years ago, but I haven't seen it in their stores
> lately. Many thanks and 73s, John, K7JY.

>
What is your reason for wanting the actual particulars on the RS cable?? Doesn't make sense to me. The stuff is well known to be crap so you don't use it. End of where I come from.
>
The only way you'll get the right answer is to buy 100 feet of the stuff and pump RF thru it into a dummy load with Bird wattmeters on both ends of the cable.
>
w3rv

4917. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 15:49:51 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <_8326.219$e5.662869@news.ntplx.net>
Source record: 174015

>Here is the fresh one for all those scaremongers like FCC, ARRL, N6NB and all
> those who came up with RF safety "standards":

http://www.washingtonpost.com/wp-srv/aponline/20001219/aponline160124_000.htm

>Kepp making them up, starve the children, eat your grand parrents, RF kills,
>freaktenna will sue your butt, etc....

>Now you can take your lead suits off!

ARRL did not come up with the RF-exposure standards. They were developed by the consensus committee IEEE SCC-28 and then adopted as regulation by the FCC.

Can you provide any examples of ARRL material that is as "scare-monger" oriented as this post implies?

73,
Ed Hare, W1RFI

4918. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 16:13:43 UTC
From: chantey <chantey@shore.net>
Message-ID: <GQ726.1636$JG.205922@news.shore.net>
Source record: 173873

Dear Reg:

As one who does not have a pecuniary interest in ARRL publications I would like to weigh in on the side of W7EL. I know some of those who write for the various ARRL publications and they do possess the appropriate technical credentials and do quality work. The worst error I have found in an ARRL publication was a square root sign that did not enclose enough of an equation, and this was obviously a type-setting error.

Going further back, much of the information in the ARRL Antenna Book has its roots in the works of Messrs Beverage, Brown (phased verticals), Kraus, and Lawson (Yagis), much of which originally appeared in the Proceedings of the IRE or in Lawson's case was published in his text on Yagis. (Lawson also wrote one of the volumes of the classic MIT Radiation Laboratories Series. He later became head of R&D for a small company called General Electric.)

Best Wishes,

Bob, N1RC
BSEE, MIEEE

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:922u1f$24e$2@plutonium.btinternet.com...
> Roy sez -
> > In general, the ARRL publications (particularly the
> > Handbook and Antenna Book) are very good, and real
> bargains for the
> > price.
> ========================
> A sales blurb from a vested interest ? Lacking in
> originality ?
>
> By when have you planned to correct your technical and other
> errors ?
>
> ;o) ;o) ;o)
>
> Reg.
>
>

4919. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 16:20:55 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7C326.220$e5.665191@news.ntplx.net>
Source record: 174016

Stephen Dobak <shdobak@earthlink.net> wrote in message
news:3A46A30B.F05C0B98@earthlink.net...

> I believe that although the energy from cell phones will not cause
immediate
> problems there are long term effects to be taken into consideration and
it you
> want years of tissue heating to your head to enhance corporate profits,
Fine your
>choice, I don't and have a hard time with putting profit above people and
lying
> to a largely gullible public with bad and agenda driven sciences.

The people who comprise the IEEE committee that sets these standards are drawn from a wide range of researchers, industry and user groups (such as ARRL). There are very clear dangers to high levels of RF that have been documented by good science -- the levels of the standard are set based on what has been demonstrated by good science. Groups like the American Medical Association and American Physical Society have made recent announcements that RF exposure *at the level of the standard* has not been demonstrated to cauase cancer. Why would the AMA "lie?"

The threshold is based on a specific absorbtion rate of 4 W/kg of body mass. It is at this level that various studies show unwanted health effect. (None of these effects have been tied in to long-term health hazards; they are indeed short-term and thermal in nature.) From that level, the standards committee added safety factors -- 1/10 for controlled/occupational exposure and 1/50 for uncontrolled/general-public exposure.

Let me put that into terms that most people can easily visualize. An absorbtion rate of 4 W/kg would be attained if someone locked themselves into a very small closet with a 500 W heat source (let's use a light bulb -- its radiation is electromagnetic and would ultimately be absorbed as heat in this closed system). I can see how a 500-watt heat source in a small closet would very soon overheat the occupant to the point of causing temporary unwanted health effects. Now, let's expose him at the controlled exposure level by replacing the 500-watt bulb with a 50-watt bulb. Okay, on a hot day, this may add a bit of thermal load, but not enough to be dangerous to most people. Next, we will replace the 50-watt bulb with a 5-watt nightlight, to exposure the occupant at the uncontrolled level.

I trust this will help put the levels involved into the correct perspective.

73,
Ed Hare, W1RFI

4920. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 16:22:45 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <RD326.221$e5.665260@news.ntplx.net>
Source record: 174017

David R.Gemmer <david.r.gemmer@gte.net> wrote in message
news:yMK16.206$jr3.57146@paloalto-snr1.gtei.net...

> Any thoughts on the use of a chain link fence as an antenna? I have one
> surrounding about an acre, but every ten feet or so a post is set in the
> ground, as is typical for a fence. Probably an excellent ground, but any
> hope of using it for the actual antenna?

I would be concerned about safety if it was at all possible someone could
contact the antenna.

Any corrosion or dissimilar metal junctions could arc or become non-linear,
generating harmonics or IMD.

73,
Ed Hare, W1RFI

4921. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 17:10:04 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A48D0EC.59DA@wt.net>
Source record: 174018

Ed Hare, W1RFI wrote:

>
> Any corrosion or dissimilar metal junctions could arc or become non-linear,
> generating harmonics or IMD.
>
> 73,
> Ed Hare, W1RFI

You got that right. I've noticed some weird things things on 160m lately in that dept. It's real easy to get a bad connection to act as a rectifier, and it will spew AM broadcast garbage all across the band. It's like a distorted AM BC birdy every ten kc. I'm having that problem here, and not sure whats causing it. It's intermitant and sometimes will just flat instantly disappear, so I think a bad connection somewhere around here. It may have something to do with all the dang xmas lights that are plastered all over the house right now. They are effecting my 160 dipole and acting like a reflector a bit. I'll be glad to get that stuff off the house. I'm also tied into a chain link fence, and that may well be a problem also. I need to go out and unhook from it and see what happens. All this mess started recently. My receiver used to be pretty quiet as far as junk. Somethings goofy around here...But I just checked right now, and quiet as a mouse. Go figure. When I get it, it's on either antenna, so not an antenna problem per say. Something else in the area. MK
--
http://web.wt.net/~nm5k

4922. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 17:44:38 UTC
From: richardharrison@webtv.net
Message-ID: <19643-3A48D906-36@storefull-111.iap.bryant.webtv.net>
Source record: 173869

Roy Lewallen wrote:
"This would be true if the power into the monopole is half the power into the dipole, for example, if the author excited both antennas with the same current rather than the same power."

Cecil had quoted Edminister as saying, "As the monopole radiates power only in the region above the conducting plane, the total radiated power is one-half that corresponding to the dipole."

Edminister must assume that half of a vertical dipole is hidden below the earth in such a way that its impedance and power input are not affected but half the radiation is lost to free-space.

The opposite assumption is usually made. The monopole is assumed installed over perfectly conducting and reflecting earth. Power input to the monopole is made the same as to a dipole in space.

As the same power feeds the monopole, radiating in only one hemisphere, as would feed a dipole in a free-space spherical pattern, 3 db gain is credited to the monopole.

The math is OK. Power is current squared times the resistance. R for the dipole is about 74 ohms. For the monopole, R is about 37 ohms (half the dipole value). In the monopole the current is the square root of two (1.414) times the current into the dipole for the same radiated power. Twice the value for the current squared times half the resistance obviously produces the same calculated power. Nothing complicated and no magic.

Best regards, Richard Harrison, KB5WZI

4923. Radio Works Super Loop 80 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 18:32:50 UTC
From: user
Message-ID: <3toh4tslumham2s9025clpim2f6vcdpfmc@4ax.com>
Source record: 173870

Considering a Radio Works Super Loop 80 antenna. Does anyone have any
knowledge of this antenna/ advice on same. Thanks de Eddie, wb4mle
--
Eddie Seymour,WB4MLE
Delete the capital letters:
wb4mleAT@mindspringDOT.com

4924. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 20:17:15 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A48FC93.D861ADB4@att.net>
Source record: 173871

Suggest you re-read Roy's statement about the effect of dielectric loss
vs. conductor loss.

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Stick wrote:
>
> ....the wire line uses an air dialectric and because of the spaceing of
> the wires...low loss between the two. Coax uses various dialectric materials
> but because the wires(the shield and the inner conductor)are very close
> together, the losses are higher despite the best efforts of the
> manufracturer. thats that
> Alex Allan <alex@g3zbe.freeserve.co.uk> wrote in message
> news:3A3FBCB1.F2E401D7@g3zbe.freeserve.co.uk...
> > Thanks for the reply Roy,
> >
> > I will digest it and get back to the group and explain what prompted the
> > question.
> >
> > Alex
> >
> > Roy Lewallen wrote:
> >
> > > Yes. In both types of line, the dominant source of loss is, by far, due
> > > to conductor resistance at frequencies up to and including UHF. (In
> > > coax, dielectric loss typically begins to dominate somewhere between 1
> > > and 10 GHz.).

4925. Tower for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 20:22:03 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A48FDEB.17F1@bellsouth.net>
Source record: 173882

I have a 60' Rohn tower for sale. I bought it last summer thinking I would put it up. But (alas) plans change, sooo.....I would like to get $200 obo for it. It is one of those that will "telescope" within itself and is easy to haul via pickup, van, or small station wagon. It is in very good condition. Pickup only in western NC.

Tnx,

Jerry
K4KWH

4926. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 20:26:26 UTC
From: tom_bruhns@agilent.com
Message-ID: <92autbsvc1@nnrp1.deja.com>
Source record: 173872

Bill S offered some good words of wisdom on this. I'd agree, it ain't an easy exercise. Extending his idea of comparative measurements, you might put it on a (very good) network analyzer and _compare_ it with a known cap. The capacitive reactance is pretty low, only about 9 ohms, so even a very tiny amount of series resistance will lower the measured Q. Making reliable connections with low resistance is very difficult, so you might make the measurement several times and see different numbers each time, just because the resistance is different! If you can solder it into a test fixture (circuit), that could help a lot. (Our component test fixtures pretty much always use a four-wire connection for this reason.) My suspicion is that the losses will be dominated by series resistance, and actual in-circuit losses likely by the resistances external to the cap itself.

Cheers,
Tom

In article <929pcq$2pk$1@nnrp1.deja.com>,
dc6022@my-deja.com wrote:
> Hi there,
>
> Does any one know how to measure or evaluate the Q value of capacitor
> (12pF; NPO) which is used at 1.5GHz ckt.? Please advise. Tks.
>
> DC-6022
>
> Sent via Deja.com
> http://www.deja.com/
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

4927. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 21:20:30 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <92b26r$33t@nnrp2.farm.idt.net>
Source record: 173876

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a3f7ae4.7198289@news.akorn.net...
> On Mon, 18 Dec 2000 23:42:06 GMT, tom_bruhns@agilent.com wrote:
>
> >Seems to me it's pretty hard to blame it on the female end. Either
> >the male or the female, unmated, will cause a rather large reflection!
> >But in the mated pair, I've seen impedances as low as about 25 ohms,
> >maybe a bit lower, and the 40-ohm end of the range is mighty rare in
> >those I've looked at.
>
> Better look again Tom. Inside the PL-259 the cable dimensions are
> exactly the same as the cable you have installed. That's true right up
> to the start of the pin.
>
> The entire problem is in the female connector, were at the mating
> female section it is a larger dimension. Zo there is typically in the
> 30-35 ohm range, but if the dielectric is removed (some connectors
> have a mostly air dielectric) impedance moves up close to 50 ohms.
>
> >If you do have a UHF mated pair that's 25 ohms for, say, 1 inch length,
> >and if the velocity factor is 0.5 (typical insulation in UHF connectors
>
> The only way you'd have a bump one inch long of 25 ohms with a Vp of
> .5 is if you had an absolute junk barrel connector at that point.
>
> >has a higher dielectric constant than polyethylene, though you can get
> >Teflon ones that are better: electrically shorter and also higher
> >impedance), at 450MHz, that's about 27 electrical degrees. That will
> >transform 1:1 SWR into very nearly 2:1. Even half an inch, about 14
> >electrical degrees, gets you to about 1.42:1. If you have a couple of
> >the 25-ohm 1" mated pairs as above on 450MHz, with about 160 electrical
> >degrees of coax between them, you get to over 2:1 SWR. That assumes low
> >(0.01dB) loss in the connectors and in the interconnecting coax; higher
> >loss line reduces SWR of course. But on a 440 transmitter with one
> >single run of line between it and its antenna, it's quite possible to
> >design for very low loss and low SWR using UHF connectors: the
> >transmitter can be designed to deliver power to the impedance seen
> >looking into the UHF connector on the transmitter, from the inside, when
> >it's terminated into 50 ohms, even though that's not 50 ohms and in fact
> >is somewhat reactive...and at the antenna end, the antenna can be tuned
> >to present a 50 ohm match to the PL-259-terminated transmission line.
> >So at each end, the UHF can be accounted for, with practically no ill
> >effects. And at each end, the socket--which I'll agree is the
> >controlling factor for most of the "bump"--is under the control of the

> >designer of the equipment. In summary, the effect can be bad if
> >unaccounted for, but can be pretty small if accounted for.
>
> No one I know of recommends UHF connectors for 450 Mz, because if you
> use enough connectors and they are spaced the "wrong distance" apart
> you can indeed cause SWR problems at UHF. Actually with enough
> connectors spaced the the wrong distance apart, it can cause a SWR
> problem at 30 MHz, but then a line with 25 or more female connectors
> probably needs to be redesigned anyway.
>
> >I'm trying to understand if the N connectors I'm familiar with are the
> >same N connectors that others here are talking about. They won't take
> >as much kicking around in the dirt as a UHF plug, but I haven't notices
> >problems with pins pulling out...that seems like a defective connector
> >design.
>
> The center pins pull back because of how the N grabs the cable.
> Nothing secures the center pin in most N connectors.
>
> If you use the N with "superflex" cables (in some cables the jacket
> does not grip the braid and outside of the inner dielectric securely)
> the cable can "pull back" the center pin on the ends. You have to be
> very careful what type of coax you use with an N connector, which is
> what you'd want to do at UHF frequencies anyway.
>
> Using an N connector at VHF and lower is almost silly, since there is
> nothing to be gained except headaches. The exception is if you are
> making precision measurements.
>

Well just for fun I did some calculations at various frequencies for a system composed of a 1 inch long UHF barrel connector, with a PL-259 plug on each end. The dielectric length of the PL-259 plugs I measured was 0.25 inches, and the barrel connector was 1 inch long. Each plug, and the barrel adapter, were treated as a transmission line. The three "transmission" lines were cascaded in series, a PL-259 plug on each end of the barrel adapter. A "perfect" 50 ohm load was assumed connected to one PL-259 plug, and the SWR meter was connected at the end of the other PL-259 plug. The input impedance for each "transmission" line was calculated starting with the perfect 50 ohm load, and then used as the load impedance for the next "transmission" line. The length of the "transmission" lines were converted to the equivalent wavelength based on the test frequency, and VF of the line. The loss less transmission line equation was used for all the calculations below.

The dielectric constants I used were pulled from a copy of the book "Reference Data for Radio Engineers" published by ITT.

Er=1.0 (air)
Er=2.1 (Teflon up to 3 GHz)
Er=4.6 (Phenol with 65% mica fill at 1 MHz)
Er=4.04 (Phenol with 65% mica fill at 100 MHz)

Er=3.57 (Phenol with 65% mica fill at 3.57 GHz)

VF=1/sqrt(Er) was assumed too.

I did find references, on the Amphenol Connectors web site, where they use a mica filled dielectric in some of the UHF connectors they manufacture. You should be able to look up specific connectors, then look under the specifications, to see what types dielectric materials you can get them in. The dimensions I measured on a barrel connector I took apart were; adapter pin OD equals 0.217 inches, and the adapter shell ID equals 0.47 inches.

(Zadapter in ohms with an Er of adapter of)
(1.0 2.1 4.0)

46.37 31.998 23.185 (ohms)

The calculations were made at 430 MHz, 222 MHz, 144 MHz, 50 MHz, and 28 MHz. The dielectric constant of the material in the PL-259 plugs was assumed to be 1.0 (air), for this test.

(Freq) (SWR with an Er of adapter)
(MHz) (1.0 2.1 4.0)

430 1.052 1.207 1.469
222 1.027 1.108 1.253
144 1.017 1.07 1.162
50 1.006 1.024 1.054
28 1.003 1.013 1.03

Now repeating the calculations at 430 MHz, 222 MHz, 144 MHz, 50 MHz, and 28 MHz. The dielectric constant of the material in the PL-259 plugs was assumed to be 2.1 (Teflon), for this test.

(Freq) (SWR with an Er of adapter)
(MHz) (1.0 2.1 4.0)

430 1.253 1.548 2.047
222 1.125 1.263 1.498
144 1.079 1.165 1.307
50 1.027 1.055 1.099
28 1.015 1.03 1.054

Now finaly repeating the calculations at 430 MHz, 222 MHz, 144 MHz, 50 MHz, and 28 MHz. The dielectric constant of the material in the PL-259 plugs was assumed to be 4.0 (Phenol with 65% mica filled), for this test.

(Freq) (SWR with an Er of adapter)
(MHz) (1.0 2.1 4.0)

430 1.489 1.97 2.794
222 1.231 1.439 1.785
144 1.145 1.269 1.467
50 1.048 1.087 1.144
28 1.027 1.048 1.079

As you can see the mix of different dielectric types can result in widely varying SWR's. It would appear that even Teflon dielectric for 70 cm use may be no good with UHF type connectors, unless you have a perfect 50 ohm load. The results for 2m, using Teflon connectors, however look aceptable. If you take the time to examine the V/UHF type of connectors used on high quality SWR meters, power meters, and antenna mounts, you will find the manufacturers use a "web" dielectric type of design. This is to get the impedance bump of the UHF connector as close to 50 ohms as they can get. They can do this because the "web" dielectric design is mostly air.

Measuring SWR at V/UHF has to be done with care. If the SWR meter is at the rig end of the line, and the splice point some distance away, the SWR will look lower because some of the reflected power is lost in the coax cable. So with reduced reflected power the SWR meter will show a better SWR that what you really have.

If anyone wishes I have the Mathcad worksheet I used, which I can E-mail for further calculations. You will have to let me know what version of Mathcad you have since I have to save the worksheet in the format specific for a given version, such as 2K, 8, 7, or 6 only.

--
73's,

Leland C. Scott
KC8LDO
>>kc8ldo@arrl.net<<

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

4928. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 21:23:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92b274okd1@uranium.btinternet.com>
Source record: 173874

Congratulations Tom - that's brief enough. Hic !

4929. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 21:42:37 UTC
From: n8blk@aol.com
Message-ID: <20001226164237.18339.00003450@nso-fa.aol.com>
Source record: 173878

In article <3a46050c.8985033@nntp.z052.glo.be>, mauricea.nobrol@glo.be (Maurice ON4BAM) writes:

>I wouldn't dream of putting a bugcatcher on my car here in Europe.
>Have you tried 100 Miles/Hour with a bugcatcher? I do that with the
>Outbacker without problems. It makes US hams smile when I tell them
>I'm cruising the German 'autobahn' at 100 M/Hr while talking to them..
>
>It sure seems that some people are getting paid to be negative about
>the Outbacker... It works great and I have the QSL's to prove it..
>that's enough for me. VK, P29, JA, KL7, W6, PY, ZS, 7X from the car
>can hardly be called a 'dummyload'.

I'm sure that at least a few bugcatchers in the states have successfully withstood the rigors of 160KPH travel, probably not legally but withstand them none the less. I do note that many successfully manage 70 or 75 mph legal travel in places like Texas and Montana. I suspect that a 15 cm diameter bugcatcher on a magmount isn't a good idea, but a normal mount, and grounding to the auto frame probably is more effective on 75 meters and 40 meters than an outbacker. XYL and other appearance issues may make the outbacker a better choice, but just for either mounting considerations or performance issues, a screwdriver and/or bugcatcher is probably no more difficult to mount or use. Low bridges, awnings and other factors might make an outbacker more likely to survive, but for radiating and receiving, the screwdrives and bugcatchers seem to work better.

It's also been my experience that almost any antenna will work mobile, but consistency of performance seems to require more than an outbacker, no matter how durable they are. I'm glad you like your outbacker, and you're happy with it, I wouldn't be, and I've played with them. They're fine on 10 meters, even on 15 meters, but on 75 meters, or 40 meters, they're just not acceptable to me.
-art clemons-

4930. Re: Small Loop Skywire..17 ft per side..will it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 21:45:19 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <Zg826.26351$BC.505552@e420r-atl2.usenetserver.com>
Source record: 173877

Large loops (quad elements) radiate well at the overtone resonances: these are not exactly at the 2;1, 3:1 etc harmonics, but are offset a little. The pattern changes, though. For the 2nd, 4th etc overtone there is no radiation at exactly right angles to the loop plane. If you use good transmission line and an antenna tuner, the loop radiates well for all frequencies from about 1/2 resonance to the point line loss becomes dominant. And if you make a loop with large enough conductor (or a large cage), the loop feed is around 100 ohms with almost no reactance for frequencies from about 1.5 times resonance up.

bob w4mb

4931. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 22:23:18 UTC
From: k3bu@aol.com
Message-ID: <20001226172318.05387.00002070@ng-cl1.aol.com>
Source record: 173879

>
>ARRL did not come up with the RF-exposure standards. They were developed by
>the consensus committee IEEE SCC-28 and then adopted as regulation by the
>FCC.
>
>Can you provide any examples of ARRL material that is as "scare-monger"
>oriented as this post implies?
>
>73,
>Ed Hare, W1RFI
>

What was N6NB doing? Wasn't he ARRL employee/whatever?
What did ARRL do to object to FCC "standard" that has no basis and no linkage to harmfull effects? Who is asking hams to comply with "standard" that has no base in any studies or known facts?

Yuri, K3BU

4932. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 22:28:20 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <WRtJOt6VG1OouFTPj02WQHYEigvZ@4ax.com>
Source record: 173880

k7jy@aol.com (K7jy) wrote:

>Well I've received a number of great replies about my original post, but
>nobody's answered my question yet. I'm wondering if anyone has the db loss
>figures for Radio Shack RG/8 coax? There seems to be universal agreement that
>it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
>looking for is the proof in the numbers. Anybody know them? Rad Shack used to
>sell the thick stuff a few years ago, but I haven't seen it in their stores
>lately. Many thanks and 73s, John, K7JY.

The ARRL antenna handbook gives the db loss characteristics of several
brands of coax, but not RS coax. That should tell you enough :-)

Bob
k5qwg

4933. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 22:31:44 UTC
From: k3bu@aol.com
Message-ID: <20001226173144.05387.00002071@ng-cl1.aol.com>
Source record: 173881

>
>Let me put that into terms that most people can easily visualize. An
>absorbtion rate of 4 W/kg would be attained if someone locked themselves
>into a very small closet with a 500 W heat source (let's use a light bulb --
>its radiation is electromagnetic and would ultimately be absorbed as heat in
>this closed system). I can see how a 500-watt heat source in a small closet
>would very soon overheat the occupant to the point of causing temporary
>unwanted health effects. Now, let's expose him at the controlled exposure
>level by replacing the 500-watt bulb with a 50-watt bulb. Okay, on a hot
>day, this may add a bit of thermal load, but not enough to be dangerous to
>most people. Next, we will replace the 50-watt bulb with a 5-watt
>nightlight, to exposure the occupant at the uncontrolled level.
>
>I trust this will help put the levels involved into the correct perspective.
>
>73,
>Ed Hare, W1RFI
>
>
>
>

Very inapropriate analogy. Lightbulb in a closet is not equivalent to RF
exposure and transparency of human body to HF frequencies.
Lets ban all RF and be 100% "safe"!!!

We have unfounded RF "standards" and you are already "explaining" and defending
it. What's next? Don't breathe air?

Yuri, K3BU

4934. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 22:50:25 UTC
From: TR <w7trx@mindspring.com>
Message-ID: <92b7a9$l7g$1@slb7.atl.mindspring.net>
Source record: 173883

Mark Keith <nm5k@wt.net> wrote in message news:3A482FA2.44EC@wt.net...
> TR wrote:
> > How were you planning to tune your all band "Super-Stick"?
>
> You would have to get out of the car for my antenna. It will be tuned
> about the same as my present one, except it'll just be taller. I'll
> probably use a 7 ft 10m stick as the base antenna. Or at least the
> highest band stick I can get thats 7 ft tall. I'll take off windings if
> needed. So the base stick will work 10m as is.
> I'll add a 80 meter coil about a ft or so below the top. There will be
> one tap for 40m. The stinger will be a fixed length, so the coil will be
> tuned to 80m by adjusting the number of turns. There is no tap for 80m.
> I don't move around much... After I get 80m tuned, I add a tap for 40m.
> I'll use a jumper to put the coil on 40m, or to bypass totally for high
> band use. On 30-10 meters the coil will be bypassed, and I'll have a
> different stinger for each of the high bands. By the time you get up to
> ten meters the stinger will be pretty short. So that gives me 80-10 with
> one antenna. But I have to get out to change bands. Takes about 2 min. I
> use a quick disconnect and keep a nutdriver behind the seat for quick
> stinger changing. But with this system the antenna is properly tuned for
> each band. No tuner used for the antenna itself, but you will need
> impedance matching. I usually use a small tuner. But this antenna with
> the big coil won't be mistaken for any hamstick on the air. I'll have
> bugcatcher performance in an antenna that weighs very little. My present
> one works real good. "8 ft total", but you know hams, never satisfied.
> The new one will be a good bit more efficient on 80m. Mainly because of
> the higher coil and longer stinger. With the extender , the coil will be
> appx 9 ft off the deck of the car or truck. But that will only be used
> when parked usually. 12 ft is tall enough for driving...g I'm counting
> on the wind flex to the rear to let me clear the 13.6 ft overpasses on
> the interstates. Even if I hit, no biggie. Just slaps off whatever it
> hits. The 15 ft setup for camping sites etc.

Mark, Thanks for the details. I'll study and consider this further.

FYI: I have seen a new hamstick named Iron Horse (or something like that)
It has the standard male 3/8 thread at the bottom (for the base mount) and a
3/8 female at the top, to allow the pre-adjusted stinger assembly to be
screwed into the top of the fiberglass base section. A real nice touch. The
other option it may allow is two of the base sections to be screwed together
for 8ft total of fiberglass. Add your own monster coil and a 3-4 foot
stinger to the top and you may have a pretty decent long mobile whip (11-12
ft) with the capability to easily unscrew into 4 foot long sections for
storage or transport.

73, Tracy
W7TRX

4935. Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 22:58:33 UTC
From: tomkulas@pressenter.com
Message-ID: <Zk926.522$e6.331757@news.uswest.net>
Source record: 173884

The city won't let me put up anything higher than a 35' tower. Is a beam useful at that height for stateside contests and some DXing?

K0TK

4936. Re: X7 Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:05:18 UTC
From: nospam@libero.it
Message-ID: <3a4922b0.652315@News.CIS.DFN.DE>
Source record: 173885

On Sun, 24 Dec 2000 23:36:50 GMT, nospam@libero.it (Arturo) wrote:

>The target of this job is to build the theoretical H-plane and
>V-plane radiation patterns of this antenna.

OK, I did hit the target.
You can see the results and other info on the X7 antenna at:
www.qsl.net/ik7jwy (section "X7-antenna")
Thanks

Arturo IK7JWY
www.qsl.net/ik7jwy
www.qsl.net/ari-lecce

4937. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:19:23 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <if9i4tg5m5ge0l1jglrn1to6njn68ll6fl@4ax.com>
Source record: 173886

I don't really want to be having to defend suppliers, but Radio Shack
also sells Belden RG-8U (8214 & 8237) under part numbers 910-1578 and
910-1579. Belden is a very respected name in coax.

Dick - W6CCD

On Tue, 26 Dec 2000 22:28:20 GMT, Bob Miller <bamiller@texas.net>
wrote:

>k7jy@aol.com (K7jy) wrote:
>
>>Well I've received a number of great replies about my original post, but
>>nobody's answered my question yet. I'm wondering if anyone has the db loss
>>figures for Radio Shack RG/8 coax? There seems to be universal agreement that
>>it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
>>looking for is the proof in the numbers. Anybody know them? Rad Shack used to
>>sell the thick stuff a few years ago, but I haven't seen it in their stores
>>lately. Many thanks and 73s, John, K7JY.
>
>The ARRL antenna handbook gives the db loss characteristics of several
>brands of coax, but not RS coax. That should tell you enough :-)
>
>Bob
>k5qwg

4938. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:34:40 UTC
From: fractenna@aol.com
Message-ID: <20001226183440.04282.00001847@ng-cr1.aol.com>
Source record: 173887

>
>>
>>ARRL did not come up with the RF-exposure standards. They were developed by
>>the consensus committee IEEE SCC-28 and then adopted as regulation by the
>>FCC.
>>
>>Can you provide any examples of ARRL material that is as "scare-monger"
>>oriented as this post implies?
>>
>>73,
>>Ed Hare, W1RFI
>>
>
>What was N6NB doing? Wasn't he ARRL employee/whatever?
>What did ARRL do to object to FCC "standard" that has no basis and no linkage
>to harmfull effects? Who is asking hams to comply with "standard" that has no
>base in any studies or known facts?
>
>Yuri, K3BU
>
>
>
>
>
>
>

Hello Yuri,

Last week you stated that you had a 5 year prison sentence hanging over your head from some time back. When asked what you were convicted of, you went into a tirade of personal attack (you never answered the question), finally ending with a statement that you had left the NG and would not return for "several months".

And here you are...

This behavior is a serious problem. If it continues, at least against me as an individual, it will lead to civil AND criminal charges against you. I am stating this here because you are already publicly going against what you said you would do, and I see another one of your outbursts, filled with innuendo and attack, emerging here.

If this occurs, given your previous statements, it will be used as evidence in the claims which will be brought against you, should you not attain a civil attitude and presentation which is free of malicious libel and attack. If used, it will be one of several pieces of historical and now ongoing public posts to

show your pattern.

This NG is a public forum with defined norms of behavior. Please stay within them. This will be the last opportunity you will have to hear this from me.

Cordially,

Nathan Cohen, Ph.D.

4939. Re: Radio Works Super Loop 80 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:38:13 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3a492b5b_3@news.iglou.com>
Source record: 173888

It's just a full wave loop so go buy some wire, a few insulators and enough open wire to reach your turner. You'll have a better antenna. Don't fall for their hype.

user wrote in message <3toh4tslumham2s9025clpim2f6vcdpfmc@4ax.com>...
>Considering a Radio Works Super Loop 80 antenna. Does anyone have any
>knowledge of this antenna/ advice on same. Thanks de Eddie, wb4mle
>--
>Eddie Seymour,WB4MLE
>Delete the capital letters:
>wb4mleAT@mindspringDOT.com

4940. QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:39:35 UTC
From: fractenna@aol.com
Message-ID: <20001226183935.04282.00001849@ng-cr1.aol.com>
Source record: 173889

QST--

You are invited to join the fractal antenna reflector at:

fractalantenna-subscribe@egroups.com

This lively groups discusses the exciting and state of the art antenna technology based on fractals. Topics range from antenna theory to practical ham uses. Recent list size is 265. The reflector is moderated and no spam or personal attacks OR off-topic posts are allowed. Archives to subscribers only.

Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna reflector will be the 'net conduit for contact with him, so if you have fractal antenna questions, this is the place!

Happy Hammin'

Phil N1ZKT

4941. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:42:41 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A492CF1.BAD3D0A6@mwci.net>
Source record: 173890

Tom Kulas wrote:

> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?

A 3 element tribander 20-15-10 at 35 feet will probably be a better compromise than anything else at that height. Several dB gain better than a dipole at that height. Front to back and front to side ratios of 20 and 10 dB. Rotatable directivity.

Very easy to buy and install with a low cost rotator and a low cost tower. Good common sense for modest operatimg goals.

The tower will support an inverted V for 40 and 80.

Bill W0IYH

4942. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:49:21 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A492E81.37FEE5@mwci.net>
Source record: 173891

William E. Sabin wrote:

> Tom Kulas wrote:
>
> > The city won't let me put up anything higher than a 35' tower. Is a beam
> > useful at that height for stateside contests and some DXing?
>
> A 3 element tribander 20-15-10 at 35 feet will probably be a better
> compromise than anything else at that height. Several dB gain better than a
> dipole at that height. Front to back and front to side ratios of 20 and 10
> dB. Rotatable directivity.
>
> Very easy to buy and install with a low cost rotator and a low cost tower.
> Good common sense for modest operatimg goals.
>
> The tower will support an inverted V for 40 and 80.
>
> Bill W0IYH

A 30L-1 will definitely make up for some of the limitations.

Bill W0IYH

4943. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-26 23:53:46 UTC
From: k1bqt@aol.com
Message-ID: <20001226185346.21066.00006866@ng-fc1.aol.com>
Source record: 173892

>ARRL did not come up with the RF-exposure standards. They were developed by the consensus committee IEEE SCC-28 and then adopted as regulation by the FCC.<

And a giraffe, as we all know, is a horse designed by a committee.

>Can you provide any examples of ARRL material that is as "scare-monger" oriented as this post implies?<

Which "ARRL"? There are two. The ham "organization" of course isn't for profit and is tax exempt. ARRL Publications, the "material generator", on the other hand, IS very much for profit--a bit of duplicity often overlooked. So, while the League's "educational" efforts may not engauge in outright scare-mongering per se, they're certainly not above reveling in the opportunity for some baldfaced marketeering! They have the weapon, the motive, and the opportunity!

Rick K1BQT

4944. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:01:40 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4930bc.2413375@news.akorn.net>
Source record: 173893

On Tue, 26 Dec 2000 00:35:12 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>This would be true if the power into the monopole is half the power into
>the dipole, for example, if the author excited both antennas with the
>same current rather than the same power. Otherwise, this is definitely a
>text and author to avoid.

I guess I missed what Moxon was saying.

Do you think he was talking about a monopole with a perfect ground?

73 Tom

4945. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:02:25 UTC
From: 2w8ji@contesting.com
Message-ID: <3a49313e.2543552@news.akorn.net>
Source record: 173894

On Tue, 26 Dec 2000 07:50:23 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Roy Lewallen wrote:
>> This would be true if the power into the monopole is half the power into
>> the dipole, for example, if the author excited both antennas with the
>> same current rather than the same power.
>
>It appears to be the same current. It says the E and H fields for
>a monopole are identical to 1/2 of a dipole.
>--
>http://www.mindspring.com/~w6rca

What does he really say Cecil?

4946. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:05:38 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A493252.2090201@hiwaay.net>
Source record: 173895

Hey!- if I read this right- This means we will be rid of the fracky
jerk, unless we are so stupid as to go to the egroups list.
The last I saw, they were averaging about 3 posts a month.- That
qualifies as a 'lively group'?

Bill-W4BSG

Fractenna wrote:

> QST--
>
> You are invited to join the fractal antenna reflector at:
>
> fractalantenna-subscribe@egroups.com
>
> This lively groups discusses the exciting and state of the art antenna
> technology based on fractals. Topics range from antenna theory to practical ham
> uses. Recent list size is 265. The reflector is moderated and no spam or
> personal attacks OR off-topic posts are allowed. Archives to subscribers only.
>
> Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna
> reflector will be the 'net conduit for contact with him, so if you have fractal
> antenna questions, this is the place!
>
> Happy Hammin'
>
> Phil N1ZKT

4947. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:20:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4935CF.BCAB3E2E@IEEE.org>
Source record: 173896

Tom Kulas wrote:
>
> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?

Yep, 35' is about 1/2WL on 20m. It will do a fine job and actually
give you a larger footprint than a 100' tower.
--
http://www.mindspring.com/~w6rca

4948. Small Loop Skywire..17 ft per side..will it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:22:26 UTC
From: earlve3ab@igs.net
Message-ID: <3a493543.2482249@news.ott.igs.net>
Source record: 173875

I have been reading about the LOOP SKYWIRE..best kept secret in ham radio according to some user(s)..I wonder if a small loop..17 or 18 ft per side(fundamental freq approx 14 mhz) would work on harmonics up to and including 6 meters. This antenna would be temporary for 6 months or so until I install my 48 ft tower and hopefully..a good directive beam. 73 Earl VE3AB

4949. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:28:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4937A8.8E538907@IEEE.org>
Source record: 173898

Tom W8JI wrote:
>
> On Tue, 26 Dec 2000 07:50:23 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Roy Lewallen wrote:
> >> This would be true if the power into the monopole is half the power into
> >> the dipole, for example, if the author excited both antennas with the
> >> same current rather than the same power.
> >
> >It appears to be the same current. It says the E and H fields for
> >a monopole are identical to 1/2 of a dipole.
>
> What does he really say Cecil?

"17.7 Monopole Antenna A conductor of length L/2 normal to an infinite
conducting plane forms a monopole antenna. When fed at the base the
resulting E and H fields are identical to the dipole's. This is evident
when the image of the monopole is positioned below the conducting plane
as shown in Fig. 17-7. As the monopole radiates power only in the region
above the conducting plane, the total radiated power is one-half that of
the corresponding dipole. From R(rad)=2P(rad)/I^2(0) it follows that the
radiation resistance is one-half the value for the dipole. Thus, for L/2=
WL/4 (quarter-wave monopole), R(rad)=36.5 ohms."
--
http://www.mindspring.com/~w6rca

Gun control advocates tell us that the more helpless we are,
the safer we are from criminals.

4950. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:31:59 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A49387B.D8BF290D@home.com>
Source record: 173897

Tom Kulas wrote:

> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?
>
> K0TK

Lots of guys are using 32 ft towers with good results.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4951. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 00:48:51 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <T%a26.22452$RC1.662924@newsread1.prod.itd.earthlink.net>
Source record: 173899

ROTFL

I can Just see the Dogie taking a Whiz on the Fence :-)

"James Mosier" <jimm@gatecom.com> wrote in message news:3A4781DE.9C44A9B6@gatecom.com...
> David,
>
> On a lark, I used mine years ago when the ground was frozen solid here in
> the Detroit area. The tuner's random wire position worked against the house
> plumbing allowed me to QSO the Rocky Mtn. states well on 75m. The tuning
> was not predictable or repeatable from night to night as was expected.
> When the thaw came a few weeks later, it became an earthworm warmer. Watch
> out for all the stray dogs and kids in the neighborhood, as parents get
> upset when you fry their offspring.
>
> Merry Christmas,
>
> Jim KD8GS
>
>
>
>
>
>
>

4952. 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:03:41 UTC
From: Jean Pierre Magnan <incendie@softhome.net>
Message-ID: <B66EAA1D.EBF%incendie@softhome.net>
Source record: 173900

I am planning on putting a 10 meter antenna up. I am on a thight budget.

1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could string a 150-200 feet insulated wire in the trees around the house. This would cost me next to nothing. The only problem is that I don't have the manual for the tuner so how should I attach the long wire to the tuner. There is no lug at the back of the tuner, only an SO-239 connector.

2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I figure I could use my TV rotor to rotate it. It'll be at around 25 feet above ground until I can get my tower up.

3rd scenario: Something like a Carolina windom or a dipole between 2 trees near the shack. It would probably require an antenna tuner (other then the MFj-16010 though).

Once again I am seeking your advice to help me find a solution to my antenna problem. I welcome any comments.

I must say that money wise I (and most probably my XYL too) would prefer to go with the first scenario. I will definitely have to work out the details regarding how to connect te long wire and the ground to the tuner but I bet that it should not be to much of a problem.

Stay safe !

73 de VE2JPT

Jean-Pierre

Jean-Pierre Magnan
VE2 JPT (Basic and 5 wpm)
Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Quï¿½bec, Canada G0X 3J0
email: famille_magnan@infoteck.qc.ca
URL: http://famille_magnan.tripod.com (Go take a look -> Sorry it's in french for now)

The opinions expressed above are mine, all mine.
But I love to share them 8-)

4953. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:18:42 UTC
From: k1bqt@aol.com
Message-ID: <20001226201842.07785.00007045@ng-fy1.aol.com>
Source record: 173901

>Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna reflector will be the 'net conduit for contact with him...<

Kripe, mate, that only took four years to accomplish. Thank ya Phil, and I know many includin' meself 'll be lookin' forward to that change.

Rick K1BQT

4954. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:24:37 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <pxb26.194193$U46.5955440@news1.sttls1.wa.home.com>
Source record: 173902

When ten is open you can work do a lot with a dipole much more with a beam. I don't see what you will gain with a random wire and a tuner. If you want something cheap and works quite fine do a search on a wire half-square antenna. It is two 1/4 wave length wires hanging off of a 1/2 wavelength. This will work very well for very cheap and hangs between trees and such real nice. Cost you 1/2 wave length more in wire than a dipole. On 10 meters you can afford it! I have used a half-square on 10, 15 and 20 and was quite pleased. I plan on erecting one to cover 17 and 12 meters.

Glenn

"Jean Pierre Magnan" <incendie@softhome.net> wrote in message
news:B66EAA1D.EBF%incendie@softhome.net...
> I am planning on putting a 10 meter antenna up. I am on a thight budget.
>
> 1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could
> string a 150-200 feet insulated wire in the trees around the house. This
> would cost me next to nothing. The only problem is that I don't have the
> manual for the tuner so how should I attach the long wire to the tuner.
> There is no lug at the back of the tuner, only an SO-239 connector.
>
> 2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I
> figure I could use my TV rotor to rotate it. It'll be at around 25 feet
> above ground until I can get my tower up.
>
> 3rd scenario: Something like a Carolina windom or a dipole between 2 trees
> near the shack. It would probably require an antenna tuner (other then the
> MFj-16010 though).
>
> Once again I am seeking your advice to help me find a solution to my
antenna
> problem. I welcome any comments.
>
> I must say that money wise I (and most probably my XYL too) would prefer
to
> go with the first scenario. I will definitely have to work out the details
> regarding how to connect te long wire and the ground to the tuner but I
bet
> that it should not be to much of a problem.
>
>
> Stay safe !
>
> 73 de VE2JPT

>
> Jean-Pierre
> _____
> Jean-Pierre Magnan
> VE2 JPT (Basic and 5 wpm)
> Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Qu&#65533;bec, Canada G0X 3J0
> email: famille_magnan@infoteck.qc.ca
> URL: http://famille_magnan.tripod.com (Go take a look -> Sorry it's in
> french for now)
>
> The opinions expressed above are mine, all mine.
> But I love to share them 8-)
>

4955. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:31:55 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A49468B.C8731317@dvol.com>
Source record: 173903

Dick Hughes wrote:

> I don't really want to be having to defend suppliers, but Radio Shack
> also sells Belden RG-8U (8214 & 8237) under part numbers 910-1578 and
> 910-1579. Belden is a very respected name in coax.
>
> Dick - W6CCD
>

>
Walk into a RS and ask for 100 ft. of RG-8 and the clerk is gonna point you to the junk cable he has in stock.
>
w3rv

4956. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:38:15 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A494807.156ED1BD@dvol.com>
Source record: 173905

Irv Finkleman wrote:

> Tom Kulas wrote:
>
> > The city won't let me put up anything higher than a 35' tower. Is a beam
> > useful at that height for stateside contests and some DXing?
> >
> > K0TK
>
> Lots of guys are using 32 ft towers with good results.

>
You won't usually open the band with a small beam at 35 feet but you'll work
'em. Many claim that quads are better than tribanders at heights below 40 feet.

>
w3rv

4957. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 01:38:34 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <uKb26.194201$U46.5956349@news1.sttls1.wa.home.com>
Source record: 173904

"Tom Kulas" <tomkulas@pressenter.com> wrote in message
news:Zk926.522$e6.331757@news.uswest.net...
> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?

Tom, I mounted a 10-15-20 meter tri-bander on a 8 ft Martin roof tower. I it might be 30 ft high, maybe. It is so many times better than my dipole and vees and verticals. I almost always work what I hear on 100 watts if I can out smart the large cannons. I have moved up in the ranking in the contest I participate in and actually got a section first place in the 1999 10 meter dx contest. Never came close with a dipole or vertical during the previous solar peak. Do it you will be happy you did and as some bright individual mentioned you can hang a 40 and or 80 meter wire.

Glenn

4958. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 02:46:51 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A49581B.3702704A@tir.com>
Source record: 173906

Tom W8JI wrote:
>
> On Tue, 19 Dec 2000 21:02:52 -0500, "J. Mc Laughlin" <n8tt@tir.com>
> wrote:
>
> >Dear Group:
> > It can be worse. Study has shown that CU braided coax is slightly
> >non-linear (produces harmonics) and that tendency is increased with
> >even slight corrosion. RG214 is better - the AU seems to help. 73
> >Mac
>
> Any pressure contact joint can cause less than perfect linear
> operation. That's true no matter what the materials are.
>
> The level of that problem is insignificant in coaxial lines compared
> to the loss problem.

-----As with so many things, it depends. With many co-located
transmitters and receivers, the IM produced can be the limiting
factor. I recall that on a flat-top, solid line had to be used to
overcome IM produced in the braided coax. It was thought that the
problem was in the radios, but during a refit with extra filtering in
the radio (but still using coax to the load) the IM would not abate
independently of the filtering! 73 Mac N8TT
P.S. I intended to say Ag (silver) not Au (gold) for RG214.

--
J. Mc Laughlin n8tt@tir.com Michigan ~

4959. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 02:50:02 UTC
From: Michael <moreth@hotmail.com>
Message-ID: <3A4958DA.1961@hotmail.com>
Source record: 173907

Eric,

If you mounted your antenna to a metal railing, I gather it is a condo
or apartment installation, and not for your car.

Late this fall I wanted to put up a 20M antenna before the Chicago
winter arrived. I used two Valor Pro-Am 20-meter mobile whips, a $13.00
Transel TDAK dipole mount (http://www.transeltech.com/) up about 35
feet with a $30.00 MFJ hamfest tuner.

With this modest antenna and 100 watts I worked central and northern
Europe, Japan, South America, South Shetland Islands, South Africa,
Australia, etc. Most stateside contacts get good reports with 10 or 50
watts. It is keeping me busy this winter.

-Michael, N9OGC

Eric Struble wrote:
>
> I was wondering about peoples experiences with Hamsticks. I have a 20M
> mounted to a metal railing and I would say it's so-so. Although it's hard to
> compete with the 1KWs and beams. There are numerous postings talking about
> Outback vs. Screwdrivers and the likes, how about the Hamstick.
>
> Thanks,
> Eric, N6PYF

4960. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 03:11:02 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <skmi4to91626d8b4nlgrbjff8esigcd3km@4ax.com>
Source record: 173908

That's true, but not if you ask for one of the part numbers I gave
below. I will also say that special ordering at RS is amazingly fast.
Delivered right to your door. Being an informed consumer doesn't
really take that much effort. I'm not saying you should buy your coax
at RS, just that you CAN buy quality coax at RS if you know what to
ask for. I buy mine from http://www.cablexperts.com/

Dick - W6CCD

On Tue, 26 Dec 2000 20:31:55 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>
>Dick Hughes wrote:
>
>> I don't really want to be having to defend suppliers, but Radio Shack
>> also sells Belden RG-8U (8214 & 8237) under part numbers 910-1578 and
>> 910-1579. Belden is a very respected name in coax.
>>
>> Dick - W6CCD
>>
>
>>
>Walk into a RS and ask for 100 ft. of RG-8 and the clerk is gonna point you to the
>junk cable he has in stock.
>>
>w3rv

4961. ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 04:22:41 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A496E85.22400F37@home.com>
Source record: 173909

Greetings,

Does anyone know of any commercially made product(s) for feeding ladder line (or any type of "twin" lead) into a house without drilling holes in the window and/or frame? I envision something where the window would be slid open a few inches, the gadget placed into the opening, then the window slid down, "locked" in place with a sturdy dowel wedged in place to prevent opening from the outside. I guess I could "homebrew" such a gadget but I wonder if such a thing already exists? Comments?

Regards,

Rich Ardolino / KB2CPE

4962. hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 04:31:04 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A497077.9385A77@home.com>
Source record: 173910

Has anyone had any experience with the Hexbeam antenna(s)? Comments,
pro,con or whatever are invited.

Regards,

Rich A. / KB2CPE

4963. Replace S meter lite,hard??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:05:57 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <l4ui4tsug6dg00lnib9nted7b117s588rd@4ax.com>
Source record: 173911

The "S" meter light died on my ft 736, and was wondering how "hard" it is going to be to repair? If you have 'been down this trail' would appreciate your input. thanks in advance. Callie Lorentson "73"

4964. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:12:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92bur8pnf3@lure.pipex.net>
Source record: 173914

"Tom W8JI" wrote >
> The main thing that causes a cold joint (assuming it was heated enough
> and clean) is moving the joint while it is cooling, not how fast you
> remove heat after the solder flows. This isn't concrete!
>
> How fast you cool the joint has nothing to do with joint quality as
> long you don't disturb the solder while it is hardening.

Good electronic solder has 2% antimony to keep the joints bright.
i.e. 60/40 is really 59/39/2

If you hold the iron on for *too long* then you will boil off the antimony
and the joint goes dull.

The secret of a good joint is:

Support both parts of the materials to be joined so that they will readily
remain in that position without any assistance,

wipe the iron clean and bright on a wet sponge, if it cools listen for the
click of the thermostic control,

apply it to both halves of the material to be joined and bring them up to a
temperature (the temperature voltage anolog) just above the melting point of
the solder to be used.
Again listening for the click can help. This can be assured with a curie
point tip of the correct number, usually a number 6 or 7 and of the correct
shape to limit the heat flow (i.e the heat current analog),

and then having cut the dead bit of solder off (1/4") that has no resin
flux in it (boiled off by the previous joint),

apply the solder to the WORK and not to the iron.
NEVER carry solder to the joint on the iron, by the time it gets there the
antimony will have boiled off.

Once the solder flows remove the iron.

The resulting joint should suck a nice meniscus of solder around the the
materials being joined.

```
I I
___)I(___,I,___ Imagine the tops of the brackets are not there
)I( 'I' Imagine the bottoms of the brackets are not there
I I
```

There should be NO surplus of solder.
If the solder hasn't pulled into a meniscus then there is a good chance that

it is not a good joint. A sound mechanical joint will have the best electrical properties. Usual reason for bad joint is failing to clean the materials BEFORE you start to apply solder.
Working from the junk box particular care to cleaning is worth the effort.

Practice makes perfect.
To do the best joints it takes about a week of practice to get back onto good form.

Gary7SLL

4965. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:26:53 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <t4ivcgle0qc6d7@corp.supernews.com>
Source record: 173912

> Does anyone know of any commercially made product(s) for feeding
ladder
> line (or any type of "twin" lead) into a house without drilling holes
in
> the window and/or frame? I envision something where the window would
be
> slid open a few inches, the gadget placed into the opening, then the
> window slid down, "locked" in place with a sturdy dowel wedged in
place
> to prevent opening from the outside. I guess I could "homebrew" such a
> gadget but I wonder if such a thing already exists? Comments?

Rich,

You've got the right idea. For years, I've just put a piece of
some sort of insulation on each side of the ladder line where
it passed through the usual "slide-by" aluminum window frame.
Then I seal the open gap with good old duct tape.

I've run a full KW through this arrangement with no ill affects.
(I do it now with a full 5 watts QRP, and it works fine.)

Don't forget the dowel. I did once, and was burglarized!

73,

John, K6QQ
Alturas, CA, at the corner of 299 & 395.

4966. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:32:15 UTC
From: richardharrison@webtv.net
Message-ID: <28966-3A497EDF-67@storefull-117.iap.bryant.webtv.net>
Source record: 173916

Cecil enlarged upon the earlier quotation, adding:
"---From Rrad = 2Prad / current squared, it follows that the radiation resistance is one-half the value for the dipole.---"

This equation can be restated as:
P = I squared times R/2
P would be the monopole power
R would be the radiation resistance of the dipole
R/2 would be the monopole resistance
I is the dipole current

For the equation to be true, the current (I) must be the same for the dipole and for the monopole.

Best regards, Richard Harrison, KB5WZI

4967. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:34:41 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A497F71.371B3D2E@dvol.com>
Source record: 173915

Dick Hughes wrote:

> That's true, but not if you ask for one of the part numbers I gave
> below. I will also say that special ordering at RS is amazingly fast.
> Delivered right to your door. Being an informed consumer doesn't
> really take that much effort. I'm not saying you should buy your coax
> at RS, just that you CAN buy quality coax at RS if you know what to
> ask for. I buy mine from http://www.cablexperts.com/
>
> Dick - W6CCD
>

>
If, in general, consumers were actually informed RS woulda gone belly-up years ago. Lotta good, fast cable sources, my own favorite is The Wireman. As far as quick delivery is concerned I'm in an odd situation: There is a small but quite good ham gear store just over the border in Delaware from here which is owned by a YL we call "The Candy Lady". I can call her any time before 4pm and order what I need, she lives just around the corner from me, I can pick it up by 6pm. No FedEx or UPS charges. Heh.
>
w3rv

4968. Re: Newbie Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 05:46:14 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A498226.C122253F@dvol.com>
Source record: 173917

Irv Finkleman wrote:

>
> Abe,
> You don't say what a BC 3000 xlt is, but I am assumming that it is a
> scanner which covers VHF.

>
It's a handheld Bearcat VHF/UHF scanner.
>

> Radio Shack sells a discone which would probably
> due the job for most

>
About the only reasonable option out here.
>
w3rv

4969. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 06:04:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A498674.9C90260D@IEEE.org>
Source record: 173819

rich a wrote:
> Does anyone know of any commercially made product(s) for feeding ladder
> line (or any type of "twin" lead) into a house without drilling holes in
> the window and/or frame? I envision something where the window would be
> slid open a few inches, the gadget placed into the opening, then the
> window slid down, "locked" in place with a sturdy dowel wedged in place
> to prevent opening from the outside. I guess I could "homebrew" such a
> gadget but I wonder if such a thing already exists? Comments?

Since the size of windows varies all over the place, most of us just
roll our own. I have a piece of 1/4 inch thick plexiglas that fits in
at the bottom of the hamshack window.
--
http://www.mindspring.com/~w6rca

4970. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 06:04:42 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A49867A.4DAFF324@dvol.com>
Source record: 173918
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Cortland Richmond wrote:

> I find myself wondering why you didn't buy a piece of aluminum at Home Depot or
> somewhere -- or use a piece of aluminum ground wire! -- and make your own? Worth not
> having the hassle, from what I read here about the company. Faster, too.
>
> Cortland
>

>
. . . . hell will freeze tight before I ever again buy any HF antenna. Home-brewing antennas has never easier than it is today what with great resources like EZNEC, CAD, Reg Edward's gems and others on the deisgn side and the likes of Home Depot and who-knows-how-many web-based hardware sources which simply didn't exist "in the good old days". No ham can design and build a TS-2000 but fer cripes sake at least a lousy beam or vertical which doesn't have to be "supported" by a Cushcraft or Mosely? How lame are we, anyway??
>
w3rv

4971. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 06:38:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A498E48.8F3C7CBD@dvol.com>
Source record: 173820

rich a wrote:

> Has anyone had any experience with the Hexbeam antenna(s)? Comments,
> pro,con or whatever are invited.

>
Lew McCoy wrote a very complimentary review of the Hexbeam in the April
2000 issue of CQ.
>
See: http://www.hexbeam.com/hexbeamcq.pdf and
http://www.cebik.com/amod33.html
>
The Hexbeam is coming up a real winner when space and weight are big
issues. The hexbeam is simply a folded-up very close spaced yagi.
Real-world forward gain is modest at best but the F/Bs can be very
high.Quite possibly the biggest fully commercialized and user-tested
bang-for-the-square-foot or pound out there.
>

>
>
> Regards,
>
> Rich A. / KB2CPE

>
w3rv

4972. [HELP] vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 06:58:40 UTC
From: Pascal <fr0dh@wanadoo.fr>
Message-ID: <92c40d$qh5$1@wanadoo.fr>
Source record: 173821

Hello,

What is the better ground plane for a 1/4 wave length monopole - monobande
(14 MHz), mounted at the ground level.

Have you a URL for more information ?

Many Thanks and sorry for my english

Pascal

4973. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 07:09:50 UTC
From: dc6022@my-deja.com
Message-ID: <92c4js$o91$1@nnrp1.deja.com>
Source record: 173822

In article <3A48827B.44E02CBC@mwci.net>,
sabinw@mwci.net wrote:
>
>
> dc6022@my-deja.com wrote:
>
> > Does any one know how to measure or evaluate the Q value of
capacitor
> > (12pF; NPO) which is used at 1.5GHz ckt.?
>
> One method:
>
> Use a high-Q resonator, preferably a cavity resonator, with
extremely
> small coupling to the generator and load. Determine Qr with a 12 pF

1. Not familiar with cavity. Any cavity or substitution suggestion?

2. How to build the small coupling?

> very-high-Q air capacitor, using the 3 dB frequency response method
and
> using a frequency counter and an accurate spectrum analyzer. Then
replace
> the reference capacitor with the test capacitor and get a new Qt
value.
> The Qtc of the test capacitor itself is
>
> 1/Qtc = 1/Qt - 1/Qr
>
> The test capacitor may not be what you think it is at 1.5 GHz,
because of
> internal and lead wire inductances (it should preferably be a chip
cap).
> If the cavity does not resonate close to 1.5 GHz it probably has
> considerable inductance. Compare low freq C and 1.5GHz C to find this
> inductance.
>
> This test setup is not a simple exercise. Unless you *really* want
to do
> it, ask to see the vendor's detailed spec sheet.
>
> Bill W0IYH
>
>

DC-6022

Sent via Deja.com
http://www.deja.com/

4974. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 07:57:18 UTC
From: dc6022@my-deja.com
Message-ID: <92c7ct$q4u$1@nnrp1.deja.com>
Source record: 173823

In article <92autbsvc1@nnrp1.deja.com>,
tom_bruhns@agilent.com wrote:
> Bill S offered some good words of wisdom on this. I'd agree, it ain't
> an easy exercise. Extending his idea of comparative measurements, you
> might put it on a (very good) network analyzer and _compare_ it with a
> known cap. The capacitive reactance is pretty low, only about 9 ohms,
> so even a very tiny amount of series resistance will lower the
measured
> Q. Making reliable connections with low resistance is very difficult,
> so you might make the measurement several times and see different
> numbers each time, just because the resistance is different! If you
can
> solder it into a test fixture (circuit), that could help a lot. (Our
> component test fixtures pretty much always use a four-wire connection
> for this reason.) My suspicion is that the losses will be dominated
by
> series resistance, and actual in-circuit losses likely by the
> resistances external to the cap itself.
>
> Cheers,
> Tom
>

Tom,

I got your point. The chip cap. supplier books the test frequency as
1MHz low. I was trying to measure the Q at LCR meter(w/ 4wire test
fixture) and impedance analyzer. However, no matter how I calibrate
the instruments, the Q read out is still negative at 1MHz. The cause
might be what you concern about. Any suggestion to get the correct
readout?

DC-6022

Sent via Deja.com
http://www.deja.com/

4975. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 08:48:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A49ACF2.75EB9D5A@eznec.com>
Source record: 173824

Gary Peach wrote:
> . . .

> Good electronic solder has 2% antimony to keep the joints bright.
> i.e. 60/40 is really 59/39/2

> . . .

Most interesting. In my several decades as an engineer and technician (including military), I've never encountered solder containing antimony. A quick look at a Newark catalog does show some 95Sn/5Sb alloys as lead free solder for HVAC and food service equipment, but nothing like you're describing. And that one 95/5 alloy is the only one containing antimony shown on my Kester "Solder Alloys Guide". (Interestingly, there's a lot of information on the Kester web site about lead free solders, along with a statement that they feel elimination of lead containing solder is inevitable.)

Are the solder vendors adding the antimony without telling anyone (which I seriously doubt), or is this some special alloy you can buy? Is there a eutectic combination with tin and lead? If so, what percentages of tin and lead are required?

Roy Lewallen

4976. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 11:06:05 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A49CD1D.9050206@hiwaay.net>
Source record: 173825

GAry- please get it right before you preach- Antimony boils at about
2500 degrees, F, so the soldering iron that will do that is one I dont
want to hold in my hand. I would like to know where this bit of
'information' originated. Do you know?

Bill- W4BSG

Gary Peach wrote:

> "Tom W8JI" wrote >
>
>> The main thing that causes a cold joint (assuming it was heated enough
>> and clean) is moving the joint while it is cooling, not how fast you
>> remove heat after the solder flows. This isn't concrete!
>>
>> How fast you cool the joint has nothing to do with joint quality as
>> long you don't disturb the solder while it is hardening.
>
>
> Good electronic solder has 2% antimony to keep the joints bright.
> i.e. 60/40 is really 59/39/2
>
> If you hold the iron on for *too long* then you will boil off the antimony
> and the joint goes dull.
>
> The secret of a good joint is:
>
> Support both parts of the materials to be joined so that they will readily
> remain in that position without any assistance,
>
> wipe the iron clean and bright on a wet sponge, if it cools listen for the
> click of the thermostic control,
>
> apply it to both halves of the material to be joined and bring them up to a
> temperature (the temperature voltage anolog) just above the melting point of
> the solder to be used.
> Again listening for the click can help. This can be assured with a curie
> point tip of the correct number, usually a number 6 or 7 and of the correct
> shape to limit the heat flow (i.e the heat current analog),
>
> and then having cut the dead bit of solder off (1/4") that has no resin
> flux in it (boiled off by the previous joint),
>
> apply the solder to the WORK and not to the iron.
> NEVER carry solder to the joint on the iron, by the time it gets there the

> antimony will have boiled off.
>
> Once the solder flows remove the iron.
>
> The resulting joint should suck a nice meniscus of solder around the the
> materials being joined.
>
> I I
> ___)I(___,I,___ Imagine the tops of the brackets are not there
>)I('I' Imagine the bottoms of the brackets are not there
> I I
>
> There should be NO surplus of solder.
> If the solder hasn't pulled into a meniscus then there is a good chance that
> it is not a good joint. A sound mechanical joint will have the best
> electrical properties. Usual reason for bad joint is failing to clean the
> materials BEFORE you start to apply solder.
> Working from the junk box particular care to cleaning is worth the effort.
>
> Practice makes perfect.
> To do the best joints it takes about a week of practice to get back onto
> good form.
>
> Gary7SLL

4977. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 11:09:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A49CDEC.6FB57D6@eznec.com>
Source record: 173826

"Leland C. Scott" wrote:

[Good and interesting calculations]

> . . .

> As you can see the mix of different dielectric types can result in widely
> varying SWR's. It would appear that even Teflon dielectric for 70 cm use may
> be no good with UHF type connectors, unless you have a perfect 50 ohm load.
> The results for 2m, using Teflon connectors, however look aceptable. If you
> take the time to examine the V/UHF type of connectors used on high quality
> SWR meters, power meters, and antenna mounts, you will find the
> manufacturers use a "web" dielectric type of design. This is to get the
> impedance bump of the UHF connector as close to 50 ohms as they can get.
> They can do this because the "web" dielectric design is mostly air.

> . . .

Many years ago, I was surprised to find an SO-239 antenna connector on a surplus commercial 450 MHz transceiver. (As I recall, it was a Motorola "twin V" -- originally used in a taxi or similar service.) But it's apparent how they got away with it. The transmitter output matching network could easily be adjusted to match whatever impedance was presented by the combination of the connector and 50 ohm load, to effect maximum power transfer. The connector wouldn't have any effect on the transmission line SWR, being at the transmitter end. Similarly, the receiver input impedance could be adjusted so that the load seen by the antenna when receiving was 50 ohms, again resulting in a 1:1 transmission line SWR and proper load for the antenna. So no harm was done.

If there was a connector at the antenna and the antenna had some means of matching (a gamma match for example), it could be adjusted to compensate for the connector. Again, the transmission line would have a 1:1 SWR and everything would be properly matched.

The trick is to have the connector close to the point where a compensating matching network can be placed (or at a point where a network already is -- a network that can be adjusted or designed to compensate for the connector). If you can do that, you can use pretty badly mismatched connectors or other components with very little performance degradation. (If the match is really gross, you can incur loss or narrowbandedness from the matching network.) The farther apart the matching network and mismatched component, the more narrowbanded the compensation. You'll also have an elevated SWR on the transmission line between them, which will result in added loss if the line loss is

significant to begin with.

So whether a mismatched connector or other component is a problem depends largely on whether you have a compensating network, and where it is relative to the connector or other component.

Thanks for the quantitative data!

Roy Lewallen, W7EL

4978. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 12:50:49 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A49E5A8.EDC97296@mwci.net>
Source record: 173827

dc6022@my-deja.com wrote:

> > > Does any one know how to measure or evaluate the Q value of
> capacitor
> > > (12pF; NPO) which is used at 1.5GHz ckt.?
> >

Did you really mean 1.5 GHz, or do you mean 1.5 MHz?

Bill W0IYH

4979. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 13:04:45 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <92cpdg$4jj$1@slb1.atl.mindspring.net>
Source record: 173828

What will you be using for a radio?

It sounds like you are a new ham. The combination
of radio and antenna will greatly affect your first
impression of this hobby.

73,
Tom Wagner - N1MM
Check out the N1MM Free Contest Logger at
http://tomwagner.home.mindspring.com/n1mm.htm

Jean Pierre Magnan <incendie@softhome.net> wrote in message
news:B66EAA1D.EBF%incendie@softhome.net...
> I am planning on putting a 10 meter antenna up. I am on a thight budget.
>
> 1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could
> string a 150-200 feet insulated wire in the trees around the house. This
> would cost me next to nothing. The only problem is that I don't have the
> manual for the tuner so how should I attach the long wire to the tuner.
> There is no lug at the back of the tuner, only an SO-239 connector.
>
> 2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I
> figure I could use my TV rotor to rotate it. It'll be at around 25 feet
> above ground until I can get my tower up.
>
> 3rd scenario: Something like a Carolina windom or a dipole between 2 trees
> near the shack. It would probably require an antenna tuner (other then the
> MFj-16010 though).
>
> Once again I am seeking your advice to help me find a solution to my
antenna
> problem. I welcome any comments.
>
> I must say that money wise I (and most probably my XYL too) would prefer
to
> go with the first scenario. I will definitely have to work out the details
> regarding how to connect te long wire and the ground to the tuner but I
bet
> that it should not be to much of a problem.
>
>
> Stay safe !
>
> 73 de VE2JPT

>
> Jean-Pierre
> _____
> Jean-Pierre Magnan
> VE2 JPT (Basic and 5 wpm)
> Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Qu&#65533;bec, Canada G0X 3J0
> email: famille_magnan@infoteck.qc.ca
> URL: http://famille_magnan.tripod.com (Go take a look -> Sorry it's in
> french for now)
>
> The opinions expressed above are mine, all mine.
> But I love to share them 8-)
>

4980. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 13:48:39 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <ajsj4t0b6rjr17fepfp311k5r0defb4suf@4ax.com>
Source record: 173829

The problem for many of us is that, if you want to pick up something
today, RS is the only game in town. The next nearest electronic parts
store to me is 100 miles away. Those who live in or near large cities
get spoiled with the choices. The price you pay for rural living.

Dick - W6CCD

On Wed, 27 Dec 2000 00:34:41 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>Dick Hughes wrote:
>
>> That's true, but not if you ask for one of the part numbers I gave
>> below. I will also say that special ordering at RS is amazingly fast.
>> Delivered right to your door. Being an informed consumer doesn't
>> really take that much effort. I'm not saying you should buy your coax
>> at RS, just that you CAN buy quality coax at RS if you know what to
>> ask for. I buy mine from http://www.cablexperts.com/
>>
>> Dick - W6CCD
>>
>
>>
>If, in general, consumers were actually informed RS woulda gone belly-up years ago.
>Lotta good, fast cable sources, my own favorite is The Wireman. As far as quick delivery
>is concerned I'm in an odd situation: There is a small but quite good ham gear store
>just over the border in Delaware from here which is owned by a YL we call "The Candy
>Lady". I can call her any time before 4pm and order what I need, she lives just around
>the corner from me, I can pick it up by 6pm. No FedEx or UPS charges. Heh.
>>
>w3rv

4981. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 14:06:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92d1ae$dc1$1@plutonium.btinternet.com>
Source record: 173832

The impedance of twin, figure-of-eight, flexible, multi-strand cable, such as may be used for speaker cable, or for small 110/230 volt appliances, is approx 125 - 145 ohms. Zo is relatively independent of wire gauge because diameter/wire spacing ratio remains fairly constant.

Insulation is pvc or similar which has a higher dielectric loss-factor than RF-grade polyethylene due to chemical imperfections, color pigments etc.

But dielectric loss is very low at HF on all types of cable. Loss is mainly due to conductor resistance. So 20 awg or 18 awg twin zip-cord has a lower loss (when dry) than small-bore 50-ohm coax simply because its Zo is 3-times higher for similar gauge conductors.

Archer 18-gauge twin speaker wire, stranded, polarised, brown pvc, has Zo = 140 ohms, attenuation = 0.5dB per 100 feet at 10 MHz, and a velocity factor = 0.70 Also use it for choke baluns wound on ferrite rings or rods.

A British twin-and-earth 18gauge solid conductor cable for 230volt domestic lighting cable has Zo = 116 ohms, VF = 0.55 and attenuation = 0.9 dB / 100-feet at 2 MHz.

Twin cable with both wires close together, embedded in a thick circular sheath, has an impedance of roughly 75 ohms. Use it at HF only when it is polyethylene-insulated and manufactured for HF use.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
rb <rbigg@pcola.gulf.net> wrote in message news:t49ligtm5slga1@corp.supernews.com...
> What is the approximate Z of common 110v power cord? Years ago, hams used
> to run it as a twinlead type feedline for dipoles (it was called zipcord
> then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> with better insulation, still a good dipole feedline in some applications?

>
>
>
>

4982. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 14:09:10 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <aKm26.24803$3B5.893184@newsread2.prod.itd.earthlink.net>
Source record: 173830

I've been using the HX-5B Hexbeam since the Spring of this past year. Forward gain appears to be very good on all bands, f/b ratio is best in the CW portion of each band, deteriorating the higher you go on the band. I'm very satisfied with the antenna. Construction is excellent and it has withstood high winds very well. In a recent DX contest, I worked 103 countries in 32 zones on 10 meters in just over 5 hours, while running an AL-80B amp to the Hexbeam. When you're comparing it to other antennas, be sure to compare it to other FIVE BAND antennas. When comparing cost, compare the cost of the entire installation, not just the antenna. Here's a link to my website with more info and photos on the antenna. http://home.sprintmail.com/~sentek/hexpage1.htm .

If you have any further questions, send me a real email address and I'd be happy to answer them.

K8AC

"rich a" <rckchp@home.com> wrote in message
news:3A497077.9385A77@home.com...
> Has anyone had any experience with the Hexbeam antenna(s)? Comments,
> pro,con or whatever are invited.
>
> Regards,
>
> Rich A. / KB2CPE
>

4983. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 14:40:09 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <HP9JOjUE=abNgm7tcb0znccTcV44@4ax.com>
Source record: 173831

rich a <rckchp@home.com> wrote:

>Greetings,
>
>Does anyone know of any commercially made product(s) for feeding ladder
>line (or any type of "twin" lead) into a house without drilling holes in
>the window and/or frame? I envision something where the window would be
>slid open a few inches, the gadget placed into the opening, then the
>window slid down, "locked" in place with a sturdy dowel wedged in place
>to prevent opening from the outside. I guess I could "homebrew" such a
>gadget but I wonder if such a thing already exists? Comments?
>
>Regards,
>
>Rich Ardolino / KB2CPE

Never seen such a gadget, possibly because windows come in so many
widths.

A 2"x4" from the local lumber yard, cut to the width of the window,
works well. A little piece of insulation nailed to the top of the
board will cut out the drafts. You can then paint it or not, drill any
manner of holes in it...

Bob
k5qwg

4984. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:16:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92d1ag$dc1$2@plutonium.btinternet.com>
Source record: 173833

Hello Gary, welcome back from wherever you've been.

Measurement of soil resistance is not difficult. The problem
is how to use, or more often abuse the figures when you've
got 'em.

The difference in received signal strength on a two-hop path
when (1), the midpoint reflection is from a calm north
Atlantic ocean, and (2) the midpoint reflection is a
landmass such as north America, is crudely 6 dB. (Reflection
coefficient = 0.5 and depends on elevation angle)

To make up the difference at the launch-point would require
transmitter power to be increased 4 times. Increasing the
nimber of radials from 60 to the regulation 120 would not
make a scrap of difference.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Gary Peach <xcg34@dial.pipex.com> wrote in message
news:92bur5pnf1@lure.pipex.net...
>
> "Reg Edwards" wrote ...
> > Peace (cough) on Earth (cough, cough) and Goodwill to
all
> > Men (cough).
>
> It wasn't the coughing that carried him off,
> but the coffin they carried him off in.
>
> Unfortunately no spectacle will help those who will not
see.
>
> Since, it appear from the preceding posts, the measurement
of soil
> resistance seems to be such a complex subject and the
results to be so
> variable, what prospect is there of an antenna system that
operates without
> the need for a good groundplane at the base of the
antenna.

>
> For a moment consider a point 500 miles away from the
Antenna (no matter
> what is being used, bit of wet string if you like) Does
the wave at that
> point really care about the ground resistance over which
it is passing to
> make it the next 500 miles?
>
> What would need to be done to duplicate those conditions
at the launch point
> of a wave?
>
> Happy Chritmuth and a nappy new year.
>
> Gary7SLL
>
>

4985. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:28:28 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <sq1d29.u3e.ln@mail.specsol.com>
Source record: 173835

Bill Aycock <baycock@hiwaay.net> wrote:
> GAry- please get it right before you preach- Antimony boils at about
> 2500 degrees, F, so the soldering iron that will do that is one I dont
> want to hold in my hand. I would like to know where this bit of
> 'information' originated. Do you know?

> Bill- W4BSG

<rest snipped>

Getting antimony into solution in the first place is a bit of a chore, but once there, the melting point of the alloy is not much affected.

Don't recall seeing any solder with antimony in it, but lineotype (SP?) metal had quite a bit by design (makes the alloy harder and molds "crisper"). And a soldering iron will melt it.

Bullet casters prefer lead alloys with a bit of antimony for the same reasons.

Ever hear of silver solder? You can't melt pure silver with any ordinary soldering iron either, but once alloyed with lead and/or tin....

Jim Pennino

4986. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:31:00 UTC
From: RttyMan <jlockett@onemain.com>
Message-ID: <2Un26.849$mk2.37477@nntp2.onemain.com>
Source record: 173834

Why is it then most (all) commercial HF sites use 120 radials? If they can get 'good enough' performance with less, why don't they use less? I assume they all like to save money and more radials cost more money, especially in a commercial enviornment? I'm not trying to be a smart 'ass' here, I am genuinely interested.. I am getting the impression that 'more radials' are a waste of time, especially for an amateur setup? Is this correct..?

regards, Jerry -w7wpx-

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:92d1ag$dc1$2@plutonium.btinternet.com...
> To make up the difference at the launch-point would require
> transmitter power to be increased 4 times. Increasing the
> nimber of radials from 60 to the regulation 120 would not
> make a scrap of difference.
> --
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>

4987. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:32:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92d22c$26l$1@uranium.btinternet.com>
Source record: 173836

Use just one small hole. Bring both insulated wires through
the single hole close together for an inch or so. The only
noticeable effect might be a change in the setting of a
tuner capacitor of 1 pF. Drill hole through glass or metal.

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
rich a <rckchp@home.com> wrote in message
news:3A496E85.22400F37@home.com...
> Greetings,
>
> Does anyone know of any commercially made product(s) for
feeding ladder
> line (or any type of "twin" lead) into a house without
drilling holes in
> the window and/or frame? I envision something where the
window would be
> slid open a few inches, the gadget placed into the
opening, then the
> window slid down, "locked" in place with a sturdy dowel
wedged in place
> to prevent opening from the outside. I guess I could
"homebrew" such a
> gadget but I wonder if such a thing already exists?
Comments?
>
> Regards,
>
> Rich Ardolino / KB2CPE

4988. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:35:32 UTC
From: richardharrison@webtv.net
Message-ID: <7552-3A4A0C44-39@storefull-111.iap.bryant.webtv.net>
Source record: 173837

Gary7SLL wrote:
"Does the wave at that point really care about the ground resistance over which it is passing to make it the next 500 miles?"

The wave is a sky-wave, and it may be attenuated by ionization it penetrates. But, a ray is affected by ground only when it strikes ground. This happens on take-off and landing. It can also happen at intermediate points if there are multiple hops for the sky-wave.

Current in a wire is encircled by a magnetic field and radiates an electric field perpendicular to the wire.

An unattenuated ray traveling the wrong direction could be turned around by a perfect reflection from the ground, or something else, and if that happens, the reflected ray could be exactly constructively phased with a wave traveling the desired direction. So, two coincident rays could have double the impact of a single ray.

More reflections from more surfaces could do more, but from a plain earth surface only one reflection is likely to be helpful in any particular direction. Radials are used with vertical antennas to reduce reflection loss.

A dipole in free-space has r-f displacement current. This is like the current in a capacitor and flows through space without wires. Displacement current flows because there is an alternating potential difference between parts of the dipole. Displacement current creates a magnetic field just as current through a wire does. The displacement current flows mainly between parts of the dipole, and because it is in free-space without clutter, there isn`t much loss.

The ground-mounted vertical also has r-f displacement current, but the ground must be one plate of the capacitor this implies, unless it is replaced by something with less loss. Copper radials are usually supplied to have less loss than soil.

Most displacement current involve a soil area near the base of the vertical. Less than a wavelength from the antenna base reactive displacement current drops to nearly zero.

Buried radials try to make the soil conductive.

Elevated radials try to shield the soil from displacement current and replace the soil as a conductor.

Best regards, Richard Harrison, KB5WZI

4989. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:40:08 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01c0701b$d13ae660$0b8127d4@f6awn.cpod.fr>
Source record: 173841

hello!

Have done some tests some years ago with power line / speaker line.

for a 30 meters long piece :

3 MHz 0.7 dB
7 MHz 1.8 dB
10 MHz 2.5 dB
14 MHz 4.0 dB
21 MHz 5.5 dB
30 MHz 7.5 dB

It was a two colors red / black with twisted multi-wires of good diameter (12 mm perhaps without the insulated part). Something as the DC cord for a VHF 50 Watts Rig.

So, only usable in /P, for a short line and ... on 80 meters band. Or to get a very fine ROS on ten !! :-)

73,

Francis
F6AWN

rb <rbigg@pcola.gulf.net> a écrit dans l'article
<t49ligtm5slga1@corp.supernews.com>...
> What is the approximate Z of common 110v power cord? Years ago, hams used
> to run it as a twinlead type feedline for dipoles (it was called zipcord
> then), and it seems like it was around 75 ohms, or so. Is the modern stuff,
> with better insulation, still a good dipole feedline in some applications?
>
>
>
>
>

4990. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:47:54 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4a0bb2.58476365@news.akorn.net>
Source record: 173838

On Wed, 27 Dec 2000 07:31:00 -0800, "RttyMan" <jlockett@onemain.com>
wrote:

>Why is it then most (all) commercial HF sites use 120 radials? If they can
>get 'good enough' performance with less, why don't they use less? I assume
>they all like to save money and more radials cost more money, especially in
>a commercial enviornment? I'm not trying to be a smart 'ass' here, I am
>genuinely interested.. I am getting the impression that 'more radials' are a
>waste of time, especially for an amateur setup? Is this correct..?
>
>regards, Jerry -w7wpx-

Hi Jerry,

Commercial sites use 120 radials partically because they want to safe
rather than soryy. Actually, 60 radials are enough to be at the point
where adding more makes little difference.

Reg's intentions are certainly good, but he greatly oversimplifies
some problems to the point where his answers are meaningless. The
truth is:

1.) The resistance we might "measure" at the feedpoint of an antenna
is often a "modification" of the loss resistances and radiation
resistance of the system.

2.) That "resistance", even if we sort out the part useful radiation
is from, NEVER includes all the loss resistances associated with an
antenna near earth. The resistance can be all over the place
regardless of loss.

3.) A measurement at DC is (at best unreliable and more likely)
meaningless at RF, since skin depths and impedances (as well as
losses) are totally different.

That's why BC stations always use the slope of attenuation with
distance to determine average effective soil losses, and why they
always use FS measueremnt to determine efficiency. Any BC engineer in
his right mind would laugh his fanny off or sigh with disgust at a
suggestion base resistance or a "resistance" test at some frequency
far removed from the operating frequency is meanigful.

When one guy sits back and says the entire rest of the world and how
they do things is wrong, it pays to look a bit deeper in his claims.
While well intentioned, the advice the rest of the world is wrong is
probably not accurate.

73 Tom

4991. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 15:55:29 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4a1047.59649818@news.akorn.net>
Source record: 173839

On 27 Dec 2000 01:18:42 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>>Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna
>reflector will be the 'net conduit for contact with him...<
>
>Kripe, mate, that only took four years to accomplish. Thank ya Phil, and I
>know many includin' meself 'll be lookin' forward to that change.
>
>Rick K1BQT

The reflector page is found at http//www.prozac.com

Welcome back.

73 Tom

4992. Re: coaxial cable: gradual deterioration of performance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 16:03:25 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4a114f.59913327@news.akorn.net>
Source record: 173840

On Tue, 26 Dec 2000 21:46:51 -0500, "J. Mc Laughlin" <n8tt@tir.com>
wrote:
>
>-----As with so many things, it depends. With many co-located
>transmitters and receivers, the IM produced can be the limiting
>factor. I recall that on a flat-top, solid line had to be used to
>overcome IM produced in the braided coax. It was thought that the
>problem was in the radios, but during a refit with extra filtering in
>the radio (but still using coax to the load) the IM would not abate
>independently of the filtering! 73 Mac N8TT

I never consider subjective data for anything more than it is, and
opinion.

I'd be interested in published measurements of just how bad IMD can
be.

As a perrsonal aside, I find it EXTEREMELY unlikely that the cable was
a major contributor (let alone a noticable contributor) to IMD in a
system like that if the other cable was not defective. Often times
site people accidentally "fix" a problem (I've seen this hundreds of
times over the years) by blindly changing things and disturbing
everything in the system, and then wrongly conclude they "found" the
problem.

73 Tom

4993. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 16:34:21 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <lm4k4tsf77bochpkv9s431forpr6pmkhm9@4ax.com>
Source record: 173842

On Tue, 26 Dec 2000 11:20:55 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>The threshold is based on a specific absorbtion rate of 4 W/kg of body mass.
>It is at this level that various studies show unwanted health effect. (None
>of these effects have been tied in to long-term health hazards; they are
>indeed short-term and thermal in nature.) From that level, the standards
>committee added safety factors -- 1/10 for controlled/occupational exposure
>and 1/50 for uncontrolled/general-public exposure.

...and this is the kind of BS that gets people like me riled up.
Where do these "safety factors" come from? I'm not arguing with the 4
W/kg part of the standard. What I really object to is the notion that
for *occupational* limits that we aren't supposed to approach even one
tenth of that amount. Who are we protecting and what are we
protecting them from?

Answering my own question somewhat: This is the "committee" approach
to safety engineering. You gather together a group of blind men who
all examine different parts of the elephant and then they get together
to develop a policy to deal with this animal. This is why so many are
getting such a bad attitude about a standard which should almost be
sacrosanct.

The problem is that when such specialists get together, nobody really
tries to look at the big picture. Instead they try to protect us from
ourselves. The result is this bogus safety factor. After all, why
use ten dB and 13 dB safety factors? Are these factors related to
modeling accuracy? Are they related to measurement accuracy? Duty
cycle timing accuracy? I think none of the above. I think they
picked that number because we all have ten fingers.

I rest my case.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4994. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 16:58:15 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Xdp26.280$e5.728913@news.ntplx.net>
Source record: 173843

Yuri Blanarovich <k3bu@aol.com> wrote:

> What was N6NB doing? Wasn't he ARRL employee/whatever?

Once upon a time, Wayne was an ARRL Vice Director. At the time this all came up on the FCC plate, Wayne was a member of the ARRL Bioeffects Committee. The short of it is the Bioeffects Committee chose to file independent comments with the FCC, as the ARRL Bioeffects Committee. Overbeck was removed from the committee, and the remainder soon resigned in protest. ARRL has formed the ARRL RF Safety Committee to take the place of those who were no longer willing to serve.

> What did ARRL do to object to FCC "standard" that has no basis and no linkage
> to harmfull effects?

ARRL's comments to the FCC asked that the categorical exemption for Amateur Radio continue under the new rules. The FCC decided otherwise. After that, ARRL filed a number of petitions for partial reconsideration with the FCC, and worked closely with its OET staff to help both fine tune the rules to be a better match for the ARS and to help the OET prepare its documentation. The League then continued on to prepare the book, RF Exposure and You, to help hams meet the requirements.

I agree, exposure at the level of the standard has no demonstrated harmful effects. Would you propose that the standard be set a level for which there would be harmful effects? The bottom line, influenced significantly by the work of the ARRL, hams are permitted to do their own evaluations, there are no paperwork or filing requirements with the FCC, the power levels that trigger the need to do an evaluation are appropriately set, on most bands, at power levels greater than "barefoot" level, so many hams don't have to do an evaluation at all. The burdens on the amateur radio service are not onerous; with RFX and You in hand, I have been able to complete the evaluations for most stations in under a minute.

> Who is asking hams to comply with "standard" that has no base in any studies or known facts?

The FCC. ARRL is asking amateurs to follow FCC rules.

See http://www.arrl.org/tis/info/rfexpose.html for info and linkages to easy ways to evaluate your station.

73,
Ed Hare, W1RFI

4995. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:01:09 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Fgp26.281$e5.729155@news.ntplx.net>
Source record: 173844

Yuri Blanarovich <k3bu@aol.com> wrote:

> Very inapropriate analogy. Lightbulb in a closet is not equivalent to RF
> exposure and transparency of human body to HF frequencies.
> Lets ban all RF and be 100% "safe"!!!

The levels have been set higher at HF to account for such transparency, Yuri. At the levels of exposure in the standard, the absorbtion by humans is at the levels as I described.

> We have unfounded RF "standards" and you are already "explaining" and defending
> it.

The levels of the standards are "unfounded" because they have been set at a level demonstrated not to cause harm. Are you proposing that they be increased to a harmful level?

> What's next? Don't breathe air?

That assertation is ridiculous.

73,
Ed Hare, W1RFI

4996. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:02:09 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Bhp26.282$e5.729168@news.ntplx.net>
Source record: 173845

Rick Littlefield <k1bqt@aol.com> wrote:

> >Can you provide any examples of ARRL material that is as "scare-monger"
> oriented as this post implies?<

> Which "ARRL"? There are two. The ham "organization" of course isn't for
> profit and is tax exempt. ARRL Publications, the "material generator", on
the
> other hand, IS very much for profit--a bit of duplicity often overlooked.
So,
> while the League's "educational" efforts may not engauge in outright
> scare-mongering per se, they're certainly not above reveling in the
opportunity
> for some baldfaced marketeering! They have the weapon, the motive, and
the
> opportunity!

Can you include any examples in your example?

73,
Ed Hare, W1RFI

4997. Re: Outbacker Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:05:22 UTC
From: mauricea.nobrol@glo.be
Message-ID: <3a491cf2.14028545@nntp.z052.glo.be>
Source record: 173846

On Mon, 25 Dec 2000 08:31:26 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>20m-10m mobile antenna and I guess anyone who drives
>100 mph has money to burn. :-)

Not really... We Euro guys don't drive the massive gasguzlers (sp?)
that you guys do.. it all has to do with the price of gas :-) I'm
still running @25+ miles/gallon at that speed anyway..

Besides.. I wonder how a bugcatcher would behave at 100m/h?

Bye Maurice

Hamradio: ON4BAM / M0CIL http://www.qsl.net/on4bam
Pix and travelstories from Alaska, Schotland
South Africa and IOTA activations
*** remove 'nobrol' to reply ***
Fight Spam! Join CAUCE (Coalition Against Unsolicited Commercial Email)
at http://www.cauce.org/

4998. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:21:27 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <92d8eghuh1@nnrp1.deja.com>
Source record: 173848

In article <3A496E85.22400F37@home.com>,
rich a <rckchp@home.com> wrote:
> Greetings,
>
> Does anyone know of any commercially made product(s) for feeding
ladder
> line (or any type of "twin" lead) into a house without drilling holes
in
> the window and/or frame? I envision something where the window would
be
> slid open a few inches, the gadget placed into the opening, then the
> window slid down, "locked" in place with a sturdy dowel wedged in
place
> to prevent opening from the outside. I guess I could "homebrew" such a
> gadget but I wonder if such a thing already exists? Comments?
>
> Regards,
>
> Rich Ardolino / KB2CPE
>

I have not seen commercial products but here are the two methods I have used. In each case, I used a nice dry piece of 1x4 painted all over with three coats of exterior paint.

1. Once upon a time, you could buy feed-through insulators. The ones I used consisted of two ceramic pyramids, the bases of which fit together. There was a long bolt that ran through the two ceramic parts from top of one to top of the other. Dirll two holes in the board spaced the same distance apart as the twin lead. The bolt goes through the hole and the two insulators sit one on each side of the board. Thyis requires cutting the twin lead -- one end ties to the antenna and to one end of the feed-thru bolt, then you need another piece of twin-led to go from the inside end of the feed-thru to the tuner.

2. My current method -- and the easiest -- is this. Drill two small holes in the board spaced apart same distance as the twin leads. Use a drill no bigger than the wires -- I use 1/8-inch bit. Then, draw a straight line the length of the board running through the center of both holes and, using a thin saw blade, cut the board in half, splitting the holes. Raise the window. Put the bottom half of the board in the window; lay the twin lead in the grooves, set the top half of the board on top and lower the window. Goes without saying to cut the board same width as the window opening. Go the friendly local hardware store and pick up some felt weatherstripping -- stuff it in

any cracks. Another trick is to use two boards -- one only about 6 inches long, split it as described above to bring in twin lead. The other board is the width of the window minus the width of the twin-lead board. Drill big holes in the second board to pass coax, stuffing felt weatherstripping around the coax.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com
http://www.deja.com/

4999. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:25:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92d8n4$56h$1@uranium.btinternet.com>
Source record: 173847

Francis, by what method did you make the measurements ? The
increase in loss with increasing frequency is too large.

Reg, G4fgq
==========
>
> Have done some tests some years ago with power line /
speaker line.
>
> for a 30 meters long piece :
>
> 3 MHz 0.7 dB
> 7 MHz 1.8 dB
> 10 MHz 2.5 dB
> 14 MHz 4.0 dB
> 21 MHz 5.5 dB
> 30 MHz 7.5 dB
>
> It was a two colors red / black with twisted multi-wires
of good diameter
> (12 mm perhaps without the insulated part). Something as
the DC cord for a
> VHF 50 Watts Rig.

5000. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:30:21 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4A272D.18E6FAEC@pim.com>
Source record: 173849

Have you ever compared it to a tribander?

Floyd Sense wrote:

> I've been using the HX-5B Hexbeam since the Spring of this past year.
> Forward gain appears to be very good on all bands, f/b ratio is best in the
> CW portion of each band, deteriorating the higher you go on the band. I'm
> very satisfied with the antenna. Construction is excellent and it has
> withstood high winds very well. In a recent DX contest, I worked 103
> countries in 32 zones on 10 meters in just over 5 hours, while running an
> AL-80B amp to the Hexbeam. When you're comparing it to other antennas, be
> sure to compare it to other FIVE BAND antennas. When comparing cost,
> compare the cost of the entire installation, not just the antenna. Here's a
> link to my website with more info and photos on the antenna.
> http://home.sprintmail.com/~sentek/hexpage1.htm .
>
> If you have any further questions, send me a real email address and I'd be
> happy to answer them.
>
> K8AC
>
> "rich a" <rckchp@home.com> wrote in message
> news:3A497077.9385A77@home.com...
> > Has anyone had any experience with the Hexbeam antenna(s)? Comments,
> > pro,con or whatever are invited.
> >
> > Regards,
> >
> > Rich A. / KB2CPE
> >

5001. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:33:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92d9k6$i0v$1@neptunium.btinternet.com>
Source record: 173851

"When you can measure what you are speaking about, and express it in numbers, you know something about it. But when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind. It may be the beginning of knowledge but you have scarcely in your thoughts advanced to the state of science."

William Thomson, Lord Kelvin, 1824-1907.

5002. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 17:37:42 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <WOp26.283$e5.731181@news.ntplx.net>
Source record: 173850

Jake Brodsky <frussle@erols.com> wrote:

> >The threshold is based on a specific absorbtion rate of 4 W/kg of body mass.
> >It is at this level that various studies show unwanted health effect. (None
> >of these effects have been tied in to long-term health hazards; they are
> >indeed short-term and thermal in nature.) From that level, the standards
> >committee added safety factors -- 1/10 for controlled/occupational exposure
> >and 1/50 for uncontrolled/general-public exposure.

> ...and this is the kind of BS that gets people like me riled up.

> Where do these "safety factors" come from?

Clearly, the standard should be set at a level that is below that demonstrated to cause unwanted effects. The general reasons given for the 10X safety factor is that the modeling and testing that was used to derive the 4 W/kg threshold are not perfect, the correlation between some of the methods used and human beings is not completely understood and, as I started this paragraph, the standard should be set at a level that is below that demonstrated to cause unwanted effects. The 10X level was the one for which concensus was reached by a committee of about 150 people.

The 50X factor for general public exposure is less clearly defined. There are those (among them the members of the now-defunct ARRL Bioeffects Committee) that believe that there are "non thermal" effects to RF safety below the levels demonstrated to cause harmful effects. The studies that support this belief are not well understood or generally accepted by most of the scientific community, but such studies and ongoing discussion about them continues. The 50X factor was included as the only way to get concensus to get the standard in place at all. The present SCC-28 members are very much considering that one level should be appropriate and that if the controlled level is safe, then it should allply to all.

> I'm not arguing with the 4 W/kg part of the standard. What I really object to is the notion that
> for *occupational* limits that we aren't supposed to approach even one tenth of that amount.
> Who are we protecting and what are we protecting them from?

I would very much argue against setting the standard to 4 W/kg -- this is the level that caused demonstrated unwanted effects. Clearly, the level needs to be set lower than that. There may even be some justification for

setting a level even lower than 400 mw/kg. This level is a thermal load equivalent to putting on a light sweater. No problem for most people most of the time, but would it be appropriate to do so if one was already at maximum thermal load, perhaps outdoors in the sun at 115 F? Under controlled conditions, the person being exposed has knowledge of the exposure and presumably the training to know that if it is hot, he or she should limit exposure below the 400 mw/kg level.

How about those who are not aware of RF exposure and/or who do not know what factors apply under what conditions? Most of the time, you could "put a sweater on" your neighbors safely, but what about that 110 degree day, with a neighbor who is ill, perhaps running a fever of 103 degrees, just as an example? Can you say unconditioanally that adding additional thermal load to a person under those circumstances is safe? I cannot.

I think I would have significant reservations about the uncontrolled exposure levels except for the fact that virtually all amateur stations meet them easily. Those that run 1500 watts and indoor antennas do not.

> The problem is that when such specialists get together, nobody really
> tries to look at the big picture.

Do you really believe that those who had spent literally years of their lives to develop the standards did not try to look at the big picture?

> I rest my case.

I wish I had all the answers so that I could rest my case, too. I am sure that those continuing to do research and continuing to put a lot of themselves into the development of the next versions of the standards wish they had all the answers, too.

If you really do have the expertise to reach such a conclusion, I am sure you would be welcome to participate on the commmittee.

73,
Ed Hare, W1RFI

5003. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 18:10:49 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92dbcqbde1@iac5.navix.net>
Source record: 173852

And then there are those of us that live so far in the boonies that we have an "Associate Store". My "Radio Shack" dealer is the local guy who fixes washing machines. He carries mostly TV antennas and CB stuff, his total resistor supply was purchased about the time Allied give up the shacks and could be carried home in a small paper sack. If you want something, you pay in advance and wait for the weekly delivery. We still walk to town in the snow uphill both ways. ;.}

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:ajsj4t0b6rjr17fepfp311k5r0defb4suf@4ax.com...
> The problem for many of us is that, if you want to pick up something
> today, RS is the only game in town. The next nearest electronic parts
> store to me is 100 miles away.

5004. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 18:31:18 UTC
From: richardharrison@webtv.net
Message-ID: <7553-3A4A3576-24@storefull-111.iap.bryant.webtv.net>
Source record: 173854

Jerry, W7WPX wrote:
"Why is it then most (all) commercial HF sites use 120 radials?"

Broadcasters on the medium-waves use 120 radials because it is economical for them to seek perfection and avoid FCC problems. HF sites rarely use radials because nearly all use horizontal antennas. HF users aim at the sky, not the horizon.

Brown, Lewis, and Epstein tested the effects of numbers of radials at 3 MHz. This was about 70 years ago. They tried various lengths of radials and various heights of antennas. Ed Laport summarized their results in "Radio Antenna Engineering" on pages 119 and 120.

Ed concludes that 1/2-wavelength from the antenna base is far enough to extend radials. In fact, he says that 0.4 wavelength and 120 radials are points of diminishing returns.

From one of Laport`s graphs, here are data for a 1/4-wave vertical antenna at 3 MHz using different numbers of 0.412-wavelength radials. Field strengths in millivolts per meter were measured at one mile.

n mv
2 120
15 155
30 170
60 180
113 185

Best regards, Richard Harrison, KB5WZI

5005. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 18:33:11 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <s4dk4t424iuk74fgl3eshqabk5n548qpmj@4ax.com>
Source record: 173853

I ran into one of those north of Jasper Alberta. We had a frozen
wheel bearing on a motorcycle trailer, and they were able to fix it.
This was a Sunday and he had to get the owner of the local auto parts
to come down and open up the store to get a bearing set. Things like
that you never see in the city. He fixed washing machines too.

On Wed, 27 Dec 2000 13:10:49 -0500, "Fred Hambrecht" <Fred@w4jle.com>
wrote:

>And then there are those of us that live so far in the boonies that we have
>an "Associate Store". My "Radio Shack" dealer is the local guy who fixes
>washing machines. He carries mostly TV antennas and CB stuff, his total
>resistor supply was purchased about the time Allied give up the shacks and
>could be carried home in a small paper sack. If you want something, you pay
>in advance and wait for the weekly delivery. We still walk to town in the
>snow uphill both ways. ;.}
>
>
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:ajsj4t0b6rjr17fepfp311k5r0defb4suf@4ax.com...
>> The problem for many of us is that, if you want to pick up something
>> today, RS is the only game in town. The next nearest electronic parts
>> store to me is 100 miles away.
>

5006. screwdriver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 18:49:26 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <t4keds1pckeb86@corp.supernews.com>
Source record: 173855

i have a freind who is looking for a decent scewdriver for use on 80 meters
in a full sized ford van...
what are two or three good options?
and the pros and cons of each..
thanks
hank wd5jfr

5007. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 19:14:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4A3FAC.2027AFBB@eznec.com>
Source record: 173856

Reg Edwards wrote:
> . . .

> Archer 18-gauge twin speaker wire, stranded, polarised,
> brown pvc, has Zo = 140 ohms, attenuation = 0.5dB per 100
> feet at 10 MHz, and a velocity factor = 0.70 Also use it
> for choke baluns wound on ferrite rings or rods.
>
> A British twin-and-earth 18gauge solid conductor cable for
> 230volt domestic lighting cable has Zo = 116 ohms, VF = 0.55
> and attenuation = 0.9 dB / 100-feet at 2 MHz.

> . . .

Did you actually measure these? What instrumentation did you use?

Roy Lewallen, W7EL

5008. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 19:27:50 UTC
From: Rob Dunn <dunnr@ix.netcom.com>
Message-ID: <92dfn6$6fh$1@slb3.atl.mindspring.net>
Source record: 173857

Morning All,

I am a newbie who has is looking to put up a decent antenna in the near future so I have been watching this thread with interest since I live in Nevada where ground conditions are poor so the issue of radials is real. Radials are a pain to lay out and getting 0.4 wavelengths in a 0.5 acre lot is non-trivial as well.

So now comes my question. Using the Laport data in Richard's message below it appears that the difference between 15 radials and 113 radials is only 1.5 dB. With square law radiation (1/R**2) of the RF this translates to a 0.75 dB or 18% difference in range for a given signal strength. Looks like for those of us that are constrained the difference in performance is not huge. Comparing 30 radials to 113 radials with the data below indicates a difference in 1/R**2 of only 9%. Am I missing somenthing here?

Of course all this this is based apparently on a single sample of data in an unknown environment, still it is interesting.

73, Rob, KD7HRN

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:7553-3A4A3576-24@storefull-111.iap.bryant.webtv.net...
> Jerry, W7WPX wrote:
> "Why is it then most (all) commercial HF sites use 120 radials?"
>
> Broadcasters on the medium-waves use 120 radials because it is
> economical for them to seek perfection and avoid FCC problems. HF sites
> rarely use radials because nearly all use horizontal antennas. HF users
> aim at the sky, not the horizon.
>
> Brown, Lewis, and Epstein tested the effects of numbers of radials at 3
> MHz. This was about 70 years ago. They tried various lengths of radials
> and various heights of antennas. Ed Laport summarized their results in
> "Radio Antenna Engineering" on pages 119 and 120.
>
> Ed concludes that 1/2-wavelength from the antenna base is far enough to
> extend radials. In fact, he says that 0.4 wavelength and 120 radials are
> points of diminishing returns.
>
> From one of Laport`s graphs, here are data for a 1/4-wave vertical
> antenna at 3 MHz using different numbers of 0.412-wavelength radials.
> Field strengths in millivolts per meter were measured at one mile.
>
> n mv
> 2 120

> 15 155
> 30 170
> 60 180
> 113 185
>
> Best regards, Richard Harrison, KB5WZI
>

5009. Re: screwdriver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 19:41:12 UTC
From: dcollin@connix.com
Message-ID: <3a4a462f.478174@news.mybizz.net>
Source record: 173858

On Wed, 27 Dec 2000 12:49:26 -0600, "Henry Kolesnik"
<wd5jfr@oklahoma.net> wrote:

>i have a freind who is looking for a decent scewdriver for use on 80 meters
>in a full sized ford van...
>what are two or three good options?
>and the pros and cons of each..
>thanks
>hank wd5jfr

Take a look at this site for lots of information on mobile antennas of
all sorts (and HF mobile in general):

http://www.k2bj.com

5010. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 19:49:44 UTC
From: richardharrison@webtv.net
Message-ID: <22496-3A4A47D8-29@storefull-113.iap.bryant.webtv.net>
Source record: 173860

Tom, W8JI wrote:
"The resistance we might "measure" at the feedpoint of an antenna is
often a "modification" of the loss resistances and radiation resistance
of the system."

A single 1/4-wave vertical with 120 radials of sufficient length should
measure a resistance near 37 ohms and the loss resistance is negligible.

Tom also wrote:
"That "resistance", even if we sort out the part useful radiation is
from, NEVER includes all the loss resistances associated with an antenna
near earth, The resistance can be all over the place regardless of
loss."

My experience is that volatile measurements are signs of either a
defective antenna system or the bad instrumentation used to make the
measurements. Most measurements made with good instruments in a good
system are highly repeatable. Don`t throw away a perfectly good bridge
just yet.

Tom also wrote:
"A measurement at DC is (at best unreliable and more likely)
meaningless."

Depth of wave penetration is limited to about 1/2-wavelength in ordinary
soil, more in poor soil, less in more conductive soil. DC has a very
long wavelength, so it really goes deep. But, an oil-man may look, feel,
smell and even taste oil sand and give a good estimate of porosity and
more. DC conductivity of soil in a wooden box may give a good estimate
of r-f loss if you have core samples down to the wave`s depth of
penetration at the appppropriate places, that is around the antenna where
it counts. The soil in the box must be representative of that in the
site, including moisture and compaction.

BC stations need conductivity in surface soil along the entire
medium-wave signal path.
It`s most important near the station where the current is greatest.

Sky-wave users need only conductivity in the soil at the surface where
their waves hit the ground.

Best regards, Richard Harrison, KB5WZI

5011. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 20:07:39 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92di6e$7tg$1@bob.news.rcn.net>
Source record: 173859

When I was a teenager I worked "dx" using a TA31jr rotatable dipole on a 25 foot
mast. I'd dare say a good beam on a modest tower would allow you work a lot of
DX; often the skill of the operator far outweighs the few dB advantage of a Big Gun
station.

Go for it, and enjoy.

Pete

"Tom Kulas" <tomkulas@pressenter.com> wrote in message
news:Zk926.522$e6.331757@news.uswest.net...
> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?
>
> K0TK

5012. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 20:36:47 UTC
From: jflanders2@home.com
Message-ID: <3a4a4d5b.97369351@news>
Source record: 173861

On Wed, 27 Dec 2000 07:31:00 -0800, "RttyMan" <jlockett@onemain.com>
wrote:

>Why is it then most (all) commercial HF sites use 120 radials? If they can
>get 'good enough' performance with less, why don't they use less? I assume
>they all like to save money and more radials cost more money, especially in
>a commercial enviornment? I'm not trying to be a smart 'ass' here, I am
>genuinely interested.. I am getting the impression that 'more radials' are a
>waste of time, especially for an amateur setup? Is this correct..?
>
>regards, Jerry -w7wpx-
>
>

Why use 120 radials in an AM commercial broadcasting installation?
Actually, I don't know.

That said, I can tell you what I _suspect_ happened:

1. An authoritative engineer published a study in the early licensing
days of an antenna that arbitrarily used 120 radials, and found the
antenna worked well in a broadcasting system.

2. Licensing authorities, trying to do a good job in a regulatory
environment, decreed that a broadcaster's antenna should perform as
well as the above "reference" system.

Result: Either you put down 120 radials, or spend REALLY BIG BUCKS
proving that your radial screen is as good as the "standard". For the
station owner, it is much cheaper to go by the book. He can put down
radials for only a few bucks per hour.

Repeating - I don't really know, but I would bet money the above
speculation is pretty close. I have seen similar stuff in other
industries. Standards get "grandfathered" this way.

Jerry W4UK

5013. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 20:40:31 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <3A4A52ED.799B8ED0@NO.excite.SPAM.com>
Source record: 173862

I remember an article in the late 1970's in 73 Magazine. The impedance was something on the order of 100 Ohms but very loosely. I do remember still seeing 75 Ohm ZipLine Feed Line on Newark Catalog not all that many years ago (less than 5) so it still should be available.

5014. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 21:25:15 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <23kk4t46qggvpg5umg24tusur4kt7rc639@4ax.com>
Source record: 173863

On Wed, 27 Dec 2000 12:37:42 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>
>Jake Brodsky <frussle@erols.com> wrote:
>
>> >The threshold is based on a specific absorbtion rate of 4 W/kg of body
>mass.
>> >It is at this level that various studies show unwanted health effect.
>(None
>> >of these effects have been tied in to long-term health hazards; they are
>> >indeed short-term and thermal in nature.) From that level, the
>standards
>> >committee added safety factors -- 1/10 for controlled/occupational
>exposure
>> >and 1/50 for uncontrolled/general-public exposure.
>
>> ...and this is the kind of BS that gets people like me riled up.
>
>> Where do these "safety factors" come from?
>
>Clearly, the standard should be set at a level that is below that
>demonstrated to cause unwanted effects. The general reasons given for the
>10X safety factor is that the modeling and testing that was used to derive
>the 4 W/kg threshold are not perfect, the correlation between some of the
>methods used and human beings is not completely understood and, as I started
>this paragraph, the standard should be set at a level that is below that
>demonstrated to cause unwanted effects. The 10X level was the one for which
>concensus was reached by a committee of about 150 people.

Except that when you're dealing with a thermal energy source, and
you're dealing with a healthy occupational situation, why not state
the whole equation thermally and allow the engineers/technicians to
determine safety?

>The 50X factor for general public exposure is less clearly defined. There
>are those (among them the members of the now-defunct ARRL Bioeffects
>Committee) that believe that there are "non thermal" effects to RF safety
>below the levels demonstrated to cause harmful effects. The studies that
>support this belief are not well understood or generally accepted by most of
>the scientific community, but such studies and ongoing discussion about them
>continues. The 50X factor was included as the only way to get concensus to
>get the standard in place at all. The present SCC-28 members are very much
>considering that one level should be appropriate and that if the controlled
>level is safe, then it should allply to all.

But the non-thermal effects are not well demonstrated. In fact, even when the studies indicate a "non-thermal" effect exists, it's usually such a small fraction of the general public (for example, childhood lukemia) that there is serious questions whether the data really demonstrates anything or if it's just a statistical artifact.

Standards should be realistic and based on what is known in controlled, repeatable environments.

>> I'm not arguing with the 4 W/kg part of the standard. What I really
>object to is the notion that
>> for *occupational* limits that we aren't supposed to approach even one
>tenth of that amount.
>> Who are we protecting and what are we protecting them from?
>
>I would very much argue against setting the standard to 4 W/kg -- this is
>the level that caused demonstrated unwanted effects. Clearly, the level
>needs to be set lower than that. There may even be some justification for
>setting a level even lower than 400 mw/kg. This level is a thermal load
>equivalent to putting on a light sweater. No problem for most people most
>of the time, but would it be appropriate to do so if one was already at
>maximum thermal load, perhaps outdoors in the sun at 115 F? Under
>controlled conditions, the person being exposed has knowledge of the
>exposure and presumably the training to know that if it is hot, he or she
>should limit exposure below the 400 mw/kg level.

It might be healthy to climb stairs in a pleasant office environment. It might be totally different to climb those same stairs when the air conditioning breaks down. Shall we make standards for climbing stairs?

Why not state these standards for room temperature and an adjustment factor to account for different environments? Clearly, there will be some variation due to background temperature and the physical condition of the people being exposed.

Further, I'm not arguing that there shouldn't be an occupational and non-occupational exposure level. What I am saying is that one number with an arbitrary "safety factor" is a dumb way to express this standard.

>I think I would have significant reservations about the uncontrolled
>exposure levels except for the fact that virtually all amateur stations meet
>them easily. Those that run 1500 watts and indoor antennas do not.

That it for now. However the camel's nose is already in the tent. We already have a bunch of folks who have convinced the committee that "non-thermal" effects, though still questionable after decades of research, should be a part of this specification. We don't even know whether such effects exist and it's already part of the standard!

I think that we should base our standards on what we know to be repeatable and predictable. I have yet to read about research which demonstrates "non-thermal" effects with repeatable, predictable

results. Is this the new "fuzzy engineering?"

>> The problem is that when such specialists get together, nobody really
>> tries to look at the big picture.
>
>Do you really believe that those who had spent literally years of their
>lives to develop the standards did not try to look at the big picture?

Oh, I believe they tried. I don't think they succeeded. Blind men
will know various aspects of the elephant very well. However, they
are incapable of understanding the whole elephant. That's what
academia is all about. I don't mean to say that people with
impressive degrees and backgrounds should not be respected. However,
their views are just one more opinion in a pile of practical issues.
In the end, if the standard is not authoritative AND realistic, it
will fail.

>> I rest my case.
>
>I wish I had all the answers so that I could rest my case, too. I am sure
>that those continuing to do research and continuing to put a lot of
>themselves into the development of the next versions of the standards wish
>they had all the answers, too.

My case is simply that this standard is a farce.

The ANSI committees should have done better. My point is that they
have already made a bad policy. The RF safety thing has thrown flat
embedded safety factors on the table. Politically it will be next to
impossible to repeal those arbitrary standards. We are stuck with a
blanket of "safety factor" on an already tight standard which takes
undemonstrated "non-thermal" effects in to account.

The job of safety factors should be those of the engineer and the
engineer alone. They know better than the standard writers what the
situation will look like. So I strongly disagree with "safety
factors" fudged in to the standard. Most engineers reading this
standard won't know what went in to it. Shall we add the expense of
fudging another safety factor on top of the safety factor we may not
already know about?

Where do these fudge factors end?

>If you really do have the expertise to reach such a conclusion, I am sure
>you would be welcome to participate on the commmittee.

To be member 151 of an already bloated committee? Don't you realize
that's exactly what's wrong?

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

5015. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 21:55:42 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a4a659d$0$35010$44a10c7e@news.net-link.net>
Source record: 173864

The feed through insulators are a good idea if you can find them. Try older farm supply places. Old electric fencers had to be kept indoors out of wx and the feed thru insulators for this work good.

2 bolts spaced same distance apart thru a board works well. Use brass if possible with wingnuts out side, so you can disconnect before bad storm and hook to ground, unless you have also rigged up a spark arrestor here.

I like the idea of just sandwiching the window line between 2 boards, but you don't have to. Just use one board and saw 2 slits to center of board and put the line over the slits. Trim the plastic on the line or the board to make it work and put a bit of silicone caulk or shoogoo stuff to seal. You can get the insulation tape used for pick up caps to stick on the board to seal out the wx.

What would happen if you just terminated 450 ladder line into a PL-259, used a double SO-239 bulkhead connector, then just started the 450 ladder line with another PL-259 on the other side? Mayby a 1 or 2pf bump?

I like the W9INN remote balun box too and am using one at present.
Joe Schlatter wrote in message <92d8eghuh1@nnrp1.deja.com>...
>In article <3A496E85.22400F37@home.com>,
> rich a <rckchp@home.com> wrote:
>> Greetings,
>>
>> Does anyone know of any commercially made product(s) for feeding
>ladder
>> line (or any type of "twin" lead) into a house without drilling holes
>in
>> the window and/or frame? I envision something where the window would
>be
>> slid open a few inches, the gadget placed into the opening, then the
>> window slid down, "locked" in place with a sturdy dowel wedged in
>place
>> to prevent opening from the outside. I guess I could "homebrew" such a
>> gadget but I wonder if such a thing already exists? Comments?
>>
>> Regards,
>>
>> Rich Ardolino / KB2CPE
>>
>
>I have not seen commercial products but here are the two methods I have
>used. In each case, I used a nice dry piece of 1x4 painted all over
>with three coats of exterior paint.

>
>1. Once upon a time, you could buy feed-through insulators. The ones
>I used consisted of two ceramic pyramids, the bases of which fit
>together. There was a long bolt that ran through the two ceramic parts
>from top of one to top of the other. Dirll two holes in the board
>spaced the same distance apart as the twin lead. The bolt goes through
>the hole and the two insulators sit one on each side of the board.
>Thyis requires cutting the twin lead -- one end ties to the antenna and
>to one end of the feed-thru bolt, then you need another piece of twin-
>led to go from the inside end of the feed-thru to the tuner.
>
>2. My current method -- and the easiest -- is this. Drill two small
>holes in the board spaced apart same distance as the twin leads. Use a
>drill no bigger than the wires -- I use 1/8-inch bit. Then, draw a
>straight line the length of the board running through the center of
>both holes and, using a thin saw blade, cut the board in half,
>splitting the holes. Raise the window. Put the bottom half of the
>board in the window; lay the twin lead in the grooves, set the top half
>of the board on top and lower the window. Goes without saying to cut
>the board same width as the window opening. Go the friendly local
>hardware store and pick up some felt weatherstripping -- stuff it in
>any cracks. Another trick is to use two boards -- one only about 6
>inches long, split it as described above to bring in twin lead. The
>other board is the width of the window minus the width of the twin-lead
>board. Drill big holes in the second board to pass coax, stuffing felt
>weatherstripping around the coax.
>
>
>--
>Regards,
>Joe Schlatter
>
>Respond to: joe@schlatter.org
>
>
>Sent via Deja.com
>http://www.deja.com/

5016. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 22:10:53 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <92dpd7nc1@nnrp1.deja.com>
Source record: 173865

In article <Zk926.522$e6.331757@news.uswest.net>,
tomkulas@pressenter.com (Tom Kulas) wrote:
> The city won't let me put up anything higher than a 35' tower. Is a
beam
> useful at that height for stateside contests and some DXing?
>
> K0TK
>

35 feet is fine. Get yourself a medium duty rotator and a fine tri-
bander and go for it. By the way, see if you can fudge a bit. They
will likely inspect it, so, install the tower and have it inspected and
approved. Then, stick a 10 - 15 foot mast on the rotator, put the tri-
bander at the 35-foot level then stack a couple of VHF beams on the
mast -- you can get up a respectable Christmas tree of antennas with
that arrangement.

I put up a 40 foot Rohn 25G. Rohn (or someone) sells 10 and 15 foot
lengths of very heavy duty (and very heavy) hard-drawn tubing expressly
for masts. My rotor sits 3 feet inside the tower with a thrust bearing
on the tower, thus, I get 12 feet of mast sticking above the tower. My
line up is:
-- tri-bander at 40 feet
-- 6-meter five-element
-- 2-meter 13 element
-- 432 24-element at the top
-- mast mounted pre-amps for 2 and 432.

--
Regards,
Joe Schlatter

Respond to: joe@schlatter.org

Sent via Deja.com
http://www.deja.com/

5017. Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:10:11 UTC
From: Rud Merriam <rmerriam@usa.net>
Message-ID: <92dsso$om4@atlas.lcc.net>
Source record: 173868

I'm in a deed restricted area - also a bit XYL restricted - so looking for ideas on an HF antenna. My current focus is the attic of the garage. Not much height but it is an open area I can use. I can access it easily from the shack with 50' or so of coax.

The problem with the house attic is the amount of intercom and alarm system wires roaming around. Those are just going to be RFI magnets. I already switched the 6m dipole to the garage because it kept getting into the intercom.

Basically the garage is 20' square with a joist to peak height of about 8'. It slopes in from all sides up to the peak. I can put an auto-tuner out there since there is power. Biggest question I have there is keeping RF out of the tuner. If needed I could put a ground rod next to the garage.

I'm not trying to work the world but would like local and some national/international capability.

Any suggestions?

--
Rud Merriam
KD5DTV

5018. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:18:25 UTC
From: w1ksz@tiac.net
Message-ID: <3a4a782d.7341213@news.tiac.net>
Source record: 173866

Be aware that Radio Shack does not make coax, it buys it from
a manufacturer and has it "house-branded".
Some years ago, I needed some RG-58X to feed my 40 meter
beam, so I bought some at R/S.
The address label on the box said Belden.
That coax is still in use and works fine.

73, Dick, W1KSZ

On Tue, 26 Dec 2000 22:28:20 GMT, Bob Miller <bamiller@texas.net>
wrote:

>k7jy@aol.com (K7jy) wrote:
>
>>Well I've received a number of great replies about my original post, but
>>nobody's answered my question yet. I'm wondering if anyone has the db loss
>>figures for Radio Shack RG/8 coax? There seems to be universal agreement that
>>it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
>>looking for is the proof in the numbers. Anybody know them? Rad Shack used to
>>sell the thick stuff a few years ago, but I haven't seen it in their stores
>>lately. Many thanks and 73s, John, K7JY.
>
>The ARRL antenna handbook gives the db loss characteristics of several
>brands of coax, but not RS coax. That should tell you enough :-)
>
>Bob
>k5qwg
>

5019. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:21:23 UTC
From: k1bqt@aol.com
Message-ID: <20001227182123.09676.00000131@ng-fm1.aol.com>
Source record: 173867

>Can you include any examples in your example?<

Of ARRL Publications addressing the issue of EMR exposure and safety in books and magazines that cost money for hams to obtain? Help me, Lord!

Rick K1BQT

5020. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:32:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92du6b$ie6$1@plutonium.btinternet.com>
Source record: 173769

Richard wrote -
> BC stations need conductivity in surface soil along the
entire
> medium-wave signal path.
> It`s most important near the station where the current is
greatest.
>
> Sky-wave users need only conductivity in the soil at the
surface where
> their waves hit the ground.
==========
Rich, what happens to ground loss when the soil has a very
low conductivity, in other words it behaves almost as an
insulator ? Dry rock is one such material.

Is there not a soil conductivity at which ground loss is a
maximum ? If so, what is that conductivity ?

Reg.

5021. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:37:38 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <svuk4t81mpiq0vt9k31vvhmqhv2cfi45sm@4ax.com>
Source record: 173770

On 26 Dec 2000 23:53:46 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>
>>Can you provide any examples of ARRL material that is as "scare-monger"
>oriented as this post implies?<
>
>Which "ARRL"? There are two. The ham "organization" of course isn't for
>profit and is tax exempt. ARRL Publications, the "material generator", on the
>other hand, IS very much for profit--a bit of duplicity often overlooked.

How is that fact duplicitous? Is the information concealed?

Do you object to profits?

5022. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:42:33 UTC
From: k1bqt@aol.com
Message-ID: <20001227184233.09676.00000137@ng-fm1.aol.com>
Source record: 173771

>Have you ever compared it to a tribander?<

Nope--only compared it in carefully controlled tests to a full-size short-boom
10-M yagi which beat it by about 2 scrawny (but not insignificant) dB.
My Radio Shack telescoping mast and Radio Shack rotator wouldn't hear of
supporting most tribanders, but handled the hex just fine.

Rick K1BQT

5023. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:52:01 UTC
From: k1bqt@aol.com
Message-ID: <20001227185201.09676.00000142@ng-fm1.aol.com>
Source record: 173772

> How is that fact duplicitous? Is the information concealed?<

Two entities, one name. Not concealed, but rarely discussed.

> Do you object to profits?<

Why would I? I'm a Republican and I like money. Bet you thought you just uncovered a "liberal", though, didn't you!

Rick K1BQT

5024. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-27 23:57:12 UTC
From: Jean Pierre Magnan <incendie@softhome.net>
Message-ID: <B66FEC07.1112%incendie@softhome.net>
Source record: 173773

On 12/27/00 8:04 AM, in article 92cpdg$4jj$1@slb1.atl.mindspring.net, "Tom Wagner - N1MM" <tomwagner@mindspring.com> wrote:

> What will you be using for a radio?
>
> It sounds like you are a new ham. The combination
> of radio and antenna will greatly affect your first
> impression of this hobby.
>
> 73,
> Tom Wagner - N1MM
> Check out the N1MM Free Contest Logger at
> http://tomwagner.home.mindspring.com/n1mm.htm
>
> Jean Pierre Magnan <incendie@softhome.net> wrote in message
> news:B66EAA1D.EBF%incendie@softhome.net...

I'll be using a Radio Shack HTX-100. I've been a ham for 3 years but I've been operating mainly FM VHF and UHF as well as APRS. I passed my 5 WPM last winter but never really operated below VHF. Since the 10 meter band is wide open at this time of the sun's cycle, I thought it might be a good time to try to find a used rig that is not too expensive so I could get more experience on HF.

We'll probably move within the next 6-8 months so I don't want to spend to much money on something that will have to come down soon. I had planned on putting my tower up last fall but I decided to wait until I find a new house.

At this time, I have mature maple trees all around the house so it could be used to attach a dipole or a long wire. Someone also mentioned a half-square antenna. As I said earlier, I am still opened to all options...

Stay safe !

73 de VE2JPT

Jean-Pierre

Jean-Pierre Magnan
VE2 JPT (Basic and 5 wpm)
Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Quï¿½bec, Canada G0X 3J0
email: famille_magnan@infoteck.qc.ca
URL: http://famille_magnan.tripod.com (Go take a look -> Sorry it's in french for now)

The opinions expressed above are mine, all mine.
But I love to share them 8-)

5025. Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:03:04 UTC
From: Jonathan Olson <jaolson@SPAMearthlink.net>
Message-ID: <3A4A8326.D76E5F06@SPAMearthlink.net>
Source record: 173774
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

I have a couple of 5/8 & 1/4 wave mobile (NMO) mount antennas that I want to mount on a mast (along with a scanner antenna) outside my home. My question is how best to achieve a ground plane for these antennas.

There will be two antennas, one cut for 146mHz and another for 444mHz, each identical with exception of whip length. I found a plan in the ARRL Technician book that describes the construction of a ground plane antenna for 2m and 70cm, however it uses a PL239 connector and wire where I want to use an NMO mount and antenna. Will the radials be the same length for each antenna or is there a way to calculate their proper length based upon the frequency?

I know that I could just buy a dual-band antenna (like I did on my truck) and be through with this, but that doesn't seem like much fun to me.

Jonathan Olson, KG4KPP
Wendell NC

5026. Re: ?? about B&W folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:11:02 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A4A84EC.AB092578@earthlink.net>
Source record: 173775

Irv Finkleman wrote:

> "David G. Nagel" wrote:
>
> > Go to B&W's web page and they will tell you just exactly what the
> > numbers are and how much it will cost to but the balun and load for. I
> > have one of their folded dipoles and like it.
> > Dave Nagel
> > WD9BDZ
> >
> > Cboone@Earthlink.net wrote:
> > >
> > > The balun is 16:1 according to the RF bridge KE5O and I used to
> > > measure mine with...the resistor is 800 Ohms NON inductive/100watt
> > >
> > > Chris
> > > WB5ITT
> > >
> > > Mike wrote:
> > > >
> > > > I came across one all tangled up. I am not interested in getting it back
> > > > like it should be.My question is what ratio is the large balun on it and
> > > > could this be of any use for making up another antenna. Also the large
> > > > resistor in the center of the antenna can it be of use other than a
> > > > dunny load.
>
> You are not alone. I used a B&W 370-15 antenna (T2FD type) for a number of years
>
> with great success. The balun was 12:1 and the resistor was 600 ohms. I've been
> on
> the air since 1958, but moving around in the Navy made ideal antenna
> installations
> difficult. The B&W was an easy alternative. Yes, in the final analysis it was
> down
> somewhat from a dipole, but I worked everything I wanted including lots of DX.
> B&W have always produced quality product and I thought their 370-15 was one of
> them.
>
> --
>
> Please hit 'REPLY TO' e-mail address before sending. Thanks.
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

----------SNIP----------

They make damn good dummy load's particularly toward the lower end of their rated range,
Resistors with rare exceptions do not belong in antenna's.

They are fairly quiet and can do an modest job if one does not expect to much from them.
As I remember the model's I run across in the military showed an efficiency of little over 50%
toward the high end of their range and down around 20% at the lower end.
Put 100 watts in get 20 watts out, yes that will really peg those meters, Actually they had a use at one time but technology long ago passed their purpose.
Open wire, A balun and automatic or manual tuner will beat them every time.

For casual use they might be acceptable for anything serious go elsewhere,
The SWR looks good, so does a dummy load.

Steve WB3AMG

5027. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:24:58 UTC
From: tom_bruhns@agilent.com
Message-ID: <92e18k$6vg$1@nnrp1.deja.com>
Source record: 173776

In article <92c7ct$q4u$1@nnrp1.deja.com>,
dc6022@my-deja.com wrote:
> In article <92autbsvc1@nnrp1.deja.com>,
> tom_bruhns@agilent.com wrote:

...

> I got your point. The chip cap. supplier books the test frequency as
> 1MHz low. I was trying to measure the Q at LCR meter(w/ 4wire test
> fixture) and impedance analyzer. However, no matter how I calibrate
> the instruments, the Q read out is still negative at 1MHz. The cause
> might be what you concern about. Any suggestion to get the correct
> readout?

I'd guess that the capacitor Q at 1MHz is quite high, and for only 12pF with, say, 1 volt applied, the total current is only about 60 microamps. That means the current due to loss is in the nanoamp region. It's a very difficult measurement to make. (Note that calibrating with a short is _probably_ actually calibrating with a low-value, low-Q inductance...so what you told the meter was an in-phase current during calibration, was probably actually a slightly reactive current.)

Suggest you put the capacitor in a tank circuit and measure the bandwidth. The _tank_ Q is then (center frequency)/(bandwidth). Use that to compare with a capacitor with known Q. One problem you will have is that the tank circuit is completed with stray capacitance as well as capacitance from the capacitor you are testing, and it can be difficult to separate out the effects. Another problem is that usually the Q is mostly determined by losses in the inductor, not in the capacitor, for good capacitors, and as a result, it's hard to determine accurately just what portion of the loss is in capacitor. For example, if you have a capacitor Q ten times the inductor Q, then only about 9 percent of the loss will be due to the capacitor. A 1% error in bandwidth measurement translates to more than 10% error in capacitor Q if you assign a constant loss to the coil.

Another way that occurs to me is to put a fairly high, known RF current through the capacitor and measure the capacitor's temperature rise. You'll have to calibrate using something like a resistor the same size as the capacitor under test, I suppose. Even this method doesn't completely get around problems of loss in other parts of the circuit, because there will be sizeable loss in the conductors leading to the capacitor...and it's worse for small conductors that would otherwise reduce the heat conduction from the capacitor and make its heat easier to measure.

But...why? Do you expect the capacitor losses to be significant
compared with other circuit losses?

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

5028. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:31:06 UTC
From: rwclark@seanet.com
Message-ID: <3a4e7b3d.361100975@news.seanet.com>
Source record: 173777

On Tue, 26 Dec 2000 05:36:47 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>For a moment consider a point 500 miles away from the Antenna (no matter
>what is being used, bit of wet string if you like) Does the wave at that
>point really care about the ground resistance over which it is passing to
>make it the next 500 miles?
>
>What would need to be done to duplicate those conditions at the launch point
>of a wave?
>
>Happy Chritmuth and a nappy new year.
>
>Gary7SLL

Hi Gary,

Everyone seems more interested in the magic 120 radials than in your
question.

The mechanics here are simply the Z's found at the interface or
boundary. That is, the wave in the air travels through a Z of more
than 300 Ohms whereas when it encounters the earth (in any form) it is
subject to a mismatch because that earth Z is substantially less than
free space Z. It is the mismatch that controls the mechanics of
reflection and even if the ground is lossy. If it presents a
substantial Z differential to free space, then very little power will
be lost to ground (the mismatch reflects most of the power and very
little of the wave is actually absorbed in the loss of ground).

Thus the quick answer to your question above is - yes - ground
Resistance (Z) is significant to the process of reflection. the
significance of that ground resistance is found in the differential,
not in the absolute value. The greater the differential the better.
(I would add that it necessarily follows that earth Z should be as low
as possible - if you can control that factor. Contrariwise, a
exceedingly high earth Z would perform the same job just as capably,
but attaining a very high Z is for all practical purposes - far more
difficult, if not downright impossible.)

Now to the second part of your question (part B). Most neophytes
presume that the ground condition at the base of the antenna is
responsible for the low angle launch characteristic. It is not.
Ground conditions near the antenna (within the first wavelength) are
responsible for MATCH conditions far moreso than launch conditions.
It is the far field ground that matters more for launch conditions and

again this strictly a function of the Z differential. The higher the mismatch to free space, the greater the reflection (the cleaner the mirror). If you could extend those 120 radials out 10 wavelengths, then you may drastically boost that Z differential (by driving down the ground resistance). However, this is a very difficult requirement to be met (your 10M vertical would have to sit in the middle of a football stadium sized ground field - scale that to 160M to discover the sheer size demanded!).

One compelling proof of this is found in the excellent reports of mobile operations within short distances from a shoreline. Water is not a very good conductor, but its Z is sufficiently low to present a very high mismatch to free space borne waves and thus presents a very good reflection surface. The near field earth conditions dominate the match, and the far field earth conditions dominate the launch angle. In all practicality we can control near field earth conditions far better than far field earth conditions (except when we purposely choose a site based on these considerations such as locating near a ocean shoreline, lake, or marsh).

Thus to answer your question in the context of this thread, shorter radials may be effective for a MATCH condition, but have no effect in the launch condition. The same answer could be applied to lengthened radials (that is, until they are some 5 to 10 wavelengths long) too.

73's
Richard Clark, KB7QHC

5029. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:42:02 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <u%v26.28250$3B5.1048396@newsread2.prod.itd.earthlink.net>
Source record: 173778

Donno about your Silver Solder-

But- What I use- You ain't gonna melt with a Soldering Iron :-)

The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.

That's why it's used in High Pressure AC Systems :-)

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:sq1d29.u3e.ln@mail.specsol.com...
> Bill Aycock <baycock@hiwaay.net> wrote:
> > GAry- please get it right before you preach- Antimony boils at about
> > 2500 degrees, F, so the soldering iron that will do that is one I dont
> > want to hold in my hand. I would like to know where this bit of
> > 'information' originated. Do you know?
>
> > Bill- W4BSG
>
> <rest snipped>
>
> Getting antimony into solution in the first place is a bit of a chore, but
> once there, the melting point of the alloy is not much affected.
>
> Don't recall seeing any solder with antimony in it, but lineotype (SP?)
> metal had quite a bit by design (makes the alloy harder and molds "crisper").
> And a soldering iron will melt it.
>
> Bullet casters prefer lead alloys with a bit of antimony for the same reasons.
>
> Ever hear of silver solder? You can't melt pure silver with any ordinary
> soldering iron either, but once alloyed with lead and/or tin....
>
> Jim Pennino
>
>

5030. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:54:20 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <uo5KOoQUZmzgb+Tk+x5o4YzJc6T4@4ax.com>
Source record: 173779

Joe Schlatter <joe@schlatter.org> wrote:

>1. Once upon a time, you could buy feed-through insulators.

Surplus Sales of Nebraska has a good selection of ceramic feed-through
insulators -- little bitty ones to big monsters...

Bob
k5qwg

5031. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 00:58:45 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4a8cba.91513372@news.akorn.net>
Source record: 173780

On Wed, 27 Dec 2000 11:27:50 -0800, "Rob Dunn" <dunnr@ix.netcom.com>
wrote:

>1.5 dB. With square law radiation (1/R**2) of the RF this translates to a
>0.75 dB or 18% difference in range for a given signal strength.

It doesn't work quite that simple.

When a signal is above noise even a small amount, it is easy to cpy.
When it is just above or at noise, just the smallest change sounds
like a VERY large difference.

To some people, it doesn't matter and a loss of even ten dB means
little. Everyone they work is strong and a good path so they can give
several dB.

Other people would almost kill for a couple dB.

In our applications "range" won't increase by 18 percent because the
range waddles around all the time with conditions. What will happen is
the reliability of the sation, especially for working DX, will
improve.

Also remember the soil losses we deal with are higher than those in
the AM BCB.

>Looks like
>for those of us that are constrained the difference in performance is not
>huge. Comparing 30 radials to 113 radials with the data below indicates a
>difference in 1/R**2 of only 9%. Am I missing somenthing here?

Not much. That's why, since I am a dyed-in-the-wool DXer on 160
meters, I use about 60 radials (one tower has 100 radials, but that is
my reference antenna that all others are compared to). I cringe when I
see people talking about 200 or 300 radials, especially when they are
short.

Keep in mind also that the more radials you use, the longer they must
be to be fully useful. Otherwise you may be wasting wire.

When the open-end spacing from radial tip-to-tip is .025 to .05 WL you
are at the flat part of the curve.

>Of course all this this is based apparently on a single sample of data in an
>unknown environment, still it is interesting.

It sure is. The thing that separates my station from some others are
all the "dB here and dB there" things I do. Do enough of the "dB here

and dB there" things, and pretty soon you are working things no one else can work.

That won't matter if you only ragchew, my friend W5TJ has no radials at all and is happy. But that's because he only works people who are 20 over nine. When it gets tough, the lack of five or more dB really shows.

73 Tom

5032. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:02:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92e3va$9r8$2@uranium.btinternet.com>
Source record: 173781

Measurements made on straight lengths of 50 to 100 feet,
suspended in air, using instruments such as Autek and MFJ
analysers and home made bridges.

Zo found by terminating the line with say 150-ohm, 130-ohm,
120-ohm, 1/8-watt, metal film resistors until input
resistance remains flat versus frequency over a wide
frequency range. Checked by open and closed reactance
measurements on odd-numbered 1/8th wavelengths. Or by
drawing straight line through the mean value of plot of
ripple in input impedance versus frequency..

Attenuation calculated from open and closed impedance
measurements on odd-numbered 1/8th wavelengths. Checked by
magnitude of Z/f ripple when terminated with known resistor.

The values given are extracts from my measurement note books
made over many years. The measurements were not necessarily
made at the frequency at which the results have been stated.
It may be assumed attenuation increases in proportion to
squareroot of F.

They are accurate enough, plus or minus 15 percent, for any
amateur purposes. In any case results will differ from one
reel to another and one manufacturer to another because no
attempt is made to control HF characteristics.

The last sort of instrument I would use for HF loss
measurements on twin cable is a wattmeter unless made on 10
dB or longer lengths. If power measurements MUST be made
then the most accurate method is to determine the insertion
loss of the line by reducing the setting of a calibrated
attenuator in tandem with it.

The great drawback with calculating transmission
characteristics of twin lines from dimensions is the
uncertainty in the effective dielectric constant. It's a
mixture of air and plastic. Coax is fine.

Reg, G4FGQ
==========
Roy Lewallen wrote
> Did you actually measure these?
> What instrumentation did you use?

5033. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:13:19 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <PpJKOq166+xKOlJWPfPlbNvR2nTP@4ax.com>
Source record: 173783

Jean Pierre Magnan <incendie@softhome.net> wrote:

>
>At this time, I have mature maple trees all around the house so it could be
>used to attach a dipole or a long wire. Someone also mentioned a half-square
>antenna. As I said earlier, I am still opened to all options...

I wouldn't over-think or over-complicate this... just hang up a simple
10 meter wire dipole... during a sunspot high, it will work as well or
better than most antennas you can put up, short of a beam. (As a
relatively new ham, it'll do ya good to hand-build a dipole... won't
cost much, either.)

Bob
k5qwg

5034. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:14:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4A93F6.8F4DC0D7@eznec.com>
Source record: 173782

"Silver solder" is a term traditionally applied to high-temperature hard solder alloys like you're describing. The ones I've worked with can be melted with a propane torch but not a soldering iron. But there are tin-lead solder alloys containing 2 or 3% silver to prevent leaching the metallization off of gold or silver-terminated surface mount parts. This has a melting point near that of plain tin-lead solder. Some people (mistakenly, in my opinion) call this "silver solder", confusing it with the high temperature alloys. They're very different things.

(There are also other low temperature alloys containing small amounts of silver, but mostly for special purposes and not often seen in electronics.)

Roy Lewallen, W7EL

Hassen Ben Sober wrote:
>
> Donno about your Silver Solder-
>
> But- What I use- You ain't gonna melt with a Soldering Iron :-)
>
> The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.
>
> That's why it's used in High Pressure AC Systems :-)
>
> "Jim Pennino" <jimp@mail.specsol.com> wrote in message
> news:sq1d29.u3e.ln@mail.specsol.com...
> > Bill Aycock <baycock@hiwaay.net> wrote:
> > > GAry- please get it right before you preach- Antimony boils at about
> > > 2500 degrees, F, so the soldering iron that will do that is one I dont
> > > want to hold in my hand. I would like to know where this bit of
> > > 'information' originated. Do you know?
> >
> > > Bill- W4BSG
> >
> > <rest snipped>
> >
> > Getting antimony into solution in the first place is a bit of a chore, but
> > once there, the melting point of the alloy is not much affected.
> >
> > Don't recall seeing any solder with antimony in it, but lineotype (SP?)
> > metal had quite a bit by design (makes the alloy harder and molds "crisper").
> > And a soldering iron will melt it.
> >
> > Bullet casters prefer lead alloys with a bit of antimony for the same reasons.

> >
> > Ever hear of silver solder? You can't melt pure silver with any ordinary
> > soldering iron either, but once alloyed with lead and/or tin....
> >
> > Jim Pennino
> >
> >

5035. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:15:06 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A4A9414.F4AFD9B0@home.com>
Source record: 173784

rich a wrote:

> Greetings,
>
> Does anyone know of any commercially made product(s) for feeding ladder
> line (or any type of "twin" lead) into a house without drilling holes in
> the window and/or frame? I envision something where the window would be
> slid open a few inches, the gadget placed into the opening, then the
> window slid down, "locked" in place with a sturdy dowel wedged in place
> to prevent opening from the outside. I guess I could "homebrew" such a
> gadget but I wonder if such a thing already exists? Comments?
>
> Regards,
>
> Rich Ardolino / KB2CPE

Depending on how flexible your twin lead is, just bring it through the open window, then close the window on it. You probably won't notice any big difference. I've done it with no ill effects, but now I bring it through a wooden window frame with a narrow slot drilled through for the twinlead. Try it -- you might be pleasantly surprised.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5036. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:21:27 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <q5RKOkgi4TK1TS640+8U2jwOrxhm@4ax.com>
Source record: 173785

w1ksz@tiac.net wrote:

>Be aware that Radio Shack does not make coax, it buys it from
>a manufacturer and has it "house-branded".

Be aware that I once looked at the braid on my RS coax, and found it very sparsely woven; you could see the milky-white insulator of the center conductor right through it. Comparing it to Belden coax, you simply could not see through the braid -- no if's and's or but's.

If you buy coax from RS, just make sure you're getting their Belden stuff, and not something else...

Bob
k5qwg

5037. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 01:47:52 UTC
From: Matt <doormattNOSPAM@bigpond.com>
Message-ID: <qOw26.166231$e5.144259@newsfeeds.bigpond.com>
Source record: 173786
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

Use four radials cut to one quarter of the wavelength of the frequency that you want to use - i.e. for two metres, you will want 50cm (or about 20 inch long) radials, and for 70 cms you will want radials that are about 18cm/7 inches long. The radials should be pointing down at an angle of 45 degrees from horizontal - this will (or at least should) give you the 50 ohms you should have at the antenna. For the scanner it will depend on the antenna, and what you listen on - the easiest option is to get a discone - benefit of this is you can also TX on it on both 2m & 70cm. Hope this info helps you out.

Cheers

Matt

Jonathan Olson <jaolson@SPAMearthlink.net> wrote in message news:3A4A8326.D76E5F06@SPAMearthlink.net...
> I have a couple of 5/8 & 1/4 wave mobile (NMO) mount antennas that I
> want to mount on a mast (along with a scanner antenna) outside my home.
> My question is how best to achieve a ground plane for these antennas.
>
> There will be two antennas, one cut for 146mHz and another for 444mHz,
> each identical with exception of whip length. I found a plan in the
> ARRL Technician book that describes the construction of a ground plane
> antenna for 2m and 70cm, however it uses a PL239 connector and wire
> where I want to use an NMO mount and antenna. Will the radials be the
> same length for each antenna or is there a way to calculate their proper
> length based upon the frequency?
>
> I know that I could just buy a dual-band antenna (like I did on my
> truck) and be through with this, but that doesn't seem like much fun to
> me.
>
> Jonathan Olson, KG4KPP
> Wendell NC
>

5038. HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:14:03 UTC
From: "Dr. Vecchio" <104204.707@compuserve.com>
Message-ID: <92e7l8bsc1@nnrp1.deja.com>
Source record: 173787

I have an HP4815A vector impedance meter without a probe.
I know that the output of the probe has only 2 leads (sense and ground)
but the probe connector has 9 (!) coaxial conductors in it.
Does anyone know how to wire a probe or test jig for the thing?
I'd love to get a copy of the complete schematic or at least the
probe schematic. Does anyone know of a source?

Thanks,
cvecchio@spectrasonics.com

Sent via Deja.com
http://www.deja.com/

5039. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:20:12 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <s08e29.ogo.ln@mail.specsol.com>
Source record: 173788

Hassen Ben Sober <HassenBenSober@kumputer.net> wrote:
> Donno about your Silver Solder-

> But- What I use- You ain't gonna melt with a Soldering Iron :-)

> The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.

> That's why it's used in High Pressure AC Systems :-)

The silver solder used in electonics, as opposed to plumbing and whatever else, usually runs from 2% to 6% silver and uses ordinary electronic soldering techniques and equipment.

OK, OF role call; how many of you worked on a Tek 'scope with the little roll of silver solder under the cover for replacing compenents on the little silver metalized ceramic strips?

Jim Pennino

5040. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:34:46 UTC
From: richardharrison@webtv.net
Message-ID: <4315-3A4AA6C6-51@storefull-116.iap.bryant.webtv.net>
Source record: 173789

Reg wrote:
"Is there not a soil conductivity at which ground loss is a maximum?"

Interesting question. As a transmission obstruction, it may be so. But as a constituent of ground-wave propagation or as a reflector of sky-waves, it would seem maximum loss would come from minimum conductivity.

Ground-wave propagation and sky-wave reflection require high conductivity for high efficiency. Insulation can only add loss if imperfect but doesn`t contribute much of anything to propagation of a ground-wave. Insulators are used as lenses to focus super-high frequencies, but don`t reflect sky-waves to any extent.

Nearly all ground-wave propagation curve sets begin with a theoretical inverse-distance or unattenuated field strength curve versus distance, and then add curves for sea water and soils of various conductivities. These curves indicate increasing losses as the resistance figures increase, or the reciprocal values for conductance decrease.

Surely copper is a better reflector of h-f signals than sea water or soil, and good soil is a better reflector than poor soil.

So, my guess is that more soil conductance is always better for radio propagation.

Best regards, Richard Harrison, KB5WZI

5041. silver, plumbing and lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:46:21 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <th9e29.rc2.ln@mail.specsol.com>
Source record: 173792

Roy Lewallen <w7el@eznec.com> wrote:
> "Silver solder" is a term traditionally applied to high-temperature hard
> solder alloys like you're describing. The ones I've worked with can be
> melted with a propane torch but not a soldering iron. But there are
> tin-lead solder alloys containing 2 or 3% silver to prevent leaching the
> metallization off of gold or silver-terminated surface mount parts. This
> has a melting point near that of plain tin-lead solder. Some people
> (mistakenly, in my opinion) call this "silver solder", confusing it with
> the high temperature alloys. They're very different things.

> (There are also other low temperature alloys containing small amounts of
> silver, but mostly for special purposes and not often seen in
> electronics.)

> Roy Lewallen, W7EL

<Other stuff snipped>

Geez Roy, I thought we were talking about electronic stuff here.

Is this rec.plumbing.amateur ? :-)

Properly, the stuff used in electonics should be called "silver baring
solder", but since there weren't any plumbers around to correct us, we
called it "silver solder".

You are quite correct; the purpose is to prevent leaching from a substrate.

About the only place most people have ever seen it is the silver coated
ceramic component carriers used in OLD Tec 'scopes and some old military
gear.

It is still used in the manufacture of thick film devices and things of
that ilk. Those dip/sip resistor packs, for example, have their leads
crimped to a plated ceramic substrate and then "silver soldered" (sic).

Sometimes "gold solder" (sic) is used for parts where silver migration
is a problem, but not often because of the cost.

If you like, I can bore you for hours with tales of watching silver migrate
across substrates though a microscope and trying to figure out how to keep
it from happening without using gold while the Vandegraff generator across
the lab to simulate lightning effects on parts caused the secretaries hair
to stand straight up and brought threats of violence on my person....

Jim Pennino

5042. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:51:26 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <OUx26.28869$3B5.1086540@newsread2.prod.itd.earthlink.net>
Source record: 173791

Yes - I compared it on paper to several tribanders. None of them worked worth a hoot on 17 and 12 M. On the other bands, I compare it to tribanders everyday in pileups. They usually lose.

K8AC

"Prof. Beaker" <beaker@pim.com> wrote in message news:3A4A272D.18E6FAEC@pim.com...
> Have you ever compared it to a tribander?
>
>
>
> Floyd Sense wrote:
>
> > I've been using the HX-5B Hexbeam since the Spring of this past year.
> > Forward gain appears to be very good on all bands, f/b ratio is best in the
> > CW portion of each band, deteriorating the higher you go on the band. I'm
> > very satisfied with the antenna. Construction is excellent and it has
> > withstood high winds very well. In a recent DX contest, I worked 103
> > countries in 32 zones on 10 meters in just over 5 hours, while running an
> > AL-80B amp to the Hexbeam. When you're comparing it to other antennas, be
> > sure to compare it to other FIVE BAND antennas. When comparing cost,
> > compare the cost of the entire installation, not just the antenna. Here's a
> > link to my website with more info and photos on the antenna.
> > http://home.sprintmail.com/~sentek/hexpage1.htm .
> >
> > If you have any further questions, send me a real email address and I'd be
> > happy to answer them.
> >
> > K8AC
> >
> > "rich a" <rckchp@home.com> wrote in message
> > news:3A497077.9385A77@home.com...
> > > Has anyone had any experience with the Hexbeam antenna(s)? Comments,
> > > pro,con or whatever are invited.
> > >
> > > Regards,
> > >
> > > Rich A. / KB2CPE

> > >
>
>
>

5043. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 02:58:38 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <u8ae29.rc2.ln@mail.specsol.com>
Source record: 173793

Jean Pierre Magnan <incendie@softhome.net> wrote:

<snip>

> I'll be using a Radio Shack HTX-100. I've been a ham for 3 years but I've
> been operating mainly FM VHF and UHF as well as APRS. I passed my 5 WPM last
> winter but never really operated below VHF. Since the 10 meter band is wide
> open at this time of the sun's cycle, I thought it might be a good time to
> try to find a used rig that is not too expensive so I could get more
> experience on HF.

> We'll probably move within the next 6-8 months so I don't want to spend to
> much money on something that will have to come down soon. I had planned on
> putting my tower up last fall but I decided to wait until I find a new
> house.

> At this time, I have mature maple trees all around the house so it could be
> used to attach a dipole or a long wire. Someone also mentioned a half-square
> antenna. As I said earlier, I am still opened to all options...

<snip>

Last sunspot cycle I was almost always on the road. I had a HTX-100, small power supply, and a wire dipole in my "extra" briefcase. Thumbtacked the dipole to the hotel walls and worked a lot of stuff.

If this is temporary, quit obsessing on the last db obtainable from your antenna and go hang a dipole as high as you can easily get it. If you have the space and coax, hang two at right angles and switch between the two for the best signal at the time.

You can pull the coax down and take it with you when you move; hams always need more coax for something.

When 10M is open, it doesn't take a lot to work a lot of stations...

Jim Pennino

5044. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 03:05:17 UTC
From: richardharrison@webtv.net
Message-ID: <7552-3A4AADED-110@storefull-111.iap.bryant.webtv.net>
Source record: 173794

The original question seems to have been:
Can shortened radials be effective?

Short can be offset by more numerous in most cases.

Ed Laport had something to say about short radials when discussing long-wave antennas. He observed that semiconducting soil attenuates the wave below its free-space value. Radials help reduce transmitting antenna losses. Vertical antennas must be used to launch ground-waves. At low frequencies these antennas are only a few degrees high. Radials for these antennas must also be too short in most cases.

To aleviate the short radial problem, Ed advises planting a ground rod as deeply as possible at the far end of each radial and connecting the radial to it. Ed also says that additional improvement may come from using above-ground radials to connect with the ground rods.

Best regards, Richard Harrison, KB5WZI

5045. Here it is, extorsion begins with cell phones.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 03:29:05 UTC
From: k3bu@aol.com
Message-ID: <20001227222905.11991.00004279@ng-mn1.aol.com>
Source record: 173795

Didn't take long, first tobacco, now cell phones.

Read all about it at
http://www.thetimes.co.uk/article/0,,2-59164,00.html
who will be next?

Them Hams with them ugly and dangerously radiation radiating antennas?

Lets see how many people got cancer and were watching TV, let's sue the TV stations, TV anchors, Hollywood, advertisers, TV manufacturers, cable companies, wire manufacturers, cabinet manufacturers, tower and antenna manufacturers, actors, ...

With the breakdown of the legal system, breakdown of the society is to follow. Getting ridiculous, problem with "authority"?

Yuri

5046. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 03:59:47 UTC
From: k3ky@erols.spamnocom
Message-ID: <92edrj$p13$1@bob.news.rcn.net>
Source record: 173796

I have had the pleasure of using one of these little gems some
years back. A great RF instrument! The probe tip looked fragile
and I believe it could break off due to mishandling. I'm certainly
not expert on these, but my understanding is that the instrument
is essentially useless if you do not have a functional, factory-built
probe. I would guess that your prospects of building one yourself
successfully are rather slim. I hope I am wrong about this, but that
is, I believe, your situation. Sorry to rain on your parade. It will still
look nice on the bench, however. :o) 73, David K3KY
P.S. The factory probe plugged into the front panel to stow it and
to check calibration. As long as you kept it stowed when not in
use and avoided dropping it, they held up pretty well. I never
broke one but they always made me nervous! :o)

In article <92e7l8bsc1@nnrp1.deja.com>
Dr. Vecchio <104204.707@compuserve.com> wrote:

>
>
> I have an HP4815A vector impedance meter without a probe.
> I know that the output of the probe has only 2 leads (sense and ground)
> but the probe connector has 9 (!) coaxial conductors in it.
> Does anyone know how to wire a probe or test jig for the thing?
> I'd love to get a copy of the complete schematic or at least the
> probe schematic. Does anyone know of a source?
>
> Thanks,
> cvecchio@spectrasonics.com
>
>
> Sent via Deja.com
> http://www.deja.com/

5047. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:22:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ef6u$1nn$0@208.207.71.161>
Source record: 173797

TR wrote:
>
> Mark,
>
> > > Mark Keith wrote:
> > > > ... if it were one of the standard "slim
> > > > stick" versions with a short stinger I could see it being lousy. MK
> > >
> > > It was probably a Lakeview Hamstick, about seven feet long overall.
> > >
> > I looked up those, and they are the thin kind, but not totally useless
> > as they seem to at least use a decently long stinger. But the coil is
> > tight and thin. Not good. I'm trying to think if the brand that makes
> > the larger coil variety, but escapes me right now...
>
> If you remember, pass it along. There are 3-4 companies here in the states
> that make a "hamstick" type antenna. All are of the skinny coil variety. The
> Hustler antennas are the only ones that have a large coil.
>

The better quality spiralwound whips are made by Pro-Am, and are the
Valor line.

Dick

5048. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:22:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4AC023.5C68D12D@dvol.com>
Source record: 173798

"Prof. Beaker" wrote:

> Have you ever compared it to a tribander?
>

>
Which tribanders? The biggest attraction of the hexbeam is it's decent if not outstanding performance as a particularly small and light antenna. Most likely a Hex wouldn't fare too well against some 200 Lb. monster Force 12 with 37 foot elements for obvious reasons.
>
w3rv

5049. Re: Towers and Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:46:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92egil$1nn$1@208.207.71.161>
Source record: 173799

Yes

Tom Kulas wrote:
>
> The city won't let me put up anything higher than a 35' tower. Is a beam
> useful at that height for stateside contests and some DXing?
>
> K0TK

5050. Re: Hamstick Opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:48:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92egmp$1nn$2@208.207.71.161>
Source record: 173800

TR wrote:
>
I have seen a new hamstick named Iron Horse (or something like that)
> It has the standard male 3/8 thread at the bottom (for the base mount) and a
> 3/8 female at the top, to allow the pre-adjusted stinger assembly to be
> screwed into the top of the fiberglass base section. A real nice touch.

The Pro-Am Valor has been made that way for many years. Works FB, I use
the 20meter version on both 20 and 17 with a second preadjusted stinger

Dick

5051. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:54:11 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92eh1j$1nn$3@208.207.71.161>
Source record: 173801

Hassen Ben Sober wrote:
>
> ROTFL
>
> I can Just see the Dogie taking a Whiz on the Fence :-)
>

And barking, "Man, that Hertz!"

5052. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 04:55:33 UTC
From: dentronman
Message-ID: <9Jz26.573$BG.788112@newsfeed.intelenet.net>
Source record: 173802
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

The are known as CushCrap.
"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A49867A.4DAFF324@dvol.com...
>
>
> Cortland Richmond wrote:
>
> > I find myself wondering why you didn't buy a piece of aluminum at Home
Depot or
> > somewhere -- or use a piece of aluminum ground wire! -- and make your
own? Worth not
> > having the hassle, from what I read here about the company. Faster, too.
> >
> > Cortland
> >
>
> >
> . . . . hell will freeze tight before I ever again buy any HF antenna.
Home-brewing
> antennas has never easier than it is today what with great resources like
EZNEC, CAD,
> Reg Edward's gems and others on the deisgn side and the likes of Home
Depot and
> who-knows-how-many web-based hardware sources which simply didn't exist
"in the good old
> days". No ham can design and build a TS-2000 but fer cripes sake at least
a lousy beam
> or vertical which doesn't have to be "supported" by a Cushcraft or Mosely?
How lame are
> we, anyway??
> >
> w3rv
>

5053. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:05:46 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ehna$1nn$4@208.207.71.161>
Source record: 173803

Reg Edwards wrote:
>
> "When you can measure what you are speaking about, and
> express it in numbers, you know something about it. But when
> you cannot measure it, when you cannot express it in
> numbers, your knowledge is of a meagre and unsatisfactory
> kind. It may be the beginning of knowledge but you have
> scarcely in your thoughts advanced to the state of science."
>
> William Thomson, Lord Kelvin, 1824-1907.

And that was all that was known about things in the 1800's. Since that time it has turned out that many unquantifible things are no less real.

5054. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:28:47 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A4ACF65.D5B1F90B@earthlink.net>
Source record: 173804

hey bill
i am glad you had good experiances dealing with customer service with mosley
i on the other hand have not in the past year or so i order a 9 ele 2 meter yagi
took them 8 weeks to get it to me then when i got it the quality of this antenna
was not a typical mosley antenna while waiting for the antenna after 4 weeks i
started calling and they gave me excuses after excuses why it hadnt went out yet
trying to get me to believe they didnt have any 1" diam tubing for the boom
then just a couple of months ago i needed to replace the hairpin matching wire on
my mosly diplowmat 6 meter vertical the woman taking the order couldnt find it on
the computer then when she claimed she did she quoted me $5 for the part and i
asked her if it was going to take 8 weeks to get this part(keep in mind all this
part is is an 1/8th in aluminum wire 3 foot long bent to look like a hairpin) she
said no it would go out in 5-7 days i said fine i will take it
then a week later i got a call from the office manager asking me what i really
wanted when i ordered cause it was unclear so i told her and she got it cleared up
said it will go out in a few days 2 weeks later i seen they had billed my credit
card for $23 so i called and they said the part was $10 and the other $13 was
shipping and handling keep in mind this is an aluminum rod only 3 foot long and
slightly larger around than a coat hanger i said okay just checking whats up and i
said has it been shipped she said not yet they are working on it this week well
again 8 weeks after i placed the order i had it in my hands
i know what yur thinking why didnt i just make the damn thing myself and if i knew
that it was so lightweight of aluminum rod i would have
i will never buy another antenna or order parts from them again i am only 39
years old but dont think i will live long enough to get the order in
i wont even get into the poor quality of the 2 meter yagi i bought and hated right
out of the box and never put RF thru it
good luck

Bill Nelson wrote:

> :It seems Tom has a tremendous zeal for discrediting your plight. (?) Could
> :it be that he has a portion of your investment? At any rate, Tom can buy all
> :the antennas he wants from Mosely and nobody is going to stop him. Most of
> :us, however, are more careful with their money and prefer to do business with
> :more reputable businesses, being less daring to lose $$. Thanks for letting
> :us know before we learned the same way you did, i.e., "The School of Hard
> :Knocks" Respectfully, Stinson
>
> I wouldn't be too quick to jump to conclusions. After all, you have only
> one side of the story. It is also interesting to note that there have not
> been a bunch of others following up with problems of their own. To me, this
> says that it was an isolated incident - regardless of whether it was
> reported accurately or not.
>

> Mosely has been in business for half a century or more, and millions of Hams
> have purchased their antennas over the years. I personally have used several,
> and have always had good service when the rare problem occurred.
>
> --
> Bill Nelson (billn@peak.org)

Bill Nelson wrote:

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> :it be that he has a portion of your investment? At any rate, Tom can buy all
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> says that it was an isolated incident - regardless of whether it was
> reported accurately or not.
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> have purchased their antennas over the years. I personally have used several,
> and have always had good service when the rare problem occurred.
>
> --
> Bill Nelson (billn@peak.org)

5055. Re: Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:36:44 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A4AD14E.407DD91A@earthlink.net>
Source record: 173805

hi rud
i would suggest getting a couple of big spools of 14 gauge wire and i would take the wire and follow the perimiter of the inside of the garage formomg a large loop then hook 450 ohm ladder line to it and run it to your tuner and that should be enough wire to get you out on most HF bands or you could wait til spring and put up a PVC flagpole with a multi band vertical hiding inside of it
good luck

Rud Merriam wrote:

> I'm in a deed restricted area - also a bit XYL restricted - so looking for
> ideas on an HF antenna. My current focus is the attic of the garage. Not
> much height but it is an open area I can use. I can access it easily from
> the shack with 50' or so of coax.
>
> The problem with the house attic is the amount of intercom and alarm system
> wires roaming around. Those are just going to be RFI magnets. I already
> switched the 6m dipole to the garage because it kept getting into the
> intercom.
>
> Basically the garage is 20' square with a joist to peak height of about 8'.
> It slopes in from all sides up to the peak. I can put an auto-tuner out
> there since there is power. Biggest question I have there is keeping RF out
> of the tuner. If needed I could put a ground rod next to the garage.
>
> I'm not trying to work the world but would like local and some
> national/international capability.
>
> Any suggestions?
>
> --
> Rud Merriam
> KD5DTV

5056. HALF SQUARE FEEDPOINT closer to 50 or 70 ohms?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:50:26 UTC
From: earlve3ab@igs.net
Message-ID: <3a4ad372.108529234@news.ott.igs.net>
Source record: 173790

I have ARRL ANTENNA COMPENDUMS 5 and 6 and there is a couple of
articles on half squares. Looks like feeding with 50 ohm coax (which i
would do if i were to build one)..might not result in a broadbanded
response...unless you perhaps use large dia conductors or something.
I want to try and avoid using a tuner. Im interested in 10 meters
first..anyone build a HALF SQUARE and feed at corner with coax.
IF SO ....do you have to use a tuner.73 Earl VE3AB.

5057. Propagation Software & Antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:56:39 UTC
From: n3tuk@my-deja.com
Message-ID: <92ekmo$lc9$1@nnrp1.deja.com>
Source record: 173808

Hi,
Any idea where to find a freeware copy of any good MUF propagation
software for DOS or Windows,also antenna desing.

Regards

LV

Happy 2001 and good DX's

Sent via Deja.com
http://www.deja.com/

5058. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 05:59:51 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A4AD510.3EA83E19@home.com>
Source record: 173806

rich a wrote:
>
> Greetings,
>
> Does anyone know of any commercially made product(s) for feeding ladder
> line (or any type of "twin" lead) into a house without drilling holes in
> the window and/or frame? I envision something where the window would be
> slid open a few inches, the gadget placed into the opening, then the
> window slid down, "locked" in place with a sturdy dowel wedged in place
> to prevent opening from the outside. I guess I could "homebrew" such a
> gadget but I wonder if such a thing already exists? Comments?
>
> Regards,
>
> Rich Ardolino / KB2CPE

Thanks to everyone who replied with suggestions.

5059. ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 06:06:33 UTC
From: rich a <rckchp@home.com>
Message-ID: <3A4AD69B.49BE2FBE@home.com>
Source record: 173807

Hi Reg,

Thanks for your suggestion. I'd probably do it your way except that I will be selling this house in the near future and I don't want to "damage" the window or frame, which are new units recently installed. I'll probably do the "holes drilled in a board" placed beneath the window for the time being.

Regards,

Rich Ardolino ? KB2CPE

5060. VX5R supplied antena

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 06:17:15 UTC
From: bkk411@hotmail.com
Message-ID: <92elt9$m6t$1@nnrp1.deja.com>
Source record: 173809

Hi !

I would like to use my VX5Rs for two way comm. What is
the best frequency to use with the supplied antena to get
max distance ?
Or should I really get a after market antena ? (If yes wich ?)

Thanks for any help !!!

bkk411

Sent via Deja.com
http://www.deja.com/

5061. Re: screwdriver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 07:07:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A4AE6A2.6C7A195@oio.net>
Source record: 173810

Hank,
You might also look up NU4W, Dave, who makes a
very good screwdriver antenna. Very good warranty
on them too.
'Doc

5062. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 07:10:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <92ep1n$1kd$9@bashir.peak.org>
Source record: 173812

Jean Pierre Magnan <incendie@softhome.net> wrote:

: We'll probably move within the next 6-8 months so I don't want to spend to
: much money on something that will have to come down soon. I had planned on
: putting my tower up last fall but I decided to wait until I find a new
: house.

: At this time, I have mature maple trees all around the house so it could be
: used to attach a dipole or a long wire. Someone also mentioned a half-square
: antenna. As I said earlier, I am still opened to all options...

From your earlier post, your tuner is designed for coax output. That is
no real problem - just use coax to run to the antenna - and use a current
balun at the antenna to suppress any common mode currents.

If you put up an inverted V cut for 10 meters, you should be able to run
it fine without even the antenna matcher. The SWR will not be under 2:1
for the whole 10 meter band, but it should be for the segment that is of
interest to you.

A dipole (inverted V) is probably the easiest to set up and match. Save
the long wire for later.

--
Bill Nelson (billn@peak.org)

5063. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 07:15:05 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <92ep9p$1kd$10@bashir.peak.org>
Source record: 173813

Brian Kelly <kelly@dvol.com> wrote:

: The Hexbeam is coming up a real winner when space and weight are big
: issues. The hexbeam is simply a folded-up very close spaced yagi.
: Real-world forward gain is modest at best but the F/Bs can be very
: high.Quite possibly the biggest fully commercialized and user-tested
: bang-for-the-square-foot or pound out there.

That close spacing is also going to raise the Q of the antenna, meaning
the bandwidth is also going to suffer - compared to a full sized antenna.

--
Bill Nelson (billn@peak.org)

5064. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 07:24:53 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <92eps5$1kd$11@bashir.peak.org>
Source record: 173811
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

In rec.radio.amateur.antenna Jonathan Olson <jaolson@spamearthlink.net> wrote:

: There will be two antennas, one cut for 146mHz and another for 444mHz,
: each identical with exception of whip length. I found a plan in the
: ARRL Technician book that describes the construction of a ground plane
: antenna for 2m and 70cm, however it uses a PL239 connector and wire
: where I want to use an NMO mount and antenna. Will the radials be the
: same length for each antenna or is there a way to calculate their proper
: length based upon the frequency?

A quick approximation is to use radials that are the same length as the
radiator.

You would be better off, on the base, if you used vertical that has some
gain over a 1/4 wave vertical. I would not use a mobile antenna, even
with a ground plane constructed for it.

--
Bill Nelson (billn@peak.org)

5065. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 07:46:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4AEFDE.E6AFB542@eznec.com>
Source record: 173814

Thanks for the information. We can assume then that measurements quoted
by others (but not done by the people posting them) showing much greater
loss are either in error or represent dramatically different dielectric.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Measurements made on straight lengths of 50 to 100 feet,
> suspended in air, using instruments such as Autek and MFJ
> analysers and home made bridges.
>
> Zo found by terminating the line with say 150-ohm, 130-ohm,
> 120-ohm, 1/8-watt, metal film resistors until input
> resistance remains flat versus frequency over a wide
> frequency range. Checked by open and closed reactance
> measurements on odd-numbered 1/8th wavelengths. Or by
> drawing straight line through the mean value of plot of
> ripple in input impedance versus frequency..
>
> Attenuation calculated from open and closed impedance
> measurements on odd-numbered 1/8th wavelengths. Checked by
> magnitude of Z/f ripple when terminated with known resistor.
>
> The values given are extracts from my measurement note books
> made over many years. The measurements were not necessarily
> made at the frequency at which the results have been stated.
> It may be assumed attenuation increases in proportion to
> squareroot of F.
>
> They are accurate enough, plus or minus 15 percent, for any
> amateur purposes. In any case results will differ from one
> reel to another and one manufacturer to another because no
> attempt is made to control HF characteristics.
>
> The last sort of instrument I would use for HF loss
> measurements on twin cable is a wattmeter unless made on 10
> dB or longer lengths. If power measurements MUST be made
> then the most accurate method is to determine the insertion
> loss of the line by reducing the setting of a calibrated
> attenuator in tandem with it.
>
> The great drawback with calculating transmission
> characteristics of twin lines from dimensions is the
> uncertainty in the effective dielectric constant. It's a

> mixture of air and plastic. Coax is fine.
> ----
> Reg, G4FGQ
> ==========
> Roy Lewallen wrote
> > Did you actually measure these?
> > What instrumentation did you use?

5066. Re: Propagation Software & Antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 09:31:00 UTC
From: Jeff Newbro <itrade@tiac.net>
Message-ID: <3A4B0854.54F28CB6@tiac.net>
Source record: 173815

LV,

For real-time propagation reports, take a look at http://hamdx.com and click on "Real time MUF map". It isn't quite as good as having something similar running on your own PC, but then, you don't have to input any data to this one.

Good luck,

Jeff

n3tuk@my-deja.com wrote:

> Hi,
> Any idea where to find a freeware copy of any good MUF propagation
> software for DOS or Windows,also antenna desing.
>
> Regards
>
> LV
>
> Happy 2001 and good DX's
>
> Sent via Deja.com
> http://www.deja.com/

5067. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 10:25:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92f51e$7q1$1@plutonium.btinternet.com>
Source record: 173817

In general, any 20 awg or larger twin line, especially at low HF, will have a lower attenuation than RG-58 type coax, because (1) it has a higher Zo and (2) the wire diameter is greater than the coaxial inner conductor.

Every time Zo doubles, attenuation in dB halves.

Every time wire diameter doubles, attenuation in dB halves again.

It also winds very neatly around a choke balun.

And it's less expensive.

How information becomes degraded by many repetitions is illustrated by the 1st world war military message which when originally transmitted sounded like : "Send reinforcements - we are going to advance".

When the message finally arrived at battallion HQ, passed from one bloody trench to another through the shellfire, shrapnel and chlorine, it had changed to "Send three (shillings) and four pence - we are going to a dance".
--
Reg, G4FGQ

5068. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 10:35:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92f51f$7q1$2@plutonium.btinternet.com>
Source record: 173816

Ed was an optimist. A rod at the end of a radial merely
effectively lengthens the radial by the length of the rod.

Reg

5069. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 10:47:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92f701$i2k$1@neptunium.btinternet.com>
Source record: 173720

Materials have permittivity as well as conductivity. A good insulator (low conductivity) will reflect radio waves with as little loss as a copper sheet. So is there some value of conductivity at which ground loss is a maximum ?

No doubt many people think they have such stuff right in their own back yard.

Roy, would Eznec provide an answer ?

Reg, G4FGQ

5070. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 10:54:07 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A4B1BCF.60E17AF8@mwci.net>
Source record: 173818

Dr. Vecchio wrote:

> I have an HP4815A vector impedance meter without a probe.
> I know that the output of the probe has only 2 leads (sense and ground)
> but the probe connector has 9 (!) coaxial conductors in it.

The 4815A is a very sophisticated equipment (I have one and have repaired it, but not the probe, thank heavens). The RF signal voltage from an oscillator is applied to the D.U.T. The voltage across the DUT and the current through the DUT are *sampled* with 2 nanosecond pulses at a 5 kHz rate. The probe uses two balanced diode sampling mixers, one for voltage and one for current. The two sampled outputs are amplified by 5 kHz bandpass amplifiers in a closed-loop feedback circuit. Amplitude and phase are determined in this manner.

Finding a good probe may be possible from used test equipment sources, but they will be very expensive. Repairing the probe requires a special expertise in a special facility.

Bill W0IYH

5071. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 10:57:06 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <W%E26.24455$wE3.38969@newsfeed.slurp.net>
Source record: 173719

Thank you, Reg, for clearing that matter up for me.

All problems, once solved, are simple.
--

73, Dave, K3BHJ

5072. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 12:11:36 UTC
From: gbrown@nc.rr.com
Message-ID: <3a4b2b30.132089616@news-server>
Source record: 173721
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

Consider making your own J-pole antenna, per:

http://www.thedragonmaster.com/j-pole.html

Minimal soldering skills, low parts cost!

Copper tubing versions:

http://www.qsl.net/wb8erj/440jpole.htm

http://www.cvarc.org/jpolescl.htm

They'll also work as scanner antennas.

I've never been able to make a mobile antenna work very well on
any mast. Once, a 2M mag mount worked fine attached to the steel housing
of an attic HVAC unit

73,
Gary
K4GPB

On Thu, 28 Dec 2000 00:03:04 GMT, Jonathan Olson <jaolson@SPAMearthlink.net>
wrote:

>I have a couple of 5/8 & 1/4 wave mobile (NMO) mount antennas that I
>want to mount on a mast (along with a scanner antenna) outside my home.
>My question is how best to achieve a ground plane for these antennas.

5073. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 13:31:39 UTC
From: meghertz@hotmail.com
Message-ID: <92ffbr$81u$1@nnrp1.deja.com>
Source record: 173722
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

What is the best way to tune a J-pole?
There seems to be three ways of messing up - the overall length of the thing, the placement of the cut (or length of the shorter element), and the feed point position. Can adjusting ANY of these things tune the antenna from way-wrong to spot-on? Or do all three have to be just right? Can one thing be wrong but compensated for by something else being wrong in the opposite direction?! Or would you tune each variable for the best results independently?

Plus, can you add extra length/sections at the top for more gain, and if so is that just a case of tuning a standard J-pole first and then adding the extra height while keeping an eye on the tuning? For 70cms you could make one (?) several wavelengths long and still fit it into a loft. Worth doing? Gain?

Any info appreciated, I keep meaning to experiment one day...
MegHz

Sent via Deja.com
http://www.deja.com/

5074. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 14:00:42 UTC
From: richardharrison@webtv.net
Message-ID: <13607-3A4B478A-4@storefull-115.iap.bryant.webtv.net>
Source record: 173724

Rob Dunn wrote:
"Of course all this is based apparently on a single sample of data in an unknown environment,---."

Data provided in 1937 by Brown, Lewis, and Epstein, all researchers at RCA, was not based on a single sample. They provided information widely accepted as authoritative today, some 63 years later.

Best regards, Richard Harrison, KB5WZI

5075. TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 14:14:18 UTC
From: Neal <nealj@accesstoledo.com>
Message-ID: <t4mim1b34d978c@corp.supernews.com>
Source record: 173723

Looking for a 2m antenna tuner.

5076. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 14:18:34 UTC
From: richardharrison@webtv.net
Message-ID: <13606-3A4B4BBA-10@storefull-115.iap.bryant.webtv.net>
Source record: 173727

Reg wrote:
"Ed was an optimist".

True, Ed Laport was Chief Engineer of RCA International, and obviously believed most problems can be solved.

Ed reasoned that some r-f current plunges as low as 1/2-wavelength in ordinary soil. Driving ground rods at the far ends of radials provides an easy path between the tower and some of this deeper current and saves ground loss in distance between the ground rod and the tower.

Ed Laport built many radio stations from LF to VHF. He tested the ideas he wrote about.

Best regards, Richard Harrison, KB5WZI

5077. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 14:27:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92fikmfhk1@nntp9.atl.mindspring.net>
Source record: 173725

Phil:

Jeesh... I was hoping that after he left all of us "dirty scum" here on the rraa NG, we would have to contact N1IR only via the "oracle at Delphi" or some other such exotic mechanism.

The plain old Internet?

What????

-Peter K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message news:3a4a1047.59649818@news.akorn.net...
> On 27 Dec 2000 01:18:42 GMT, k1bqt@aol.com (Rick Littlefield) wrote:
>
> >>Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna
> >reflector will be the 'net conduit for contact with him...<
> >
> >Kripe, mate, that only took four years to accomplish. Thank ya Phil, and I
> >know many includin' meself 'll be lookin' forward to that change.
> >
> >Rick K1BQT
>
> The reflector page is found at http//www.prozac.com
>
> Welcome back.
>
> 73 Tom

5078. QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 14:38:43 UTC
From: fractenna@aol.com
Message-ID: <20001228093843.08814.00000143@ng-ff1.aol.com>
Source record: 173726

I will repeat (and expand) Phil's post again for the opportunity of those who did not read accurately or completely.

I am happy to answer fractal antenna questions on the reflector when I have time. But not on USENET or e-mail. Please do not send ANY 'ham' fractal antenna questions via e-mail, especially not to commercial e-mail. They will just get erased as of 1 January and not read at all. Thanks!

73
Chip N1IR

QST--

You are invited to join the fractal antenna reflector at:

fractalantenna-subscribe@egroups.com

This lively groups discusses the exciting and state of the art antenna technology based on fractals. Topics range from antenna theory to practical ham uses. Recent list size is 265. The reflector is moderated and no spam or personal attacks OR off-topic posts are allowed. Archives to subscribers only.

Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna reflector will be the 'net conduit for contact with him on this subject, so if you have fractal
antenna questions, this is the place!

Happy Hammin'

Phil N1ZKT

5079. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 15:05:59 UTC
From: George Sereikas <sereikas@worldnet.att.net>
Message-ID: <rFI26.6881$7f3.514619@bgtnsc07-news.ops.worldnet.att.net>
Source record: 173728

Although more work, I strongly recommend the 10 meter beam, turned by a TV rotor. It will provide MUCH better performance than the other alternatives mentioned. Even at a modest height (say on a chimmney on your roof at 25 feet), you will get excellent performance. I did this about 20 years ago and was amazed at the performance.

Let me know if you have questions.

George
K2WO
"Jean Pierre Magnan" <incendie@softhome.net> wrote in message
news:B66EAA1D.EBF%incendie@softhome.net...
> I am planning on putting a 10 meter antenna up. I am on a thight budget.
>
> 1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could
> string a 150-200 feet insulated wire in the trees around the house. This
> would cost me next to nothing. The only problem is that I don't have the
> manual for the tuner so how should I attach the long wire to the tuner.
> There is no lug at the back of the tuner, only an SO-239 connector.
>
> 2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I
> figure I could use my TV rotor to rotate it. It'll be at around 25 feet
> above ground until I can get my tower up.
>
> 3rd scenario: Something like a Carolina windom or a dipole between 2 trees
> near the shack. It would probably require an antenna tuner (other then the
> MFj-16010 though).
>
> Once again I am seeking your advice to help me find a solution to my
antenna
> problem. I welcome any comments.
>
> I must say that money wise I (and most probably my XYL too) would prefer
to
> go with the first scenario. I will definitely have to work out the details
> regarding how to connect te long wire and the ground to the tuner but I
bet
> that it should not be to much of a problem.
>
>
> Stay safe !
>
> 73 de VE2JPT
>

> Jean-Pierre
> _____
> Jean-Pierre Magnan
> VE2 JPT (Basic and 5 wpm)
> Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Qu&#65533;bec, Canada G0X 3J0
> email: famille_magnan@infoteck.qc.ca
> URL: http://famille_magnan.tripod.com (Go take a look -> Sorry it's in
> french for now)
>
> The opinions expressed above are mine, all mine.
> But I love to share them 8-)
>

5080. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 15:07:19 UTC
From: richardharrison@webtv.net
Message-ID: <6241-3A4B5727-13@storefull-114.iap.bryant.webtv.net>
Source record: 173730

Reg wrote:
"A good insulator (low conductivity) will reflect radio waves with as little loss as a copper sheet."

The propagation mode must be considered. If the radio wave is guided by parallel wires or coax, interruption of the conductors with insulators can reflect the wave.

If the radio wave is traveling through a waveguide pipe, interrupting the waveguide to free space (an insulator) via a plastic waveguide window does not reflect the wave which flows right on out into free space.

In a similar way, radio waves have little reaction to insulators of various types in free space. Most insulating materials tend to slow the progress of the wave. This characteristic of plastics makes them suitable for microwave lens materials. We are familiar with plastic`s effect on propagation velocity when it is used in coax as a dielectric. But all of the plastic parabolic reflectors I`ve seen were coated with metal which performed the actual reflection.

Best regards, Richard Harrison, KB5WZI

5081. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 15:08:55 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t4mlucjb6d0n69@corp.supernews.com>
Source record: 173729

Let's assume you do get the ladder line safely through the window. Now, once the ladder line is inside the house, if the operating position is 8 feet from the window, how do you route the ladder line to the tuner so that people in the house will not accidentally come in contact with it? Could you put it in 2" PVC until it gets to the back of the tuner?

Greg, N6GK

5082. Ham-II Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 15:22:24 UTC
From: Billy Young <youngbil@lcc.net>
Message-ID: <92flrk$hp4@atlas.lcc.net>
Source record: 173731

Thanks for all the help with the HAM-II rotor. The manual helped me find out that I have a couple of bad capacitors and one bad diode.

"73's

Billy Young

KD5CSD

5083. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 15:58:54 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01c070e7$9ba964a0$208127d4@f6awn.cpod.fr>
Source record: 173740

Reg Edwards <g4fgq.regp@btinternet.com> a crit dans l'article <92d8n4$56h$1@uranium.btinternet.com>...

> Francis, by what method did you make the measurements ? The
> increase in loss with increasing frequency is too large.
> ---
> Reg, G4fgq
> ============================

Good evening Reg,

Hummm ... "method" you said ? ;-)

Well, it was seven years ago and I was not so competent as now, hi ...
(I do read your messages and those of some other contributors I appreciate only from two years ;-))

If I remember and with the few notes i have conserved :

I have get the Zc and Vf with a noise bridge, an adjustable R and my receiver.
I have used some 20 meters long piece of wire.
I have found about 100 Ohms for Zc and 0,66 for Vf.

I have realised two 1/2 transformers on toroids. (50/100 Ohms)

and for the attenuation :

TX / 6 dB power Pad / Step attenuator (HP) / Bird Wattmeter / T1: 50-100 / T2: 100-50 / Wattmeter for reference at the end of the line.

I set the power for a reference d viation at the end of the test line.

I insert the line between T1 and T2 and use the step attenuator (reducing the value ...) to come back to the standard deviation at the end (10 W ? don't remember ...)

The step att. give the attenuation and the Bird another very similar value of power increase.

Something empiric, is'nt it ?

But in fact, enough to say it's not a good choice for a performant antenna !

Another information : I have suspended the line some one meter above the ground, outside the shack ...

73,

Francis
F6AWN

5084. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:01:07 UTC
From: meghertz@hotmail.com
Message-ID: <92fo3v$f55$1@nnrp1.deja.com>
Source record: 173733
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

I've found a good info page at
http://www.frii.com/~rick/Jpole/jpole.html
and I'm working my way through it... looks like it may answer my
questions!

MegHz

> What is the best way to tune a J-pole?
> There seems to be three ways of messing up - the overall length of the
> thing, the placement of the cut (or length of the shorter element),
and
> the feed point position. Can adjusting ANY of these things tune the
> antenna from way-wrong to spot-on? Or do all three have to be just
> right? Can one thing be wrong but compensated for by something else
> being wrong in the opposite direction?! Or would you tune each
> variable for the best results independently?
>
> Plus, can you add extra length/sections at the top for more gain, and
> if so is that just a case of tuning a standard J-pole first and then
> adding the extra height while keeping an eye on the tuning? For 70cms
> you could make one (?) several wavelengths long and still fit it into
> a loft. Worth doing? Gain?
>
> Any info appreciated, I keep meaning to experiment one day...
> *MegHz*

Sent via Deja.com
http://www.deja.com/

5085. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:05:04 UTC
From: dc6022@my-deja.com
Message-ID: <92fobc$f7l$1@nnrp1.deja.com>
Source record: 173732

In article <3A49E5A8.EDC97296@mwci.net>,
sabinw@mwci.net wrote:
>
>
> Did you really mean 1.5 GHz, or do you mean 1.5 MHz?
>
> Bill W0IYH
>
>

Bill,

Am I like child plays big car? Get me out of the car.

The ckt is at 1.5 Giga Hertz. Two caps work with ustriplines at
inductive arms of HPF pi ckt respectively which is in front of a LNA.

The poor caps would cause the front-end stage to loss 2dB gain and get
1.5dB worst on NF. The fireman just told me the the cause is lower Q
from caps. I replace caps with diff. date code ones and they works.
Checking S11 at front end stage--- the difference is so slight. I
doubt the matching tolerance is that critical and try to find the way
to evaluate the caps. Any clues from the trap elements or ckt???

DC-6022 <---(plate on my car ^_^)

Sent via Deja.com
http://www.deja.com/

5086. missing ferrite rod- component tuner- ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:12:22 UTC
From: salmonsm@missouri.edu
Message-ID: <92fop0$fn6$1@nnrp1.deja.com>
Source record: 173734

Hello,

I have a consumer audio-type am/fm component tuner. There is a post where the tuner's ferrite rod would have snapped into place, but it's gone. I am in the process of investigating a replacement from the manufacturer (Yamaha) but I'm not optimistic. Can anyone suggest a comparable (or better) replacement? I've just about talked myself into building a large loop (like the plans found at ftp://bbs.ks-huseby.no/html/loopant.zip.html) but then my room would be pretty crowded. Any more compact solutions out there? In addition to the post for the missing rod I also have one screw terminal for an AM antenna.

Plus, any tips for eliminating electrical/mechanical interference other than turning lights and applicances off? I have done so throughout the house and still can't rid tuner of a persistent pattern of noisy static across the whole band. Would it help to use the ground terminal, and should I use it the same way I would ground an external antenna (that is, fasten to a buried grounding rod)?

Thanks for any help!

Michael Salmons

Sent via Deja.com
http://www.deja.com/

5087. WTB/T: TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:29:52 UTC
From: Michael Prevatt <ku4yp@earthlink.net>
Message-ID: <3A4B6A2B.5882@earthlink.net>
Source record: 173735

hello,

looking for an mfj 949e tuner. want to trade an mfj keyer and iambic
paddles for it. both are in vg condx.

tnx
--
73 de KU4YP Member of 10X International Net
Michael D. Prevatt #70625
Willow Oak, Florida

5088. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:33:41 UTC
From: Tom <tselenic@ibmnospammers.com>
Message-ID: <3A4B6B6C.1E89D5@ibmnospammers.com>
Source record: 173736
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

Hi there,

visit www.cebik.com and go to technical section. Page down to the
vhf antenna section. Click on half square antenna 2m.

This is an inexpensive 2m antenna that has more gain over the jpole
and is made of #12 common house wire. 50 ohm match, coax fed
and held on a pvc frame. You can put this together fast and use it
along with the jpole.

73 tommy

Jonathan wrote:

> I have a couple of 5/8 & 1/4 wave mobile (NMO) mount antennas that I
> want to mount on a mast (along with a scanner antenna) outside my home.
> My question is how best to achieve a ground plane for these antennas.
>
> There will be two antennas, one cut for 146mHz and another for 444mHz,
> each identical with exception of whip length. I found a plan in the
> ARRL Technician book that describes the construction of a ground plane
> antenna for 2m and 70cm, however it uses a PL239 connector and wire
> where I want to use an NMO mount and antenna. Will the radials be the
> same length for each antenna or is there a way to calculate their proper
> length based upon the frequency?
>
> I know that I could just buy a dual-band antenna (like I did on my
> truck) and be through with this, but that doesn't seem like much fun to
> me.
>
> Jonathan Olson, KG4KPP
> Wendell NC

5089. Re: HALF SQUARE FEEDPOINT closer to 50 or 70 ohms?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:39:01 UTC
From: Claudia <claudiaw@nospammingibm.net>
Message-ID: <3A4B6CAE.2A83DA77@nospammingibm.net>
Source record: 173737

Hi,
visit www.cebik.com and go to technical section,
page down to half square in hf antenna sections.

wealth of info for you !

73 cw

earl wrote:

> I have ARRL ANTENNA COMPENDUMS 5 and 6 and there is a couple of
> articles on half squares. Looks like feeding with 50 ohm coax (which i
> would do if i were to build one)..might not result in a broadbanded
> response...unless you perhaps use large dia conductors or something.
> I want to try and avoid using a tuner. Im interested in 10 meters
> first..anyone build a HALF SQUARE and feed at corner with coax.
> IF SO ....do you have to use a tuner.73 Earl VE3AB.

5090. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:44:02 UTC
From: rwclark@seanet.com
Message-ID: <3a506db9.423176896@news.seanet.com>
Source record: 173738

On Wed, 27 Dec 2000 18:20:12 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:

>
>OK, OF role call; how many of you worked on a Tek 'scope with the little
>roll of silver solder under the cover for replacing compenents on the little
>silver metalized ceramic strips?
>
>Jim Pennino

Yo!

73's
Richard Clark, KB7QHC

5091. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:50:11 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A4B6F43.C7EDF87B@mwci.net>
Source record: 173739

dc6022@my-deja.com wrote:

> The ckt is at 1.5 Giga Hertz. Two caps work with ustriplines at
> inductive arms of HPF pi ckt respectively which is in front of a LNA.
>
> The poor caps would cause the front-end stage to loss 2dB gain and get
> 1.5dB worst on NF. The fireman just told me the the cause is lower Q
> from caps. I replace caps with diff. date code ones and they works.
> Checking S11 at front end stage--- the difference is so slight. I
> doubt the matching tolerance is that critical and try to find the way
> to evaluate the caps. Any clues from the trap elements or ckt???

Suggestion:

Use a simulation of your circuit to degrade a perfect 12 pF capacitor with a small series resistance. If the gain drops 2 dB and NF degrades 1.5 dB, you will know about the capacitor. Look also at S11. Look also at the simulated frequency response, which may not be correct. Your circuit and test equipment and simulator software are a good way to calculate the Q of the capacitor and to see the effect of poor Q.

Bill W0IYH

5092. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:50:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92gb6k$7nk$1@plutonium.btinternet.com>
Source record: 173621

Bob wrote,
> The worst error I have found in an ARRL
> publication was a square root sign that did not enclose
enough of an
> equation, and this was obviously a type-setting error.
==========

- - - - and a sure sign of carelessness in checking proof copies by editorial staff and authors. Editorial staff are almost guaranteed to overlook such things as incomplete squareroot signs. If that's the only one you've found you havn't looked very hard.

Even one glaring example like that is enough to cause loss of confidence in a whole bookfull of equations. It's the probability that more insidious errors exist, even less likely to be detected and corrected, which damage reputations.

Bob, I'm fairly certain someone like yourself would never take an equation from an ARRL publication at its face value without first of all checking it from first principles. Or waiting for a correction to appear in a later issue.

Like Terman's works, amateur radio publications are excellent collections of information and data. Very comprehensive reminders and value for money. But I havn't taken Terman as being the bringer of gospel truth for 52 years.

Everitt's work is another matter. In 52 years I have never found an error, not even one attributable to the printer.

However, although Terman's stuff may contain mathematical and similar errors, his theoretical explanations are undoubtably sound. Whereas amateur radio publications are littered with old wives' tales which are repeated, distorted and plagiarised ad-infinitum, from one issue to the next and from one newsgroup to another.

Some years back there was an article published in a British amateur radio magazine by a supposedly up-and-coming, high-flying, young author. Part of the article had been plagiarised from the USA "Radio Engineer's Reference Data". The irrefutable evidence of plagiarism was an error in the form of an equation identical to what I had detected some

years earlier in the original RERD publication. The amateur magazine author had not even bothered to check the accuracy of the stuff he was stealing. The RERD editors had not detected it. The magazine technical editors had not detected it. They probably hadn't looked. Two people wrote to the editors to point out the error. I was one. G5RV was the other.

But then, its only a hobby. ;o) ;o) ;o)

May I wish you a very profitable 2001.

Reg G4FGQ

5093. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 16:53:20 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <4eK26.35216$RC1.1283243@newsread1.prod.itd.earthlink.net>
Source record: 173741

An interesting comment, but you must define what you mean by "bandwidth is going to suffer". If you're referring to SWR bandwidth, you'll find that this is simply not true. The SWR bandwidth of the commercially available hex beam is excellent - less than 1.5:1 on each of the five bands covered by the five band model.

If you think of bandwidth in terms of forward gain and front/back ratio, then the "bandwidth" certainly is not the same as the SWR bandwidth, but I don't know that it is any narrower than that of the typical small tribander (or any of the available 5 band yagis). Larry Cebik covers this subject in great detail on his website and my practical experience with a real antenna tends to agree with his information. Here's the URL for the wire beam info: http://www.cebik.com/4.html.

Personally, I prefer the wide SWR bandwidth, provided that the f/b and gain are maximized somewhere near the frequencies I most often operate. That's true with the Traffie HexBeam.

K8AC

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:92ep9p$1kd$10@bashir.peak.org...
> Brian Kelly <kelly@dvol.com> wrote:
>
> : The Hexbeam is coming up a real winner when space and weight are big
> : issues. The hexbeam is simply a folded-up very close spaced yagi.
> : Real-world forward gain is modest at best but the F/Bs can be very
> : high.Quite possibly the biggest fully commercialized and user-tested
> : bang-for-the-square-foot or pound out there.
>
> That close spacing is also going to raise the Q of the antenna, meaning
> the bandwidth is also going to suffer - compared to a full sized antenna.
>
> --
> Bill Nelson (billn@peak.org)
>
>

5094. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 17:00:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4B71BC.1361@wt.net>
Source record: 173742

Richard Clark wrote:

>
> Thus to answer your question in the context of this thread, shorter
> radials may be effective for a MATCH condition, but have no effect in
> the launch condition. The same answer could be applied to lengthened
> radials (that is, until they are some 5 to 10 wavelengths long) too.

Hummmm, Overall I agree except I'm not sure I would say the system in the near field has no effect at all. I notice reading about above ground counterpoises that they say the "almost perfect" above ground radial system has little effect on the vertical pattern due to the reason you give. IE: quite an effect as far as 10-20 wl out from the antenna due to the reflectivity of the ground at those distances. So I can agree with that, but I'm not sure I would say the radial system under the antenna has no effect at all. Or even just a little as they say. What makes me wonder is the plots I get when running verticals though eznec etc. Now, I'm not totally sure how that program jives with the real world in this case, but I do see an increase in gain at lower angles when using more radials. Say 60 compared to 2. Being as the far field ground is not going to change by adding radials under the antenna, I can't really see how there would be no effect from improving the radial system. Maybe not huge, but I think there is a bit of an advantage to the guy with more radials at low angles. The 1 dbi point at the horizon drops a few degrees when adding the radials. From about 15 degress with 2 radials, to under 10 degrees with 60. "Maybe 7-8 degrees". Am I missing something here? I'm not sure how that could qualify as no effect. The far field hasn't changed in these examples. MK
--
http://web.wt.net/~nm5k

5095. 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 17:06:23 UTC
From: fractenna@aol.com
Message-ID: <20001228120623.08798.00000165@ng-ff1.aol.com>
Source record: 173743

I just talked with someone who said the Wakfield killer was a former ham with a KA1 callsign.

Anyone know if this is true? Where can someobody check this?

73
Phil
de N1ZKT

5096. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 17:32:28 UTC
From: k9sqg@aol.com
Message-ID: <20001228123228.20208.00004805@ng-mg1.aol.com>
Source record: 173744

The value of the SWR is a big discriminator. If one has, or expects, high SWR due to using a single antenna on multiple bands, then go for the open wire line. SWRs of 50:1 or so don't produce as much loss as coax with an SWR of 3:1.

73s,

Evan

5097. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:04:17 UTC
From: Richard Leshner <rleshner@alcumet.com>
Message-ID: <TfL26.50$94.10729@e420r-atl2.usenetserver.com>
Source record: 173745

Go to QRZ.com and do a name search.
"Fractenna" <fractenna@aol.com> wrote in message
news:20001228120623.08798.00000165@ng-ff1.aol.com...
> I just talked with someone who said the Wakfield killer was a former ham
with a
> KA1 callsign.
>
> Anyone know if this is true? Where can someobody check this?
>
> 73
> Phil
> de N1ZKT
>

5098. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:11:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4B825A.512B@wt.net>
Source record: 173746

Fractenna wrote:
>
> I just talked with someone who said the Wakfield killer was a former ham with a
> KA1 callsign.

They are in error. He's current, and change the A to a B.

>
> Anyone know if this is true?

Yes I do, and it is.

Where can someobody check this?

The internet. MK

http://web.wt.net/~nm5k

5099. Re: Mobile Antenna as a Base

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:11:47 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <DnL26.170139$_5.37798009@news4.rdc1.on.home.com>
Source record: 173747
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,triangle.radio

"Gary Brown" <gbrown@nc.rr.com> wrote in message
news:3a4b2b30.132089616@news-server...
> Consider making your own J-pole antenna, per:
>
> http://www.thedragonmaster.com/j-pole.html
>
> Minimal soldering skills, low parts cost!
>
> Copper tubing versions:
>
> http://www.qsl.net/wb8erj/440jpole.htm
>
> http://www.cvarc.org/jpolescl.htm
>

The Arrow dualband J-Pole works well I have built a few. Nice antenna, follow directions and no-tuning needed. Single feed line costs about 20.00 bucks Canadian to make.

Barry D.

5100. KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:31:36 UTC
From: fractenna@aol.com
Message-ID: <20001228133136.22394.00000191@ng-fy1.aol.com>
Source record: 173748

As suggested I did a name search on qrz.com. The Boston papers report this guy lives in Haverhill and sure enough there it is in the flesh as KB1EVA.

K-B-1-E-V-A

Maybe this is his dad?? I don't think so myself. Sure looked familiar....He sure LOOKS like one of those guys you see at the MIT FLEA!!!

If it IS him this only reinforces the notion to the public that hams have lunatics in thier midst.

So much for Dr. Cohen being paranoid and stopping public ham appearances and ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I think Tom Rouch would do well to distribute that prozac he talks about!!

73
Phil de N1ZKT

5101. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:39:03 UTC
From: rwclark@seanet.com
Message-ID: <3a4c82c8.428567447@news.seanet.com>
Source record: 173750

On Thu, 28 Dec 2000 11:00:44 -0600, Mark Keith <nm5k@wt.net> wrote:

>Richard Clark wrote:
>
>>
>> Thus to answer your question in the context of this thread, shorter
>> radials may be effective for a MATCH condition, but have no effect in
>> the launch condition. The same answer could be applied to lengthened
>> radials (that is, until they are some 5 to 10 wavelengths long) too.
>
>Hummmm, Overall I agree except I'm not sure I would say the system in
>the near field has no effect at all. I notice reading about above ground
>counterpoises that they say the "almost perfect" above ground radial
>system has little effect on the vertical pattern due to the reason you
>give. IE: quite an effect as far as 10-20 wl out from the antenna due to
>the reflectivity of the ground at those distances. So I can agree with
>that, but I'm not sure I would say the radial system under the antenna
>has no effect at all. Or even just a little as they say. What makes me
>wonder is the plots I get when running verticals though eznec etc. Now,
>I'm not totally sure how that program jives with the real world in this
>case, but I do see an increase in gain at lower angles when using more
>radials. Say 60 compared to 2. Being as the far field ground is not
>going to change by adding radials under the antenna, I can't really see
>how there would be no effect from improving the radial system. Maybe not
>huge, but I think there is a bit of an advantage to the guy with more
>radials at low angles. The 1 dbi point at the horizon drops a few
>degrees when adding the radials. From about 15 degress with 2 radials,
>to under 10 degrees with 60. "Maybe 7-8 degrees". Am I missing something
>here? I'm not sure how that could qualify as no effect. The far field
>hasn't changed in these examples. MK

Hi Mark,

You are right, absolute answers usually expose exceptions.

Some months ago we had a very good example of how ground can be
suckered into playing for us vis-a-vis the fractal flyer (aka k2) or
my far more simple Lazy H.

Both use the ground as an element to find gain at low launch angles.
Thus we have an example of how ground immediately below an antenna can
affect launch angle. However, such opportunity comes at a great cost
- those designs are incredibly deaf overall with this one low angled
sweet spot of sensitivity. These "special" antennas are suitable only
to those with "challenged" circumstances. Another cost is that these
designs that optimize with ground are extremely sensitive to location

where a simple variation in height of only inches can drive the SWR through the roof.

Thus a more complex answer would have been yes - and no. Not a very useful answer to include not very useful examples. Your modeling presumes at least 60 radials (were they short as the subject is interested in?), which again removes that solution from the useful list (at least to those who have no alternative).

In all practicality, the near ground can at best affect high launch angles, but not the lower ones without considerable investment or trade-off.

73's
Richard Clark, KB7QHC

5102. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 18:40:07 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <_NL26.26465$wE3.45896@newsfeed.slurp.net>
Source record: 173749

Forget Prozac and the two-th uh-mendment.

Confiscate weapons by door-to-door search.

K3BHJ

5103. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:13:50 UTC
From: richardharrison@webtv.net
Message-ID: <6241-3A4B90EE-32@storefull-114.iap.bryant.webtv.net>
Source record: 173755

Mark Keith wrote:
"I can`t really see how there would be no effect from improving the radial system."

Longer may be better.

A look at Fig.2 on page 3-5 of the new ARRL antenna book shows the geometry of direct and reflected rays from a vertical antenna. The two rays are parallel in travel to the same ionospheric area.

Suppose the angle with the ground should be 30 degrees. By trigonometry, the reflection point to take off at 30 degrees will be away from the base of the tower about 1.7 times the altitude of its origin.

Say we have a 70-foot tower for 80 meter operation. We would want good conductivity out to about 120 feet from the tower for elevation angles down to 30 degrees. In this case, the radials are about 0.43 wavelength. This is no test so I didn`t check my arithmetic.

Best regards, Richard Harrison, KB5WZI

5104. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:19:52 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92g3qorko1@iac5.navix.net>
Source record: 173751

QRZ shows a technician class KB1EVA

"Mark Keith" <nm5k@wt.net> wrote in message news:3A4B825A.512B@wt.net...
> Fractenna wrote:
> >
> > I just talked with someone who said the Wakfield killer was a former ham
with a
> > KA1 callsign.
>
> They are in error. He's current, and change the A to a B.
>
> >
> > Anyone know if this is true?
>
> Yes I do, and it is.
>
> Where can someobody check this?
>
> The internet. MK
>
>
>
>
> http://web.wt.net/~nm5k

5105. Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:25:13 UTC
From: Peter en Helma Kerklaan <helma.kerklaan@icu.nl>
Message-ID: <92g44o$9u3$1@beast.euro.net>
Source record: 173752

Dear OM,

I have recently build a 1,5 meter diameter magnetic loop for 80 meter (I live in a area where a larger antenna for this band is giving difficulties).

While testing the antenna I have measured the radiation angle with a light tube and have find out that the point of maximum radiation is exactly in top of the loop. This means that it is transmitting at 180 deg. this seems to me as not very efficient.

The loop is at this moment mounted at 1 meter above earth, however reading the literature about this kind of antenna's this should not be a problem (is 1 meter just to close to earth?)
I have build the loop with the Capacitor in top and the Faraday Loop Match 180 deg below the C.

My questions:
1) Is this measured radiation angle what I should expect?
2) How to improve the radiation angle for "DX"?

I would very much appreciate some advice in this matter.

73, and happy new year!!

de Peter, PA5KE

5106. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:29:35 UTC
From: "Dr. Vecchio" <104204.707@compuserve.com>
Message-ID: <92g4akpku1@nnrp1.deja.com>
Source record: 173754

Thanks for the info.
Others have confirmed the same.
I bought a (probeless) 4815 thinking that the probe
was a simple passive device like a scope probe.

sabinw@mwci.net wrote:

> The 4815A is a very sophisticated equipment (I have one and have
repaired
> it, but not the probe, thank heavens). The RF signal voltage from an
> oscillator is applied to the D.U.T. The voltage across the DUT and the
> current through the DUT are *sampled* with 2 nanosecond pulses at a 5
kHz
> rate. The probe uses two balanced diode sampling mixers, one for
voltage
> and one for current. The two sampled outputs are amplified by 5 kHz
> bandpass amplifiers in a closed-loop feedback circuit. Amplitude and
phase
> are determined in this manner.
>
> Finding a good probe may be possible from used test equipment sources,
but
> they will be very expensive. Repairing the probe requires a special
> expertise in a special facility.
>
> Bill W0IYH

> > Dr. Vecchio wrote:
> > I have an HP4815A vector impedance meter without a probe.

Sent via Deja.com
http://www.deja.com/

5107. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:33:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4B9598.6F47@wt.net>
Source record: 173753

Fractenna wrote:
>
> As suggested I did a name search on qrz.com. The Boston papers report this guy
> lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
>
> K-B-1-E-V-A

Congrats... I was starting to wonder about your search skills...
>
> Maybe this is his dad?? I don't think so myself. Sure looked familiar....He
> sure LOOKS like one of those guys you see at the MIT FLEA!!!

He's pretty dang ugly, thats for sure. Note the excess "roundness", and
the scruffy overall look in general.
"Typical for a code toad"...
>
> If it IS him this only reinforces the notion to the public that hams have
> lunatics in thier midst.

A good number of mass killers are hams. But they don't usually kill
other hams. They kill people they perceive to persecute, libel, malign
them, make them pay back taxes, etc. I'd grow eyeballs in the back of my
head if I lived in the Boston area.

>
> So much for Dr. Cohen being paranoid and stopping public ham appearances and
> ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
> think Tom Rouch would do well to distribute that prozac he talks about!!

Yep, you gotta watch out for e-mail. That stuff will kill you every
time. I have a contract with the CIA to make "assassination" java
applets. I've made one that opens with a big picture of Dirty Harry and
his 44 mag.
He says "make my day, punk", and you puter shoots you. The bigger the
display used, the bigger the hole in your upper torso. As far as public
appearances, that may be due to excess "roundness". He may have trouble
getting thru the doors. Loose lids? Dunno, I've seen a few loose women.
But I've never seen a single one that used prozac yet. Thats usually
reserved for paranoid people who are afraid to go outside I think. MK

--
http://web.wt.net/~nm5k

5108. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 19:56:02 UTC
From: Joe <w4hh@my-deja.com>
Message-ID: <92g5sf$r41$1@nnrp1.deja.com>
Source record: 173757

In article <20001228120623.08798.00000165@ng-ff1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> I just talked with someone who said the Wakfield killer was a former
ham with a
> KA1 callsign.
>
> Anyone know if this is true? Where can someobody check this?
>
> 73
> Phil
> de N1ZKT
>

That's just great. And if he is, we can start the myth that hams are
mostly wacko, just like Vietnam Vets.

--
Regards,
Joe
Vietnam veteran

Sent via Deja.com
http://www.deja.com/

5109. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:03:56 UTC
From: rwclark@seanet.com
Message-ID: <3a4e9b54.434851313@news.seanet.com>
Source record: 173756

On Thu, 28 Dec 2000 20:25:13 +0100, "Peter en Helma Kerklaan"
<helma.kerklaan@icu.nl> wrote:

>Dear OM,
>
>I have recently build a 1,5 meter diameter magnetic loop for 80 meter (I
>live in a area where a larger antenna for this band is giving difficulties).
>
>While testing the antenna I have measured the radiation angle with a light
>tube and have find out that the point of maximum radiation is exactly in top
>of the loop. This means that it is transmitting at 180 deg. this seems to me
>as not very efficient.
>
>The loop is at this moment mounted at 1 meter above earth, however reading
>the literature about this kind of antenna's this should not be a problem (is
>1 meter just to close to earth?)
>I have build the loop with the Capacitor in top and the Faraday Loop Match
>180 deg below the C.
>
>My questions:
>1) Is this measured radiation angle what I should expect?
>2) How to improve the radiation angle for "DX"?
>
>I would very much appreciate some advice in this matter.
>
>73, and happy new year!!
>
>de Peter, PA5KE
>

Hi Peter,

Your measurement only relates to near, complex fields that bear little
relation to the eventual lobe characteristics for this antenna.

So close to ground will be lossy, but obviously you have little choice
in the matter. Tuning may be difficult and/or bandwidth may be
extremely small (unless the loss opens it out again).

DX angles are largely determined by the ground found 10 wavelengths
out. Not much you can do about that except live near a lake, marsh,
or seashore.

73's
Richard Clark, KB7QHC

5110. QUESTION: Can the "shortened radials" thread get any longer??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:08:11 UTC
From: Joe <w4hh@my-deja.com>
Message-ID: <92g6j6rmq1@nnrp1.deja.com>
Source record: 173760

Last time I checked, the shortened radials thread was up to 137
articles. Does a newsgroup thread become more effective as it
lengthens?

--
Regards,
Joe Schlatter

Sent via Deja.com
http://www.deja.com/

5111. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:09:44 UTC
From: rwclark@seanet.com
Message-ID: <3a4f9d09.435288351@news.seanet.com>
Source record: 173758

On Thu, 28 Dec 2000 19:29:35 GMT, Dr. Vecchio
<104204.707@compuserve.com> wrote:

>
>
>Thanks for the info.
>Others have confirmed the same.
>I bought a (probeless) 4815 thinking that the probe
>was a simple passive device like a scope probe.
>
>
>sabinw@mwci.net wrote:
>
>> The 4815A is a very sophisticated equipment (I have one and have
>repaired
>> it, but not the probe, thank heavens). The RF signal voltage from an
>> oscillator is applied to the D.U.T. The voltage across the DUT and the
>> current through the DUT are *sampled* with 2 nanosecond pulses at a 5
>kHz
>> rate. The probe uses two balanced diode sampling mixers, one for
>voltage
>> and one for current. The two sampled outputs are amplified by 5 kHz
>> bandpass amplifiers in a closed-loop feedback circuit. Amplitude and
>phase
>> are determined in this manner.
>>
>> Finding a good probe may be possible from used test equipment sources,
>but
>> they will be very expensive. Repairing the probe requires a special
>> expertise in a special facility.
>>
>> Bill W0IYH
>
>> > Dr. Vecchio wrote:
>> > I have an HP4815A vector impedance meter without a probe.
>
>
>Sent via Deja.com
>http://www.deja.com/

Hi OM,

I would re-evaluate the need for "special facilities" given that
technology has progressed since these were constructed. What I mean
by this is that the circuitry is undoubtedly simple, but the parts

"were" exotic at the time of manufacture.

What was exotic back then is typical today. I would guess that surface mount components would meet every technical challenge (if you can reasonably find replacement values for the semiconductors (probably matched - and probably your greatest challenge)).

73's
Richard Clark, KB7QHC

5112. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:14:17 UTC
From: rwclark@seanet.com
Message-ID: <3a509e42.435601992@news.seanet.com>
Source record: 173759

On Thu, 28 Dec 2000 13:13:50 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Mark Keith wrote:
>"I can`t really see how there would be no effect from improving the
>radial system."
>
>Longer may be better.
>
>A look at Fig.2 on page 3-5 of the new ARRL antenna book shows the
>geometry of direct and reflected rays from a vertical antenna. The two
>rays are parallel in travel to the same ionospheric area.
>
>Suppose the angle with the ground should be 30 degrees. By trigonometry,
>the reflection point to take off at 30 degrees will be away from the
>base of the tower about 1.7 times the altitude of its origin.
>
>Say we have a 70-foot tower for 80 meter operation. We would want good
>conductivity out to about 120 feet from the tower for elevation angles
>down to 30 degrees. In this case, the radials are about 0.43 wavelength.
>This is no test so I didn`t check my arithmetic.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I won't check your math, but I will point out that where the ray starts out should be adjusted to the "current max" of the radiator, not the convenient tip. This of course pushes out the length of radial and serves only the enhancement of the 30+ degree portion of the lobe and not the 10- degree portion wherein DX lies.

73's
Richard Clark, KB7QHC

5113. Re: Propagation Software & Antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:20:10 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <khN26.307$e5.812191@news.ntplx.net>
Source record: 173761

n3tuk@my-deja.com wrote:

> Any idea where to find a freeware copy of any good MUF propagation
> software for DOS or Windows,also antenna desing.

Yes, indeed. An excellent IONCAP-based propagation modeling package is
available from:

http://elbert.its.bldrdoc.gov/hf.html

This is quite impressive, and the price is right. :-) It goes WAY past MUF
and gives really nice charts and maps.

73,
Ed Hare, W1RFI

5114. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:21:23 UTC
From: rwclark@seanet.com
Message-ID: <3a51a016.436069785@news.seanet.com>
Source record: 173762

On Thu, 28 Dec 2000 20:14:17 GMT, rwclark@seanet.com (Richard Clark)
wrote:

>
>Hi Richard,
>
>I won't check your math, but I will point out that where the ray
>starts out should be adjusted to the "current max" of the radiator,
>not the convenient tip. This of course pushes out the length of
>radial and serves only the enhancement of the 30+ degree portion of
>the lobe and not the 10- degree portion wherein DX lies.
>
>73's
>Richard Clark, KB7QHC

Hi Again,

Hmm, on reflection, the logic above would suggest just the opposite
insofar as "pushing" the distance out.

Still and all, lengthening the radials to capture lower launch angles
doesn't seem to be SOP for any application.

73's
Richard clark, KB7QHC

5115. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:27:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4BA232.1BBD339@eznec.com>
Source record: 173763

The increase in dB loss is roughly proportional to frequency,
characteristic of dielectric loss.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Francis, by what method did you make the measurements ? The
> increase in loss with increasing frequency is too large.
> ---
> Reg, G4fgq
> ============================
> >
> > Have done some tests some years ago with power line /
> speaker line.
> >
> > for a 30 meters long piece :
> >
> > 3 MHz 0.7 dB
> > 7 MHz 1.8 dB
> > 10 MHz 2.5 dB
> > 14 MHz 4.0 dB
> > 21 MHz 5.5 dB
> > 30 MHz 7.5 dB
> >
> > It was a two colors red / black with twisted multi-wires
> of good diameter
> > (12 mm perhaps without the insulated part). Something as
> the DC cord for a
> > VHF 50 Watts Rig.

5116. antenna stacking

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:28:18 UTC
From: alco-ge@postoffice.swbell.net
Message-ID: <3A4BA262.11C9983C@postoffice.swbell.net>
Source record: 173764

I currently run a 2 element quad but am going to change to a multi element beam for 6m. I also have a 2M beam that I want to mount horizontally on the same mast. How much vertical seperation do I need to have between the two beams?

Ed
w5etm@qsl.net

5117. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:51:40 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92g96s$120$1@iac5.navix.net>
Source record: 173766

You are correct Phil, someone of Frackkies personality needs to stay hid
from normal people. I had heard Mother Teresa was gunning for him just
before she died.

"Fractenna" <fractenna@aol.com> wrote in message
news:20001228133136.22394.00000191@ng-fy1.aol.com...
> As suggested I did a name search on qrz.com. The Boston papers report this
guy
> lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
>
>
> K-B-1-E-V-A
>
>
> Maybe this is his dad?? I don't think so myself. Sure looked
familiar....He
> sure LOOKS like one of those guys you see at the MIT FLEA!!!
>
> If it IS him this only reinforces the notion to the public that hams have
> lunatics in thier midst.
>
> So much for Dr. Cohen being paranoid and stopping public ham appearances
and
> ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
> think Tom Rouch would do well to distribute that prozac he talks about!!
>
> 73
> Phil de N1ZKT

5118. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:52:11 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <kLN26.309$e5.813616@news.ntplx.net>
Source record: 173767

Rick Littlefield <k1bqt@aol.com> wrote:

> >Can you include any examples in your example?<

> Of ARRL Publications addressing the issue of EMR exposure and safety in
books
> and magazines that cost money for hams to obtain? Help me, Lord!

Well, the example I had asked for was of ARRL material that was "scare
monger" in its presentation.

The example you gave didn't include any examples of scare mongering.

Perhaps you equate scare mongering and ARRL's financial structure.

Now, on to the topic that thread drift has created:

> Of ARRL Publications addressing the issue of EMR exposure and safety in
books
> and magazines that cost money for hams to obtain?

The 230 page book sells for $15.00 -- not exactly ARRL's major cash cow.
The main reason the book was developed was to document the way that Amateur
Radio responded to the rules. It has met that goal handily, with both the
FCC and IEEE SCC-28 noting that the book is an excellent reference that is a
model of compliance documentation. Not bad for being in print a couple of
months after the rules went into effect. :-)

The most important information for hams about the topic is discussed in the
QST articles made available for download at:

http://www.arrl.org/tis/info/rfexpose.html

Giving away the store is not exactly a cash cow, either, Rick. :-)

> Help me, Lord!

No need to invoke the Lord on this one; he helps those that help themselves.
:-)

73,
Ed Hare, W1RFI

5119. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 20:53:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4BA850.4E6EBE49@eznec.com>
Source record: 173765

Let me add to Richard's response.

As he said, you're measuring the near field, and the shape of this field can be very different from the far-field radiation pattern. You'd need to repeat the test at a sizeable fraction of a wavelength distance to get an idea of the true radiation pattern. But you don't really need to, since it's well known. As it turns out, the far field radiation is also maximum straight up when your antenna is that close to the ground. In fact, the maximum is straight up for any antenna height up to a quarter wavelength (20 meters) above the ground. As you raise it higher yet, the direction of maximum radiation slowly lowers. You can see this plainly with any antenna simulation program, including the free EZNEC demo at http://eznec.com. Or, because the vertical pattern is essentially the same as for a dipole, you can look at the diagrams in books like the ARRL Antenna Book, which shows patterns for antennas at various heights. (The horizontal radiation pattern is similar to a dipole's also.)

Even though the shape of the pattern doesn't change much as you raise the antenna from 1 to 20 meters, you reduce the loss considerably, so the signal gets stronger. This can also be seen with the simulation programs. The higher you get the antenna, the stronger the signal will be. Just because it radiates most strongly straight up doesn't mean it doesn't radiate anything at all at lower angles. But most of your power will be going in directions that won't do you much good, so it won't be much of a DX antenna. You're already handicapped by the fact that such a small antenna will be very inefficient (although this can be improved a great deal by construction techniques such as using very large diameter conductors and avoiding moving contacts, and by keeping the antenna well away from other conductors or lossy materials). Any antenna one meter above the ground on 80 meters will radiate straight up, be lossy, and poor for DX. A small loop will be inefficient at any height. The combination will guarantee a weak signal. If this is the best you're able to do under the circumstances, then use it. You'll be able to communicate, but don't expect to work much DX. The larger and higher you can make your antenna, the better it'll do.

If you feed your loop at the bottom or the top, it'll be horizontally polarized. The conductivity of the surrounding ground will have very little effect on the signal strength except at very high elevation angles, so it won't help to be beside a lake. At lower angles, the ground conductivity is important only if the antenna is vertically polarized.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Thu, 28 Dec 2000 20:25:13 +0100, "Peter en Helma Kerklaan"
> <helma.kerklaan@icu.nl> wrote:
>
> >Dear OM,
> >
> >I have recently build a 1,5 meter diameter magnetic loop for 80 meter (I
> >live in a area where a larger antenna for this band is giving difficulties).
> >
> >While testing the antenna I have measured the radiation angle with a light
> >tube and have find out that the point of maximum radiation is exactly in top
> >of the loop. This means that it is transmitting at 180 deg. this seems to me
> >as not very efficient.
> >
> >The loop is at this moment mounted at 1 meter above earth, however reading
> >the literature about this kind of antenna's this should not be a problem (is
> >1 meter just to close to earth?)
> >I have build the loop with the Capacitor in top and the Faraday Loop Match
> >180 deg below the C.
> >
> >My questions:
> >1) Is this measured radiation angle what I should expect?
> >2) How to improve the radiation angle for "DX"?
> >
> >I would very much appreciate some advice in this matter.
> >
> >73, and happy new year!!
> >
> >de Peter, PA5KE
> >
>
> Hi Peter,
>
> Your measurement only relates to near, complex fields that bear little
> relation to the eventual lobe characteristics for this antenna.
>
> So close to ground will be lossy, but obviously you have little choice
> in the matter. Tuning may be difficult and/or bandwidth may be
> extremely small (unless the loss opens it out again).
>
> DX angles are largely determined by the ground found 10 wavelengths
> out. Not much you can do about that except live near a lake, marsh,
> or seashore.
>
> 73's
> Richard Clark, KB7QHC

5120. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:07:52 UTC
From: richardharrison@webtv.net
Message-ID: <17807-3A4BABA8-7@storefull-116.iap.bryant.webtv.net>
Source record: 173768

Richard Clark, KB7QHC wrote:
"---where the ray starts out should be adjusted to the "current max" of the radiator--.

Yes, Richard Clark is correct. The approximate 1/4-wave vertical has "cosine current distribution", with 0-degrees at the base producing the maximum multiplier, (1). At the tip, or 90-degrees, the multiplier is 0 which matches the cosine and the current at that point.

But I wanted to reflect the entire radiator in the radial field, and so I did as Mr. Clark suspected and used 1.7 times 70 feet to arrive at the length for the radials.

With very little penalty from reduced reflection, as the part not reflected carries little current, the radials will do a fair job in reflecting slightly lower elevation angles for longer hops. Then for yet longer distances requiring lower elevation angles, the ground is out there to do its thing without added help.

Best regards, Richard Harrison, KB5WZI

5121. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:09:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4BAC20.A27A1C28@IEEE.org>
Source record: 173619

Joe wrote:
> That's just great. And if he is, we can start the myth that hams are
> mostly wacko, just like Vietnam Vets.

Aren't most hams wacko? Proof is on r.r.a.p.
--
http://www.mindspring.com/~w6rca

5122. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:29:17 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A4BB091.D6FF4958@earthlink.net>
Source record: 173620
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

AFTER GETTING IT I WONDER THAT MYSELF I JUST WAS UNSURE HOW SENSITIVE OR CRITICAL THE BENDS WHERE SO I JUST ORDERED IT AND I AM HOUSE BOUND SO GETTING OUT TO A STORE IS TOUGH

Cortland Richmond wrote:

> I find myself wondering why you didn't buy a piece of aluminum at Home Depot or
> somewhere -- or use a piece of aluminum ground wire! -- and make your own? Worth not
> having the hassle, from what I read here about the company. Faster, too.
>
> Cortland
>
> Dennis Kaylor wrote:
>
> > you guys dont know what poor customer service is till you deal with mosley it
> > took me 6 weeks to get that little piece of aluminum rod

5123. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:34:12 UTC
From: richardharrison@webtv.net
Message-ID: <17805-3A4BB1D4-76@storefull-116.iap.bryant.webtv.net>
Source record: 173623

Richard Clark, KB7QHC wrote:
"Hmmm, on reflection, the logic above would suggest just the opposite insofar as "pushing" the distance out."

Nice touch (on reflection). Richard was right the first time. It may be confusing as the angle the ray makes with the tower and the angle the ray makes with the ground must add to 90 degrees as long as the tower remains vertical.

At the surface of the ground, the angle of incidence is equal to the angle of reflection, which is the take off angle for the ionosphere.

My take off angle of 30 degrees needs a ray that makes an angle of 60 degrees with the tower and this strikes the soil at an angle of 30 degrees. So, it must depart, on reflection, at the same 30-degree angle.

The greater the distance to be covered in one hop, the lower the angle that needs to be made with the ground at the launching. This means the tower is farther away from the reflection point than for shorter distance paths.

Best regards, Richard Harrison, KB5WZI

5124. Re: QUESTION: Can the "shortened radials" thread get any longer??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:41:43 UTC
From: rwclark@seanet.com
Message-ID: <3a52b2a3.440818223@news.seanet.com>
Source record: 173622

On Thu, 28 Dec 2000 20:08:11 GMT, Joe <w4hh@my-deja.com> wrote:

>Last time I checked, the shortened radials thread was up to 137
>articles. Does a newsgroup thread become more effective as it
>lengthens?

Hi Joe,

Nope, there are still problems of mismatch and dissipation that
dominate efficiency as threads grow. ;-)

73's
Richard Clark, KB7QHC

5125. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:52:05 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <vDO26.310$e5.815717@news.ntplx.net>
Source record: 173624

Cecil <Cecil.A.Moore@IEEE.org> wrote:

> > That's just great. And if he is, we can start the myth that hams are
> > mostly wacko, just like Vietnam Vets.

> Aren't most hams wacko? Proof is on r.r.a.p.

Do you believe that most hams post to rec.radio.amateur.policy?

73,
Ed Hare, W1RFI

5126. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:56:10 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A4BB6FA.46E6D685@mwci.net>
Source record: 173625

Dr. Vecchio wrote:

> Thanks for the info.
> Others have confirmed the same.
> I bought a (probeless) 4815 thinking that the probe
> was a simple passive device like a scope probe.

The real problem is getting the probe apart and putting it back together. It requires special skills and tools to do that, according to my sources at Rockwell-Collins.

Bill W0IYH

5127. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:56:15 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <92gcts$9c3$1@bob.news.rcn.net>
Source record: 173626

I had my HP4815A probe repaired two years ago by
the gentleman that used to run the HP line that
made the 4815 and the probes. He retired and
bought the test equipment and spare parts. He is
George Sandford. I know he had extra probes at the time
but he was talking about getting out of the business
so I don't know if he is still around. The last email
address I had for him was: 72540.1345@compuserve.com
His phone # is: 908-852-7989 He was very helpful as I
recall.

Good luck!!! The 4815A is a great instrument.

73,
Chuck...K1KW

5128. KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 21:57:24 UTC
From: fractenna@aol.com
Message-ID: <20001228165724.08425.00000054@ng-fm1.aol.com>
Source record: 173627

Shouldn't the americal radio relay league be doing damage control before the press starts playing up the ham radio angle on this guy??

Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go and shoot people.

Some of us don't even have guns...or even evil thoughts against others.

Just a thought.

Phil
de N1ZKT

5129. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:00:44 UTC
From: fractenna@aol.com
Message-ID: <20001228170044.09541.00000345@ng-fm1.aol.com>
Source record: 173628

>
>Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
>> > That's just great. And if he is, we can start the myth that hams are
>> > mostly wacko, just like Vietnam Vets.
>
>> Aren't most hams wacko? Proof is on r.r.a.p.
>
>Do you believe that most hams post to rec.radio.amateur.policy?
>
>73,
>Ed Hare, W1RFI
>

If you talk to biz people its disturbing how many of them think we ARE wacko. Some of the crud that happens right here for example does nothing to change that only enforce that.

We go to take this Macdermot thing seriously before the image of hams is irreparably harmed.

Again I ask--what is ARRL's response???

Phil
de N1ZKT

5130. Re: Mosley Antenna Update

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:02:51 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <92gd72$2g1$1@slb6.atl.mindspring.net>
Source record: 173629

"Dennis Kaylor" <k4oxg@earthlink.net> wrote in message
news:3A4ACF65.D5B1F90B@earthlink.net...
> hey bill
> i am glad you had good experiances dealing with customer service with
mosley
> i on the other hand have not in the past year or so i order a 9 ele 2
meter yagi
> took them 8 weeks to get it to me then when i got it the quality of this
antenna
> was not a typical mosley antenna while waiting for the antenna after 4
weeks i
snip (of good but hard to read post)

If I may, without sounding like a 'Usenet cop', I would like to state a
personal.....
ah, nevermind all that stuff. Could you please use your shift key and maybe
throw in a period or two? This is easily as hard to read as ALL CAPS POSTS.
(I think that was a real sentence) as are all cap posts? as all cap posts
are?....to read? So much for sounding like a Usenet cop. :-]'
Not a flame or anything. Just an observation..........
We now return to our regularly scheduled NG.

5131. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:06:48 UTC
From: CJ <cjr@visi.com>
Message-ID: <3A4BB978.DF554367@visi.com>
Source record: 173694

Jim Pennino wrote:
>
> Hassen Ben Sober <HassenBenSober@kumputer.net> wrote:
> > Donno about your Silver Solder-
>
> > But- What I use- You ain't gonna melt with a Soldering Iron :-)
>
> > The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.
>
> > That's why it's used in High Pressure AC Systems :-)
>
> The silver solder used in electonics, as opposed to plumbing and whatever
> else, usually runs from 2% to 6% silver and uses ordinary electronic
> soldering techniques and equipment.
>
> OK, OF role call; how many of you worked on a Tek 'scope with the little
> roll of silver solder under the cover for replacing compenents on the little
> silver metalized ceramic strips?
>

I never actually worked on any of those units but I read the threats
about what would happen if I didn't use the proper solder. Scared the
hell out of me!

73, CJ K0CJ

> Jim Pennino

5132. Re: missing ferrite rod- component tuner- ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:07:32 UTC
From: Emptor Phriesadommazille <Finfor@rextov.net>
Message-ID: <EQO26.92$y12.8566@news7.onvoy.net>
Source record: 173631

I think you might find a couple of different ones at Goldmine Elect. Go to:
http://sales.goldmine-elec.com/
and do a product search. They're very cheap.

salmonsm@missouri.edu wrote in message <92fop0$fn6$1@nnrp1.deja.com>...
>Hello,
>
>I have a consumer audio-type am/fm component tuner. There is a post
>where the tuner's ferrite rod would have snapped into place, but it's
>gone. I am in the process of investigating a replacement from the
>manufacturer (Yamaha) but I'm not optimistic. Can anyone suggest a
>comparable (or better) replacement? I've just about talked myself into
>building a large loop (like the plans found at ftp://bbs.ks-
>huseby.no/html/loopant.zip.html) but then my room would be pretty
>crowded. Any more compact solutions out there? In addition to the post
>for the missing rod I also have one screw terminal for an AM antenna.
>
>Plus, any tips for eliminating electrical/mechanical interference other
>than turning lights and applicances off? I have done so throughout the
>house and still can't rid tuner of a persistent pattern of noisy static
>across the whole band. Would it help to use the ground terminal, and
>should I use it the same way I would ground an external antenna (that
>is, fasten to a buried grounding rod)?
>
>Thanks for any help!
>
>Michael Salmons
>
>
>Sent via Deja.com
>http://www.deja.com/

5133. Re: TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:07:33 UTC
From: Emptor Phriesadommazille <Finfor@rextov.net>
Message-ID: <FQO26.93$y12.8566@news7.onvoy.net>
Source record: 173630

The MFJ one is a lot of fun and works great. I loaded up my 132 ft dipole, a window screen, a swing arm lamp frame, and other weird things. Non worked too great but they did load up at a 50 ohm match. I really thought my R-5 would work better than it did.

Neal wrote in message ...
>Looking for a 2m antenna tuner.
>
>

5134. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:11:05 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92gdrq$3fb$1@iac5.navix.net>
Source record: 173632

he was probably a member of the local temple, are they out doing damage
control? A bit over sensitive aren't we?

"Fractenna" <fractenna@aol.com> wrote in message
news:20001228165724.08425.00000054@ng-fm1.aol.com...
> Shouldn't the americal radio relay league be doing damage control before
the
> press starts playing up the ham radio angle on this guy??
>
> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who
go
> and shoot people.
>
> Some of us don't even have guns...or even evil thoughts against others.
>
> Just a thought.
>
> Phil
> de N1ZKT

5135. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:12:16 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92gdu1$3fq$1@iac5.navix.net>
Source record: 173633

Did I miss something or did he kill all those people with a full auto
antenna tuner?

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:vDO26.310$e5.815717@news.ntplx.net...
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
> > > That's just great. And if he is, we can start the myth that hams are
> > > mostly wacko, just like Vietnam Vets.
>
> > Aren't most hams wacko? Proof is on r.r.a.p.
>
> Do you believe that most hams post to rec.radio.amateur.policy?
>
> 73,
> Ed Hare, W1RFI
>
>

5136. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:26:17 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4BBE09.3ED4BE9F@IEEE.org>
Source record: 173635

"Ed Hare, W1RFI" wrote:
> Do you believe that most hams post to rec.radio.amateur.policy?

Nope, but seriously, I am amazed that so many murderers are hams.
--
http://www.mindspring.com/~w6rca

5137. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:28:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4BBEA0.5ED9EBF7@IEEE.org>
Source record: 173638

Fractenna wrote:
> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> and shoot people.

Nope, but an amazing (at least to me) number of hams are.
--
http://www.mindspring.com/~w6rca

5138. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:34:16 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <85fg29.q3p.ln@mail.specsol.com>
Source record: 173646

Fractenna <fractenna@aol.com> wrote:
> Shouldn't the americal radio relay league be doing damage control before the
> press starts playing up the ham radio angle on this guy??

> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> and shoot people.

> Some of us don't even have guns...or even evil thoughts against others.

> Just a thought.

> Phil
> de N1ZKT

I'm don't know what the "americal radio relay league" is, but the media could care less that he was/is a ham.

I just checked four different news outlets and none of the ones I looked at even mentioned it.

A couple mentioned his Navy service. Should the Department of the Navy begin "damage control"?

All of them emphasised loner, weapons, and "bomb making" equipment, things that are exciting to John Q. Public. Ham radio, I'm afraid, is not.

Jim Pennino

5139. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:35:40 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <mgP26.318$e5.818293@news.ntplx.net>
Source record: 173637

Fractenna <fractenna@aol.com> wrote:

> Shouldn't the americal radio relay league be doing damage control before
the
> press starts playing up the ham radio angle on this guy??

In what way was his crime related to ham radio? Bernie Goetz was also a ham; I don't recall ever seeing this mentioned in the news items about his infamous subway shooting.

Trying to "damage control" in advance any potential misrepresentation by the press would be the most effective way I could imagine to ensure such misrepresentation by the press.

73,
Ed Hare, W1RFI

5140. Re: TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:36:04 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <92gelo$2ors$1@newsreader.cetlink.net>
Source record: 173634

Unless you are trying to load up some really odd ball thing I doubt that you really need a tuner for 2 meters. If the SWR is bad enough to need one and you are using coax, then you will have enough loss the efficency will not be very good for the antenna system.

Care to tell what you are planning on using that you need the tunver for ?

> Looking for a 2m antenna tuner.
>
>

5141. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:36:26 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <t4ng3egoksom7e@corp.supernews.com>
Source record: 173636

That would be way stupid! i.e. lets create a perceived problem where none exists.

Regards,
Jim

Fractenna <fractenna@aol.com> wrote in message news:20001228165724.08425.00000054@ng-fm1.aol.com...
> Shouldn't the americal radio relay league be doing damage control before the
> press starts playing up the ham radio angle on this guy??
>
> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> and shoot people.
>
> Some of us don't even have guns...or even evil thoughts against others.
>
> Just a thought.
>
> Phil
> de N1ZKT

5142. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:38:43 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <djP26.319$e5.818152@news.ntplx.net>
Source record: 173639

Fractenna <fractenna@aol.com> wrote:

> Again I ask--what is ARRL's response???

Whom at ARRL did you ask? The ARRL Lab staff are not directly involved in these sorts of media-public relations issues.

If you asked in a thread on rraa, you did not ask ARRL. It is not even likely that this ARRL employee would have read it.

To give you my view, it would not be a good idea to try to "damage control" this unless there is an actual difficulty. What he did is not related to ham radio. I will, however, leave the decisions about that to those I believe to be better qualified than I to address them.

73,
Ed Hare, W1RFI

5143. Re: Propagation Software & Antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:50:17 UTC
From: DJ6JZ <DJ6JZ@compuserve.de>
Message-ID: <3a4bc410_1@news.arcor-ip.de>
Source record: 173641

Go to http://www.radio-portal.org/index.html
click on "search in broad" and combine the categories
"Propagation" and "Software"

33 URLs will keep you busy for a while :-)

73,
Willi, DJ6JZ

<n3tuk@my-deja.com> schrieb in im Newsbeitrag:
92ekmo$lc9$1@nnrp1.deja.com...
> Hi,
> Any idea where to find a freeware copy of any good MUF propagation
> software for DOS or Windows,also antenna desing.
>
>
> Regards
>
> LV
>
>
> Happy 2001 and good DX's
>
>
> Sent via Deja.com
> http://www.deja.com/

5144. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:50:35 UTC
From: fractenna@aol.com
Message-ID: <20001228175035.05307.00000009@ng-fl1.aol.com>
Source record: 173640

>
>Fractenna <fractenna@aol.com> wrote:
>
>> Again I ask--what is ARRL's response???
>
>Whom at ARRL did you ask? The ARRL Lab staff are not directly involved in
>these sorts of media-public relations issues.
>
>If you asked in a thread on rraa, you did not ask ARRL. It is not even
>likely that this ARRL employee would have read it.
>
>To give you my view, it would not be a good idea to try to "damage control"
>this unless there is an actual difficulty. What he did is not related to ham
>radio. I will, however, leave the decisions about that to those I believe
>to be better qualified than I to address them.
>
>73,
>Ed Hare, W1RFI
>

Uhhhh.. you say that Bernie Goetz and Mike Merdermott are both radio HAMS??
What do you think the random chance of two rampage killers being hams would
be?? 1 in 10,000? 1 in 1,000,000?

Now I really AM concerned....

Phil de N1ZKT

5145. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:51:15 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92gj0l$4eg$1@uranium.btinternet.com>
Source record: 173663

Francis, your measurement of Zo = 100 ohms is probably
correct for a power cable. VF = 0.66 is also OK.

But your attenuation measurements do not look good. When
the frequency is 10 times higher your attenuation is also 10
times higher. This is what happens when measured loss is
due to reflections and mismatch at the cable's terminations.

Your matching transformers may have as much loss as the
cable you are trying to measure. The transformer impedance
ratio may also be different from you think it is.

Your figures would be be better if Decibels = constant *
Squareroot of Frequency. Which is what usually happens on
cables at HF.

If you still have some of the cable perhaps you could
measure or estimate wire diameter over the stranding. Also
estimate distance between the two wire centres. I would be
interested to know these two dimensions please, in 1/10
millimetres if possible.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
awn <samuel.morse@nomail.cpod.fr> wrote in message
news:01c070e7$9ba964a0$208127d4@f6awn.cpod.fr...
> Reg Edwards <g4fgq.regp@btinternet.com> a crit dans
l'article
> <92d8n4$56h$1@uranium.btinternet.com>...
>
> > Francis, by what method did you make the measurements ?
The
> > increase in loss with increasing frequency is too large.
> > ---
> > Reg, G4fgq
> > ==========
>
>
> Good evening Reg,
>
> Hummm ... "method" you said ? ;-)

>
> Well, it was seven years ago and I was not so competent as
now, hi ...
> (I do read your messages and those of some other
contributors I appreciate
> only from two years ;-))
>
> If I remember and with the few notes i have conserved :
>
> I have get the Zc and Vf with a noise bridge, an
adjustable R and my
> receiver.
> I have used some 20 meters long piece of wire.
> I have found about 100 Ohms for Zc and 0,66 for Vf.
>
> I have realised two 1/2 transformers on toroids. (50/100
Ohms)
>
> and for the attenuation :
>
> TX / 6 dB power Pad / Step attenuator (HP) / Bird
Wattmeter / T1: 50-100 /
> T2: 100-50 / Wattmeter for reference at the end of the
line.
>
> I set the power for a reference d�viation at the end of
the test line.
>
> I insert the line between T1 and T2 and use the step
attenuator (reducing
> the value ...) to come back to the standard deviation at
the end (10 W ?
> don't remember ...)
>
> The step att. give the attenuation and the Bird another
very similar value
> of power increase.
>
> Something empiric, is'nt it ?
>
> But in fact, enough to say it's not a good choice for a
performant antenna
> !
>
> Another information : I have suspended the line some one
meter above the
> ground, outside the shack ...
>
> 73,

>
> Francis
> F6AWN
> -----
>

5146. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:54:20 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <vMNLOqC1qXR2Zc+ENwdWb1Ghwc29@4ax.com>
Source record: 173642

"Richard Leshner" <rleshner@alcumet.com> wrote:

>Go to QRZ.com and do a name search.
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001228120623.08798.00000165@ng-ff1.aol.com...
>> I just talked with someone who said the Wakfield killer was a former ham
>with a
>> KA1 callsign.
>>
>> Anyone know if this is true? Where can someobody check this?
>>
>> 73
>> Phil
>> de N1ZKT
>>
>
>
>

I wouldn't get too excited. He's only a Technician. Since 02/10/2000.
From the QRZ database:

Callsign: KB1EVA

Class: Technician Codes: HAI USA

Name:
Michael G. McDermott
Addr1:
31 Willie St
Addr2:
Haverhill, MA 01830
Country:
USA
Effective:
10 Feb 2000 Expires: 10 Feb 2010
License ID:
L00206071
Lookups:
220

No big deal.

Bob
k5qwg

5147. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:55:12 UTC
From: fractenna@aol.com
Message-ID: <20001228175512.05325.00000020@ng-fl1.aol.com>
Source record: 173643

Chip just told me that Donald Miller (I don't know callsign something like W9WMV but I didn't listen closely to it when Chip said it) is serving life for attempted murder, of his wife. He says he was a well known contester and dxer.

Now you tell ME that this is just a random correlation.

How many OTHER hams have been murderers??!

Phil
de N1ZKT

5148. Re: TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:57:05 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <28RLOjVjWdK15p4qoWs0a3Br28NB@4ax.com>
Source record: 173644

"Neal" <nealj@accesstoledo.com> wrote:

>Looking for a 2m antenna tuner.
>

Why? With an antenna only a couple of feet long, surely you can cut it
to resonate on 2 meters without a tuner. Eh?

Bob
k5qwg

5149. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 22:57:27 UTC
From: rwclark@seanet.com
Message-ID: <3a55c495.445412529@news.seanet.com>
Source record: 173645

On Thu, 28 Dec 2000 16:36:26 -0600, "J Tabor" <denews@taborsoft.com>
wrote:

>That would be way stupid! i.e. lets create a perceived problem where none
>exists.
>
>Regards,
>Jim
>

Hi Jim,

The first to note the obvious, congrats!

And to expect it is someone ELSEs responsibility (the ARRL) to enforce
a prohibition is even more remarkable in that it would necessarily
have to start with the poster of this trash.

73's
Richard Clark, KB7QHC

5150. Re: ladder line feed thru

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:02:39 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <9sVLOskCylH3Np25pCJf1Icb+gsl@4ax.com>
Source record: 173647

"Greg Knapp" <gknapp@freshrain.org> wrote:

>Let's assume you do get the ladder line safely through the window. Now, once
>the ladder line is inside the house, if the operating position is 8 feet
>from the window, how do you route the ladder line to the tuner so that
>people in the house will not accidentally come in contact with it? Could
>you put it in 2" PVC until it gets to the back of the tuner?
>
>Greg, N6GK
>

I assume one will be operating the station when RF is coursing through
the ladderline. Just tell people "don't touch the damned ladderline!"

Bob
k5qwg

5151. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:05:46 UTC
From: fractenna@aol.com
Message-ID: <20001228180546.05391.00000024@ng-fl1.aol.com>
Source record: 173648

>"Richard Leshner" <rleshner@alcumet.com> wrote:
>
>>Go to QRZ.com and do a name search.
>>"Fractenna" <fractenna@aol.com> wrote in message
>>news:20001228120623.08798.00000165@ng-ff1.aol.com...
>>> I just talked with someone who said the Wakfield killer was a former ham
>>with a
>>> KA1 callsign.
>>>
>>> Anyone know if this is true? Where can someobody check this?
>>>
>>> 73
>>> Phil
>>> de N1ZKT
>>>
>>
>>
>>
>
>I wouldn't get too excited. He's only a Technician. Since 02/10/2000.
>From the QRZ database:
>
>
> Callsign: KB1EVA
>
> Class: Technician Codes: HAI USA
>
> Name:
> Michael G. McDermott
> Addr1:
> 31 Willie St
> Addr2:
> Haverhill, MA 01830
> Country:
> USA
> Effective:
> 10 Feb 2000 Expires: 10 Feb 2010
> License ID:
> L00206071
> Lookups:
> 220
>
>No big deal.
>

>Bob
>k5qwg
>

Yeh well there's been over 100 look ups then since this morning! So some people think its a biggje I geuss.

Phil de n1ZKT

5152. Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:07:23 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4BC7AB.B49FAFEB@pim.com>
Source record: 173649

Haven't heard anything about it.

5153. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:09:50 UTC
From: fractenna@aol.com
Message-ID: <20001228180950.05391.00000025@ng-fl1.aol.com>
Source record: 173650

>Hi Jim,
>
>The first to note the obvious, congrats!
>
>And to expect it is someone ELSEs responsibility (the ARRL) to enforce
>a prohibition is even more remarkable in that it would necessarily
>have to start with the poster of this trash.
>
>73's
>Richard Clark, KB7QHC
>

Yeh Richie there sure are some messed up hams out there that think they can just break the law and nothing happens. Well, speaking of that I overheard something last week that surely will make YOUR millenium!

hahhhaha!

Calling ME trash!? HAHAHAHA!!! Wait til you get to know the legal system better:-)!

Phil de N1ZKT

5154. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:09:51 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92gha1$576$1@iac5.navix.net>
Source record: 173651

Let me ask a simpler question, how have you avoided becoming one considering your close proximity to Chip?

"Fractenna" <fractenna@aol.com> wrote in message news:20001228175512.05325.00000020@ng-fl1.aol.com...
> Chip just told me that Donald Miller (I don't know callsign something like
> W9WMV but I didn't listen closely to it when Chip said it) is serving life for
> attempted murder, of his wife. He says he was a well known contester and dxer.
>
> Now you tell ME that this is just a random correlation.
>
> How many OTHER hams have been murderers??!
>
> Phil
> de N1ZKT
>
>

5155. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:09:55 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <38hg29.jd1.ln@mail.specsol.com>
Source record: 173656

Fractenna <fractenna@aol.com> wrote:

> If you talk to biz people its disturbing how many of them think we ARE wacko.
> Some of the crud that happens right here for example does nothing to change
> that only enforce that.

> We go to take this Macdermot thing seriously before the image of hams is
> irreparably harmed.

> Again I ask--what is ARRL's response???

> Phil
> de N1ZKT

One news report mentioned his answering machine message take off on "The Hitchhiker's Guide to the Galaxy".

Maybe the Douglas Adams fan club needs to form a response....

Jim Pennino

5156. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:11:40 UTC
From: fractenna@aol.com
Message-ID: <20001228181140.05391.00000027@ng-fl1.aol.com>
Source record: 173652

>
>Haven't heard anything about it.
>

Looks like KB1EVA is the guy who murdered those poor folks with an ak47 in Wakefield. Was all over CNN and USA Today and elswhere.

Phil de N1ZKT

5157. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:12:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4BC8CD.CCAFC809@IEEE.org>
Source record: 173654

Fractenna wrote:
> Bernard Goetz and god knows who else and how many ham killers. It's scary..

Yep, you're a ham. :-)
--
http://www.mindspring.com/~w6rca

5158. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:15:10 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <uhhg29.jd1.ln@mail.specsol.com>
Source record: 173657

Fractenna <fractenna@aol.com> wrote:
> Chip just told me that Donald Miller (I don't know callsign something like
> W9WMV but I didn't listen closely to it when Chip said it) is serving life for
> attempted murder, of his wife. He says he was a well known contester and dxer.

> Now you tell ME that this is just a random correlation.

> How many OTHER hams have been murderers??!

> Phil
> de N1ZKT

Get a clue, there are LOTS of murders out there.

How many murders played the guitar, is a Star Trek fan, was in the
military, wore Nike shoes, ate mashed potatoes....

Go rant about something else; this is a non-starter.

Jim Pennino

5159. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:15:49 UTC
From: fractenna@aol.com
Message-ID: <20001228181549.05391.00000029@ng-fl1.aol.com>
Source record: 173653

>
>Fractenna <fractenna@aol.com> wrote:
>> Shouldn't the americal radio relay league be doing damage control before
>the
>> press starts playing up the ham radio angle on this guy??
>
>> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who
>go
>> and shoot people.
>
>> Some of us don't even have guns...or even evil thoughts against others.
>
>> Just a thought.
>
>> Phil
>> de N1ZKT
>
>I'm don't know what the "americal radio relay league" is, but the media
>could care less that he was/is a ham.
>
>I just checked four different news outlets and none of the ones I looked
>at even mentioned it.
>
>A couple mentioned his Navy service. Should the Department of the Navy
>begin "damage control"?
>
>All of them emphasised loner, weapons, and "bomb making" equipment, things
>that are exciting to John Q. Public. Ham radio, I'm afraid, is not.
>
>Jim Pennino
>

Its only a matter of time before they see a ham connection and that's why its
best to do damage control for the fraternity.
All I wanted to know was how and look where you guys took it. Bernard Goetz and
god knows who else and how many ham killers. It's scary..

Do you have a call Jim Pennino BTW?

Phil de N1ZKT

5160. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:18:12 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4BCA34.C8717ACD@IEEE.org>
Source record: 173655

Fractenna wrote:
> How many OTHER hams have been murderers??!

I have been keeping mental track for 50 years. The answer is:
a bunch. Of course, there are lots of hams. My observation
is that a lot of antisocial males become hams. I know quite a
number of them. Consider the number of hams who would rather
cuddle up to a warm radio than a warm woman.
--
http://www.mindspring.com/~w6rca

5161. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:21:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92gj0m$4eg$2@uranium.btinternet.com>
Source record: 173662

Roy wrote -
> Thanks for the information. We can assume then that
measurements quoted
> by others (but not done by the people posting them)
showing much greater
> loss are either in error or represent dramatically
different dielectric.
==========
Roy, YOU may assume measurements quoted by others are in error - but not I - at least not until I have full descriptions of make-up and dimensions of cables for which electrical data have been provided.

Physical descriptions provided so far are much too vague. It would be rash to jump to conclusions.

Is it asking too much for you to believe that I have some coax cable which has a loss much less than 600-ohm open wire even with a 10:1 SWR.

Outer conductor is 1" diameter. Inner conductor is 1/4" diameter. Solid polyethylene insulated.

Regards, Reg.

5162. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:32:13 UTC
From: rwclark@seanet.com
Message-ID: <3a56cb33.447106374@news.seanet.com>
Source record: 173659

On Thu, 28 Dec 2000 18:09:51 -0500, "Fred Hambrecht" <Fred@w4jle.com>
wrote:

>Let me ask a simpler question, how have you avoided becoming one considering
>your close proximity to Chip?
>

Hi Fred,

Are you speculating about the strong correlation between contesters
and murderers presented below? If such were so, then yes, there would
be a severe lifestyle issue in living in Boston. As always,
correlation is not causation - but given the source of this blurb, the
suggestion proceeds from a noted "authority."

This is only a problem in proportion to the bone fides of that same
"authority." No doubt this thread will become an issue of a victim
complaining of being castigated over a topic originated by the victim
and linked by the victim to the victim.

73's
Richard Clark, KB7QHC

>"Fractenna" <fractenna@aol.com> wrote in message
>news:20001228175512.05325.00000020@ng-fl1.aol.com...
>> Chip just told me that Donald Miller (I don't know callsign something like
>> W9WMV but I didn't listen closely to it when Chip said it) is serving life
>for
>> attempted murder, of his wife. He says he was a well known contester and
>dxer.
>>
>> Now you tell ME that this is just a random correlation.
>>
>> How many OTHER hams have been murderers??!
>>
>> Phil
>> de N1ZKT
>>
>>
>

5163. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:32:41 UTC
From: k1bqt@aol.com
Message-ID: <20001228183241.06780.00000089@ng-mb1.aol.com>
Source record: 173658

>So much for Dr. Cohen being paranoid...<

And, so much for Dr. Cohen keeping his word. I knew you wouldn't.

Rick K1BQT

5164. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:37:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BCEA4.1842@wt.net>
Source record: 173661

Fractenna wrote:
>
> Shouldn't the americal radio relay league be doing damage control before the
> press starts playing up the ham radio angle on this guy??

What are they going to do? Say he was listed in the DB, but he really
doesn't exist. Just a figment of their imagination. Just because the
president does this doesn't mean the americal relay league should.
Besides who cares...I bet it's hardly brought up at all in the press. I
didn't know about it until about 4 min you mentioned it.
>
> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> and shoot people.

But quite a few 3300 pound-grrrizly adams-- loner- man-mountains type
guys that shoot people are hams.
>
> Some of us don't even have guns...or even evil thoughts against others.

Most of us probably do. I've got two shotguns within arms reach. Home
invasions happen daily in this town.
Anyone who comes breaking into this house is going to have a bad day if
they don't make a quick reverse when I level on them. I'd prefer they
left without the extra ventilation. I have better things to do than
clean up a big mess on the floor. MK
--
http://web.wt.net/~nm5k

5165. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:38:11 UTC
From: rwclark@seanet.com
Message-ID: <3a57cdcd.447772823@news.seanet.com>
Source record: 173660

On Thu, 28 Dec 2000 14:34:16 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:

>All of them emphasised loner, weapons, and "bomb making" equipment, things
>that are exciting to John Q. Public. Ham radio, I'm afraid, is not.
>
>Jim Pennino

Hi Jim,

This says nothing of the aggressive effort being made here by the
original poster to make a positive (negative) link to Ham radio. In
demanding that the ARRL make some effort, it necessarily presumes a
responsibility that was not previously speculated nor assigned to us.

73's
Richard Clark, KB7QHC

5166. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:40:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92gj0n$4eg$3@uranium.btinternet.com>
Source record: 173664

What else can be expected from people who stick their heads
inside magloops ?

--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A4BAC20.A27A1C28@IEEE.org...
> Joe wrote:
> > That's just great. And if he is, we can start the myth
that hams are
> > mostly wacko, just like Vietnam Vets.
>
> Aren't most hams wacko? Proof is on r.r.a.p.
> --
> http://www.mindspring.com/~w6rca

5167. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:50:30 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <5qQ26.247$po4.1036@newsfeed.slurp.net>
Source record: 173668

So, Ed ..

What IS the League's major cash-cow, now that you've implied that there may be one?

73, Dave, K3BHJ

5168. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:52:12 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <%oQ26.246$po4.1625@newsfeed.slurp.net>
Source record: 173666

Go back to sleep. Nothing to it.

K3BHJ

5169. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:52:39 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92gjoc$90i$1@bob.news.rcn.net>
Source record: 173665

Maybe it was caused by the longterm effects of cellphone RF..

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:92gj0n$4eg$3@uranium.btinternet.com...
> What else can be expected from people who stick their heads
> inside magloops ?
>
> --
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A4BAC20.A27A1C28@IEEE.org...
> > Joe wrote:
> > > That's just great. And if he is, we can start the myth
> that hams are
> > > mostly wacko, just like Vietnam Vets.
> >
> > Aren't most hams wacko? Proof is on r.r.a.p.
> > --
> > http://www.mindspring.com/~w6rca
>
>

5170. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:53:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BD262.3A6C@wt.net>
Source record: 173667

Fractenna wrote:
>
> Chip just told me that Donald Miller (I don't know callsign something like
> W9WMV but I didn't listen closely to it when Chip said it) is serving life for
> attempted murder, of his wife. He says he was a well known contester and dxer.
>
> Now you tell ME that this is just a random correlation.
>
> How many OTHER hams have been murderers??!

I knew a ham personally that went off the deep end, and shot his wife,
and then had his "girlfriend" kill him, and she killed herself. And he
was totally normal before that. I knew a ham on 75m that got into a
radio war where all the guys gave him a good tweaking, and he went
bezerk and shot and killed his wife. I know a ham that shot himself on
the radio. Live and I guess in color if you had sstv. But I wouldn't
call him a murderer. Then you have the post office guy in OK. He was an
extra class. On and on...Many hams are devos. Ain't no doubt about it.
It's weird. Why all the curiosity? You feeling nervous around there? MK
--
http://web.wt.net/~nm5k

5171. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-28 23:59:57 UTC
From: fractenna@aol.com
Message-ID: <20001228185957.05391.00000035@ng-fl1.aol.com>
Source record: 173669

>Go back to sleep. Nothing to it.
>
>K3BHJ
>

Yuh? Here's Mark's response and it scares the bejesus outta me!

%%%%%%%

> Now you tell ME that this is just a random correlation.
>
> How many OTHER hams have been murderers??!

I knew a ham personally that went off the deep end, and shot his wife, and then had his "girlfriend" kill him, and she killed herself. And he was totally normal before that. I knew a ham on 75m that got into a radio war where all the guys gave him a good tweaking, and he went bezerk and shot and killed his wife. I know a ham that shot himself on the radio. Live and I guess in color if you had sstv. But I wouldn't call him a murderer. Then you have the post office guy in OK. He was an extra class. On and on...Many hams are devos. Ain't no doubt about it. It's weird. Why all the curiosity? You feeling nervous around there? MK
--
http://web.wt.net/~nm5k

5172. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:01:07 UTC
From: k1bqt@aol.com
Message-ID: <20001228190107.06780.00000091@ng-mb1.aol.com>
Source record: 173670

>Now I really AM concerned....<

I would be, Phil. Any shrink or defense attorney will tell you the over-riding motivation behind the carefully-planned and calculated acts of a "rampaging lunatic killer" is payback, not lack of Prozac.

Here's quiz. Who on here posts volumes more than anyone else about injustice, payback, and getting even?

Rick K1BQT

5173. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:02:36 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92gkcv$79e$1@iac5.navix.net>
Source record: 173672

His Phil persona doesn't count.

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001228183241.06780.00000089@ng-mb1.aol.com...
> >So much for Dr. Cohen being paranoid...<
>
> And, so much for Dr. Cohen keeping his word. I knew you wouldn't.
>
> Rick K1BQT

5174. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:03:09 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A4BD401.39B91B41@earthlink.net>
Source record: 173671

If you mount a small magnetic loop so that it stands vertically, it radiates equally well (or, equally poorly!) at all vertical angles, with nulls in the directions perpendicular to the loops plane; if you sight through the circle, you are sighting along the null direction. If you mount such a loop horizontally, it will radiate equally well in all azimuth directions, with nulls at 90 degrees and 180 degrees elevation.

A small loop is NOT very efficient. Neither is ANY small antenna.

But in this case, I think you will find you are not measuring what you believe you are measuring. The light tube is probably responding to the high electrical field across the tuning capacitance at the top. You need to be rather farther away to measure its radiating pattern.

Why not just use it for a while? Others have had good results with carefully built magnetic transmitting loops.

And a very good New Year to you!

Cortland

Peter en Helma Kerklaan wrote:

> Dear OM,
>
> I have recently build a 1,5 meter diameter magnetic loop for 80 meter (I
> live in a area where a larger antenna for this band is giving difficulties).
>
> While testing the antenna I have measured the radiation angle with a light
> tube and have find out that the point of maximum radiation is exactly in top
> of the loop. This means that it is transmitting at 180 deg. this seems to me
> as not very efficient.
>
> The loop is at this moment mounted at 1 meter above earth, however reading
> the literature about this kind of antenna's this should not be a problem (is
> 1 meter just to close to earth?)
> I have build the loop with the Capacitor in top and the Faraday Loop Match
> 180 deg below the C.
>
> My questions:
> 1) Is this measured radiation angle what I should expect?
> 2) How to improve the radiation angle for "DX"?
>
> I would very much appreciate some advice in this matter.
>
> 73, and happy new year!!

>
> de Peter, PA5KE

5175. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:04:22 UTC
From: fractenna@aol.com
Message-ID: <20001228190422.05297.00000027@ng-fl1.aol.com>
Source record: 173673

>>Now I really AM concerned....<
>
>I would be, Phil. Any shrink or defense attorney will tell you the
>over-riding
>motivation behind the carefully-planned and calculated acts of a "rampaging
>lunatic killer" is payback, not lack of Prozac.
>
>Here's quiz. Who on here posts volumes more than anyone else about
>injustice,
>payback, and getting even?
>
>Rick K1BQT
>

Rickie it just gets more befuddlin' .Can you je's say wat u mean? I thought we were talkin' 'bout this killer who lives about 20 miles from you...can you tell us what u think of HIM instead?

73
Phil
de N1ZKT

5176. Re: QUESTION: Can the "shortened radials" thread get any longer??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:06:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BD59F.4D11@wt.net>
Source record: 173675

Joe wrote:
>
> Last time I checked, the shortened radials thread was up to 137
> articles. Does a newsgroup thread become more effective as it
> lengthens?
>
> --
> Regards,
> Joe Schlatter

Probably depends on the topic. In the case of the verticals probably so.
In the case of the Wakefield thread, I doubt it. MK
--
http://web.wt.net/~nm5k

5177. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:09:46 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A4BD58F.8F747D53@earthlink.net>
Source record: 173674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Sorry to hear you are house-bound, Dennis. Yes, that limits how
much you can avoid of this kind of stuff. But you DID get the right
piece of metal -- and a cheap lesson in capitalism as she are done.

Happy New Year!

Cortland

Dennis Kaylor wrote:

> AFTER GETTING IT I WONDER THAT MYSELF I JUST WAS UNSURE HOW SENSITIVE OR CRITICAL THE
> BENDS WHERE SO I JUST ORDERED IT AND I AM HOUSE BOUND SO GETTING OUT TO A STORE IS TOUGH

5178. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:20:14 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BD8BE.7866@wt.net>
Source record: 173676

Richard Clark wrote:

>
> This says nothing of the aggressive effort being made here by the
> original poster to make a positive (negative) link to Ham radio. In
> demanding that the ARRL make some effort, it necessarily presumes a
> responsibility that was not previously speculated nor assigned to us.
>
> 73's
> Richard Clark, KB7QHC

Heck, I knew nothing of it, until he brought it to our attention. I have CNN going almost 24 a day on a tv behind me, and haven't heard a peep about it. I think the vast majority could care less. Many code toads are unstable in the same ways. I wonder why we haven't heard about that angle yet? Actually, I think the ratio of whacko code toads would outrank the ratio of whacko hams per population of each. But there are plenty of each types. In this case, you had a code toad who was also a ham... Double trouble... Kinda like me..g I wonder if I'm going to wig out someday... MK

--
http://web.wt.net/~nm5k

5179. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:22:33 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <TTQ26.263$po4.1848@newsfeed.slurp.net>
Source record: 173678

What does one do or think to be a 'code toad'?

K3BHJ

5180. Tone Board

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:24:35 UTC
From: Neal <nealj@accesstoledo.com>
Message-ID: <t4nme663qoev70@corp.supernews.com>
Source record: 173677

Does anyone know the model # for the optional tone encoder for the ICON
IC-271-A or where I buy one?
Neal

5181. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:26:38 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <TTQ26.264$po4.1848@newsfeed.slurp.net>
Source record: 173679

Ummmm .. okay. I'm telling you that it is a random correlation.

Other random correlations: the race-baiters haven't shown up yet.

K3BHJ

5182. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 00:48:21 UTC
From: jdm@cape.com
Message-ID: <92gn0k$99q$1@nnrp1.deja.com>
Source record: 173680

In article <20001228180546.05391.00000024@ng-fl1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> >"Richard Leshner" <rleshner@alcumet.com> wrote:
> >
> >>Go to QRZ.com and do a name search.
> >>"Fractenna" <fractenna@aol.com> wrote in message
> >>news:20001228120623.08798.00000165@ng-ff1.aol.com...
> >>> I just talked with someone who said the Wakfield killer was a
former ham
> >>with a
> >>> KA1 callsign.
> >>>
> >>> Anyone know if this is true? Where can someobody check this?
> >>>
> >>> 73
> >>> Phil
> >>> de N1ZKT
> >>>
> >>
> >>
> >>
> >
> >I wouldn't get too excited. He's only a Technician. Since 02/10/2000.
> >From the QRZ database:
> >
> >
> > Callsign: KB1EVA
> >
> > Class: Technician Codes: HAI USA
> >
> > Name:
> > Michael G. McDermott
> > Addr1:
> > 31 Willie St
> > Addr2:
> > Haverhill, MA 01830
> > Country:
> > USA
> > Effective:
> > 10 Feb 2000 Expires: 10 Feb 2010
> > License ID:
> > L00206071
> > Lookups:
> > 220

> >
> >No big deal.
> >
> >Bob
> >k5qwg
> >
>
> Yeh well there's been over 100 look ups then since this morning! So
some
> people think its a biggje I geuss.
>
> Phil de n1ZKT

Of course it's a big deal! Those poor people.

Mary

Sent via Deja.com
http://www.deja.com/

5183. Butternut Mini-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:01:11 UTC
From: Bill <bill@hovac.com>
Message-ID: <92gnbe$1b3a$1@box6.cho.cstone.net>
Source record: 173681

Has anyone used or know of any experiencesm with the Butternut HF5B? It is also a 5 band mini-beam. It's about $200 cheaper than the Hex-Beam. Is there a performance difference????

5184. 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:07:06 UTC
From: ki8fb@my-deja.com
Message-ID: <92go3n$a55$1@nnrp1.deja.com>
Source record: 173684

i need antenna suggestions for a 75 meter antenna. here is what i have.

66 foot by 66 foot corner lot. house more or less in the middle,garage
on the side of the house. no trees on lot . 40 foot tower on the
opposite side of house from the garage. i can't put up a loop(xyl).

any ideas?

Sent via Deja.com
http://www.deja.com/

5185. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:10:31 UTC
From: fractenna@aol.com
Message-ID: <20001228201031.12135.00000295@ng-cr1.aol.com>
Source record: 173682

>In article <20001228180546.05391.00000024@ng-fl1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> >"Richard Leshner" <rleshner@alcumet.com> wrote:
>> >
>> >>Go to QRZ.com and do a name search.
>> >>"Fractenna" <fractenna@aol.com> wrote in message
>> >>news:20001228120623.08798.00000165@ng-ff1.aol.com...
>> >>> I just talked with someone who said the Wakfield killer was a
>former ham
>> >>with a
>> >>> KA1 callsign.
>> >>>
>> >>> Anyone know if this is true? Where can someobody check this?
>> >>>
>> >>> 73
>> >>> Phil
>> >>> de N1ZKT
>> >>>
>> >>
>> >>
>> >>
>> >
>> >I wouldn't get too excited. He's only a Technician. Since 02/10/2000.
>> >From the QRZ database:
>> >
>> >
>> > Callsign: KB1EVA
>> >
>> > Class: Technician Codes: HAI USA
>> >
>> > Name:
>> > Michael G. McDermott
>> > Addr1:
>> > 31 Willie St
>> > Addr2:
>> > Haverhill, MA 01830
>> > Country:
>> > USA
>> > Effective:
>> > 10 Feb 2000 Expires: 10 Feb 2010
>> > License ID:
>> > L00206071
>> > Lookups:
>> > 220

>> >
>> >No big deal.
>> >
>> >Bob
>> >k5qwg
>> >
>>
>> Yeh well there's been over 100 look ups then since this morning! So
>some
>> people think its a biggje I geuss.
>>
>> Phil de n1ZKT
>
>
>Of course it's a big deal! Those poor people.
>
>Mary
>
>
>Sent via Deja.com
>http://www.deja.com/
>

Thanks for the reality check Mary. Sometimes the obvious needs to get stated.

RIP

Phil
de N1ZKT

5186. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:14:00 UTC
From: k1bqt@aol.com
Message-ID: <20001228201400.11640.00000258@ng-cr1.aol.com>
Source record: 173683

>His Phil persona doesn't count.<

Not in your book or mine, I guess.

Rick K1BQT

5187. Re: A-99 10 meter antenna w/MFJ-949E tuner for 10-80 meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:33:22 UTC
From: garneval@aol.com
Message-ID: <20001228203322.11991.00004442@ng-mn1.aol.com>
Source record: 173685

It will work well on 10 through 17 meters thats about it . A better choice would be a ladder line fed dipole as long as practical if your space is limited ,since you already have a tuner. Gary ki8dj>>Will it work?

5188. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:34:41 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BEA31.208B@wt.net>
Source record: 173686

David J. Windisch wrote:
>
> What does one do or think to be a 'code toad'?
>
> K3BHJ

Thats our name for a programmer. Anyone who sits behind a puter for hours and hours on end. I've dome my fair share of that myself. But so far I haven't started chasing my tail or barking at the moon yet. Many "toads" are the same type of introverted/loner/semi-psycho types as the hams that Cecil described. :/ MK
--
http://web.wt.net/~nm5k

5189. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:39:56 UTC
From: k1bqt@aol.com
Message-ID: <20001228203956.11640.00000265@ng-cr1.aol.com>
Source record: 173687

>...can you tell us what u think of HIM instead?<

I did--sorry you missed it. Can you tell the NG what you think about people who issue threats and publically exhibit an intense need to settle scores? That was my question to you--and I'm not buying into your sorry effort to deflect it!

Rick K1BQT

5190. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:42:14 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BEBF6.6DE2@wt.net>
Source record: 173690

ki8fb@my-deja.com wrote:
>
> i need antenna suggestions for a 75 meter antenna. here is what i have.
>
> 66 foot by 66 foot corner lot. house more or less in the middle,garage
> on the side of the house. no trees on lot . 40 foot tower on the
> opposite side of house from the garage. i can't put up a loop(xyl).
>
> any ideas?
>
> Sent via Deja.com
> http://www.deja.com/

I'd put up a dipole hung from the tower and just fit it in any way you can. Try to avoid an angle below 90% between the two legs if you can. You could have the legs tied off to ground stakes or whatever if nothing else around. I assume you want regional coverage. If dx, you could shunt feed the tower. But then you need to think about the ground/radial system. I think I'd just string the dipole up for a start. MK
--
http://web.wt.net/~nm5k

5191. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:42:55 UTC
From: k1bqt@aol.com
Message-ID: <20001228204255.11640.00000266@ng-cr1.aol.com>
Source record: 173688

Depends on what you want to work. A "drooping" dipole supported from the tower would be good for local work, and perhaps you could load the tower for DX?

Rick K1BQT

5192. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:44:00 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <A%R26.36228$3B5.1441384@newsread2.prod.itd.earthlink.net>
Source record: 173689

LOL

Betcha it'd turn a Pointer into a Sitter :-)

"Dick Carroll" <dixie@townsqr.com> wrote in message news:92eh1j$1nn$3@208.207.71.161...
>
>
> Hassen Ben Sober wrote:
> >
> > ROTFL
> >
> > I can Just see the Dogie taking a Whiz on the Fence :-)
> >
>
>
> And barking, "Man, that Hertz!"
>

5193. Re: Butternut Mini-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:45:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4BECCE.27FB@wt.net>
Source record: 173691

Bill wrote:
>
> Has anyone used or know of any experiencesm with the Butternut HF5B? It is
> also a 5 band mini-beam. It's about $200 cheaper than the Hex-Beam. Is there
> a performance difference????

I dunno, but I've heard rumors that antenna a pain to tune and get going. But I've never tried it myself. Could have been cockpit error I guess. Dunno.. I hate to slam it without trying myself. I notice cushcraft makes a little beam also that is kinda interesting. I think it's called the "director" or something like that. But I have no real world reports to it's worth. MK
--
http://web.wt.net/~nm5k

5194. Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 01:55:09 UTC
From: fractenna@aol.com
Message-ID: <20001228205509.10778.00000219@ng-cr1.aol.com>
Source record: 173692

Before everyone gets too hot and bothered, check out the CNN stories on McDermott. Also, the Boston Globe articles on www.boston.com. They say he only moved to Haverhill recently, not in February as someone showed on here from the callbook URL. I also noticed, from qrz.com, that his e-mail is not the one that the media refers to.

Haverhill is a pretty small town, but I imagine it's possible to have two Michael McDermotts..with electronics backgrounds...so let's not crucify this guy until/if we know for sure.

I can relate to this: when I was 18 I lost my lunch (at the school lunchroom even) when I read that 'Nathan Cohen' had been arrested for embezzling several million dollars. Of course, he was in a different state, let alone different town.

73,
Chip N1IR

5195. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:05:45 UTC
From: News <NONSPAM@adelphia.net>
Message-ID: <92grfslmi1@news.gate.net>
Source record: 173693

.....I've been in the News biz for over twenty years.....if you want to increase the chance the media will make a connection between this man and amateur radio......immediately go out of your way to deny it....

Otherwise, I don't think anyone really cares one way or the other.

73

"Fractenna" <fractenna@aol.com> wrote in message news:20001228165724.08425.00000054@ng-fm1.aol.com...
> Shouldn't the americal radio relay league be doing damage control before the
> press starts playing up the ham radio angle on this guy??

5196. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:27:46 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2rsg29.ht9.ln@mail.specsol.com>
Source record: 173695

Fractenna <fractenna@aol.com> wrote:

<snip - why can't everyone do this>

>>
>>I'm don't know what the "americal radio relay league" is, but the media
>>could care less that he was/is a ham.
>>
>>I just checked four different news outlets and none of the ones I looked
>>at even mentioned it.
>>
>>A couple mentioned his Navy service. Should the Department of the Navy
>>begin "damage control"?
>>
>>All of them emphasised loner, weapons, and "bomb making" equipment, things
>>that are exciting to John Q. Public. Ham radio, I'm afraid, is not.
>>
>>Jim Pennino
>>

> Its only a matter of time before they see a ham connection and that's why its
> best to do damage control for the fraternity.
> All I wanted to know was how and look where you guys took it. Bernard Goetz and
> god knows who else and how many ham killers. It's scary..

> Do you have a call Jim Pennino BTW?

> Phil de N1ZKT

You don't get it, do you?

Even if the media finds out he is a ham, THEY WON'T CARE, NO ONE WILL.

Nobody but hams and those in ham related industries (and some extent, CBers)
care about ham radio.

There is no damage to control. Do you understand yet?

Yes, I have a call; same one since 1963. If you and your clone Chip care
so much, learn to use a computer and you can find out what it is.

Jim Pennino

5197. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:31:15 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j1tg29.ht9.ln@mail.specsol.com>
Source record: 173696

Richard Clark <rwclark@seanet.com> wrote:
> On Thu, 28 Dec 2000 14:34:16 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:

>>All of them emphasised loner, weapons, and "bomb making" equipment, things
>>that are exciting to John Q. Public. Ham radio, I'm afraid, is not.
>>
>>Jim Pennino

> Hi Jim,

> This says nothing of the aggressive effort being made here by the
> original poster to make a positive (negative) link to Ham radio. In
> demanding that the ARRL make some effort, it necessarily presumes a
> responsibility that was not previously speculated nor assigned to us.

> 73's
> Richard Clark, KB7QHC

I think the repeated cry for "damage control" says a lot more about the
mental stability of the poster than the murder being a ham says about
the general stability of hams.

Jim Pennino

5198. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:33:03 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <v4tg29.ht9.ln@mail.specsol.com>
Source record: 173699

Fractenna <fractenna@aol.com> wrote:
>>Hi Jim,
>>
>>The first to note the obvious, congrats!
>>
>>And to expect it is someone ELSEs responsibility (the ARRL) to enforce
>>a prohibition is even more remarkable in that it would necessarily
>>have to start with the poster of this trash.
>>
>>73's
>>Richard Clark, KB7QHC
>>

> Yeh Richie there sure are some messed up hams out there that think they can
> just break the law and nothing happens. Well, speaking of that I overheard
> something last week that surely will make YOUR millenium!

> hahhhaha!

> Calling ME trash!? HAHAHAHA!!! Wait til you get to know the legal system
> better:-)!

> Phil de N1ZKT

Oh geez, another threat to "get even".

Someone make sure this clown doesn't have any weapons before we read about
him in the mass media.

Jim Pennino

5199. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:37:33 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ddtg29.ht9.ln@mail.specsol.com>
Source record: 173698

Fractenna <fractenna@aol.com> wrote:
> Before everyone gets too hot and bothered, check out the CNN stories on
> McDermott. Also, the Boston Globe articles on www.boston.com. They say he only
> moved to Haverhill recently, not in February as someone showed on here from the
> callbook URL. I also noticed, from qrz.com, that his e-mail is not the one that
> the media refers to.

> Haverhill is a pretty small town, but I imagine it's possible to have two
> Michael McDermotts..with electronics backgrounds...so let's not crucify this
> guy until/if we know for sure.

> I can relate to this: when I was 18 I lost my lunch (at the school lunchroom
> even) when I read that 'Nathan Cohen' had been arrested for embezzling several
> million dollars. Of course, he was in a different state, let alone different
> town.

> 73,
> Chip N1IR

The only people that seem "hot and bothered" by a possible ham connection
all seem to post from fractenna@aol.com.

The rest of us couldn't seem to care less.

Jim Pennino

5200. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 02:41:49 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3A4BF9ED.7A4E4985@inreach.com>
Source record: 173697

Get one of those 102" whips from radioshack, mount it to the top of the tower, this gives you about 50 feet. Run a wire down to the bottom of the tower, and resonate with a coil. The approx dimensions for the coil can be found through software such as Helical3 found at http://www.btinternet.com:81/~g4fgq.regp/page3.html#S301

ki8fb@my-deja.com wrote:
>
> i need antenna suggestions for a 75 meter antenna. here is what i have.
>
> 66 foot by 66 foot corner lot. house more or less in the middle,garage
> on the side of the house. no trees on lot . 40 foot tower on the
> opposite side of house from the garage. i can't put up a loop(xyl).
>
> any ideas?
>
> Sent via Deja.com
> http://www.deja.com/

5201. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 03:23:26 UTC
From: fractenna@aol.com
Message-ID: <20001228222326.06058.00000096@ng-fm1.aol.com>
Source record: 173700

>Fractenna <fractenna@aol.com> wrote:
>> Before everyone gets too hot and bothered, check out the CNN stories on
>> McDermott. Also, the Boston Globe articles on www.boston.com. They say he
>only
>> moved to Haverhill recently, not in February as someone showed on here from
>the
>> callbook URL. I also noticed, from qrz.com, that his e-mail is not the one
>that
>> the media refers to.
>
>> Haverhill is a pretty small town, but I imagine it's possible to have two
>> Michael McDermotts..with electronics backgrounds...so let's not crucify
>this
>> guy until/if we know for sure.
>
>> I can relate to this: when I was 18 I lost my lunch (at the school
>lunchroom
>> even) when I read that 'Nathan Cohen' had been arrested for embezzling
>several
>> million dollars. Of course, he was in a different state, let alone
>different
>> town.
>
>> 73,
>> Chip N1IR
>
>The only people that seem "hot and bothered" by a possible ham connection
>all seem to post from fractenna@aol.com.
>
>The rest of us couldn't seem to care less.
>
>Jim Pennino
>

Actually Jim, I just checked dejanews and according to it, lots of folks in several different NG's seem very interested.

I hope you will agree with me that this is all very much off base until shown otherwise.

73
Chip N1IR

5202. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 03:26:30 UTC
From: wa8ulx@aol.com
Message-ID: <20001228222630.03725.00000551@ng-md1.aol.com>
Source record: 173701

After checking his Call it appears hes one of them Techs, what a surprise

5203. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 03:26:35 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92h09l$hn2$1@bob.news.rcn.net>
Source record: 173702

Who started this rumor? I sure hope this don't lead to litigation.

Pete

5204. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:05:05 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a4c0d2d.5144385@news.azstarnet.com>
Source record: 173703

On 28 Dec 2000 17:32:28 GMT, k9sqg@aol.com (K9SQG) wrote:

>The value of the SWR is a big discriminator. If one has, or expects, high SWR
>due to using a single antenna on multiple bands, then go for the open wire
>line. SWRs of 50:1 or so don't produce as much loss as coax with an SWR of
>3:1.

Until you install the balun and tuner that are required to utilize the open wire
line.

N7WS

>
>73s,
>
>Evan

5205. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:09:19 UTC
From: n8blk@aol.com
Message-ID: <20001228230919.18339.00003526@nso-fa.aol.com>
Source record: 173704

In article <3A4BBE09.3ED4BE9F@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>"Ed Hare, W1RFI" wrote:
>> Do you believe that most hams post to rec.radio.amateur.policy?
>
>Nope, but seriously, I am amazed that so many murderers are hams.

Actually, statistically looked at, there aren't all that many ham killers.
There aren't even all that many squirrels running around with ham tickets, but
most squirrels seem to stand out because we hear them on the air, or get to
read the squirrels on usenet.
-art clemons-

5206. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:36:10 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <92h4bq$8qr$6@bashir.peak.org>
Source record: 173711

Floyd Sense <sentek@sprintmail.com> wrote:
: An interesting comment, but you must define what you mean by "bandwidth is
: going to suffer". If you're referring to SWR bandwidth, you'll find that
: this is simply not true. The SWR bandwidth of the commercially available
: hex beam is excellent - less than 1.5:1 on each of the five bands covered by
: the five band model.

Reduced spacing between the elements reduces the input resistance. This
reduces the efficiency of the antenna, as well as the bandwidth.

But then, all beam designs are a compromise, as you cannot maximize all
the desired features at the same time.

I think you will find all this confirmed in any decent reference on
antenna design.

--
Bill Nelson (billn@peak.org)

5207. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:40:55 UTC
From: rsmits@home.com
Message-ID: <3a4c15fd1efzvgf$mr2ice@news>
Source record: 173705

In <3A4BBE09.3ED4BE9F@IEEE.org>, on 12/28/2000
at 04:26 PM, Cecil <Cecil.A.Moore@IEEE.org> said:

>"Ed Hare, W1RFI" wrote:
>> Do you believe that most hams post to rec.radio.amateur.policy?

>Nope, but seriously, I am amazed that so many murderers are hams. --

Given the content of some of our newsgroups I'm amazed that more aren't.

Bob VE7HS

Robert Smits Ladysmith BC Canada VE7HS

--
---
rsmits@home.com

5208. Re: Wakefield killer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:44:36 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <UEU26.89621$x6.41330780@news2.rdc2.tx.home.com>
Source record: 173706

I have it on good authority that one of the news services is reporting that the killer is known to have consumed large amounts of Frosted Flakes. The parent company quickly issued a press release saying that never in their advertising was it intended that Tony the Tiger ever encouraged, or even suggested, that violence was an acceptable way to redress grievances.

Despite this, medical authorities in Massachusetts have linked sugar consumption by people with inordinate interest in carnivorous animals to antisocial behavior. In direct response to citizen pressure, state senator Daniel Cravens has introduced a bill to ban the sale of all sugar (sucrose) containing food items.

Others have called for the registration of all pictures of carnivores. Registrants would have to complete a background check following an eight hour course in the storage and handling of said pictures.

Furthermore, the governor has issued a press release reaffirming.....

Pete, KA�TZK

PS Okay. Let's get serious. The killings were tragic enough. Let's not add to the insanity. If we "respond" won't we just be planting some sort of twisted suspicion in some minds?

5209. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 04:46:01 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <92h4u9$8qr$7@bashir.peak.org>
Source record: 173710

ki8fb@my-deja.com wrote:
: i need antenna suggestions for a 75 meter antenna. here is what i have.

: 66 foot by 66 foot corner lot. house more or less in the middle,garage
: on the side of the house. no trees on lot . 40 foot tower on the
: opposite side of house from the garage. i can't put up a loop(xyl).

: any ideas?

Purchase the ARRL publications on wire antennas. If you really want to
research the possibilities, get one of the publications that covers
vertical antennas - as well.

--
Bill Nelson (billn@peak.org)

5210. Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 05:00:48 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4C1A7F.3828B056@pim.com>
Source record: 173707

When did it happen whats it all about?

5211. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 05:01:37 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4C1AB0.40738197@pim.com>
Source record: 173708

thanks. You're the only one without a smart ass reply.

Fractenna wrote:

> >
> >Haven't heard anything about it.
> >
>
> Looks like KB1EVA is the guy who murdered those poor folks with an ak47 in
> Wakefield. Was all over CNN and USA Today and elswhere.
>
> Phil de N1ZKT

5212. Murders/Hams/Stats

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 05:08:12 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <0%U26.89779$x6.41419192@news2.rdc2.tx.home.com>
Source record: 173709

Let me interject a little bit of sanity here....

The overall U.S. murder rate is 6.8 murders per 100,000 population. So, if hams were representative of the population, we would be seeing about 44 ham-committed murders a year (based on a ham population of 650,000).

My guess is that it is nowhere near that high.

Stop worrying, folks.

Pete, KATZK

5213. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 05:11:21 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <pd6h29.7ec.ln@mail.specsol.com>
Source record: 173712

Fractenna <fractenna@aol.com> wrote:

<crap snipped>

>>
>>The only people that seem "hot and bothered" by a possible ham connection
>>all seem to post from fractenna@aol.com.
>>
>>The rest of us couldn't seem to care less.
>>
>>Jim Pennino
>>

> Actually Jim, I just checked dejanews and according to it, lots of folks in
> several different NG's seem very interested.

And I can't imagine why...

Any of them have NOTHING to do with ham radio?

> I hope you will agree with me that this is all very much off base until shown
> otherwise.

> 73
> Chip N1IR

Then why did you start this crap in the first place?

Jim Pennino

5214. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 05:18:26 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2r6h29.7ec.ln@mail.specsol.com>
Source record: 173713

Prof. Beaker <beaker@pim.com> wrote:
> When did it happen whats it all about?

I don't see how anyone in North America could have missed this story; it's all over every mass media outlet.

Assuming you are somewhere else, another clown went nuts and shot up his workplace. See any news site if all you get is Internet news.

If you are in North America, you need to get out more and find out what's happening in the real world.

Jim Pennino

5215. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 06:21:58 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t4obc6aaqap12d@corp.supernews.com>
Source record: 173714

: Now you tell ME that this is just a random correlation.

Not exactly. But it is, however, a random observation.

Find out how many convicted murderers there are in the US, and then
find out how many of them were hams at the time they were convicted.
Compare that to the number of hams in the US divided by the population
of the US. That would begin to tell you something.

The mere fact that someone is able to name a few of the data points
where two characteristics meet does not in any way imply that the
two characteristics are actually correlated in the population at
large. (See "anecdotal evidence.")

Statistics simply do not work that way. (Someone else will no
doubt argue that statistics do not work at all, but that is another
story, for another NG.)

--Jim WB5UDE

5216. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 07:57:53 UTC
From: Brooke Clarke <brooke@pacific.net>
Message-ID: <3A4C4401.40998837@pacific.net>
Source record: 173715

Hello DC-6022:

The Agilent 4291B was made to make this measurement.
Note that the error spec on all network analyzers is so great they can not
make this measurement.
I personally like the 16912 fixture if your caps have metal on the ends.

73,

Brooke Clarke, N6GCE & Agilent employee

dc6022@my-deja.com wrote:

> In article <3A49E5A8.EDC97296@mwci.net>,
> sabinw@mwci.net wrote:
> >
> >
> > Did you really mean 1.5 GHz, or do you mean 1.5 MHz?
> >
> > Bill W0IYH
> >
> >
>
> Bill,
>
> Am I like child plays big car? Get me out of the car.
>
> The ckt is at 1.5 Giga Hertz. Two caps work with ustriplines at
> inductive arms of HPF pi ckt respectively which is in front of a LNA.
>
> The poor caps would cause the front-end stage to loss 2dB gain and get
> 1.5dB worst on NF. The fireman just told me the the cause is lower Q
> from caps. I replace caps with diff. date code ones and they works.
> Checking S11 at front end stage--- the difference is so slight. I
> doubt the matching tolerance is that critical and try to find the way
> to evaluate the caps. Any clues from the trap elements or ckt???
>
> DC-6022 <---(plate on my car ^_^)
>
> Sent via Deja.com
> http://www.deja.com/

5217. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 09:39:33 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92hm70$ns9$1@iac5.navix.net>
Source record: 173716

Lack of social skills coupled with the ability, and preference, to set in
front of a screen writing line after line of programming code.

"David J. Windisch" <davidw@copper.net> wrote in message
news:TTQ26.263$po4.1848@newsfeed.slurp.net...
> What does one do or think to be a 'code toad'?
>
> K3BHJ
>
>

5218. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 10:58:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92iekdkhn1@plutonium.btinternet.com>
Source record: 173575

Roy Lewallen wrote
> The increase in dB loss is roughly proportional to
frequency,
> characteristic of dielectric loss.
==========
Yes, but there is something suspicious when ALL the loss is dielectric loss at frequencies as least as low as 3 MHz. Given the cable's dimensions it would be possible to work backwards and calculate what the dielectric loss factor would have to be to be compatible with the attenuation measurements.

What's the loss factor, TanDelta, of PVC containing red and black coloring pigments ?

Reg.

5219. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 11:54:08 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <oX_26.468$po4.4510@newsfeed.slurp.net>
Source record: 173717

Tks, Mark. I'm a Code Wart Man, myself.
--

73, Dave, K3BHJ

5220. Interfaceing Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 12:48:44 UTC
From: "adrian.wigg" <adrian.wigg@ntlworld.com>
Message-ID: <SJ%26.14540$Yy.409675@news2-win.server.ntlworld.com>
Source record: 173718

Hi All,
Name is Adrian G7TYV,am looking for someone who has interfaced a Yaseu 5400 rotator to the computer.
Is it costley or can you make your own.
Adrian.......

5221. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 13:00:14 UTC
From: kg4fet@aol.combadspam
Message-ID: <20001229080014.29929.00000210@ng-fh1.aol.com>
Source record: 173569

>I am planning on putting a 10 meter antenna up. I am on a thight budget.
>
>1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could
>string a 150-200 feet insulated wire in the trees around the house. This
>would cost me next to nothing. The only problem is that I don't have the
>manual for the tuner so how should I attach the long wire to the tuner.
>There is no lug at the back of the tuner, only an SO-239 connector.

Coax Fed dipole would work in this case.

>2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I
>figure I could use my TV rotor to rotate it. It'll be at around 25 feet
>above ground until I can get my tower up.

]This is also a good option but in your area remember the wind load wil be
nearly double due to ice on the beam. Also take a look at the rotors insides
I'd bet the gears are plastis and those tend to break under very cold
conditions.

>3rd scenario: Something like a Carolina windom or a dipole between 2 trees
>near the shack. It would probably require an antenna tuner (other then the
>MFj-16010 though).

See senerario one on the windom. I would also look at a verticle such as the
Solorcon A99 or Anttron's 305. The A99 can be had for around 40- 50.00 Can new
and is an excellent DX or local antenna even at low elevation. I have one(an
A99) in the front yard at 6 ft off the ground with a set of homemade radials on
it, and an Anttron 305 @ 47 ft on top of the tower and they hear equally well
on DX although the 99 isn't worth a hoot for local, but at 20 ft and no radials
it did a great job both local and DX.
>
Once again I am seeking your advice to help me find a solution to my antenna
>problem. I welcome any comments.
>
>I must say that money wise I (and most probably my XYL too) would prefer to
>go with the first scenario. I will definitely have to work out the details
>regarding how to connect te long wire and the ground to the tuner but I bet
>that it should not be to much of a problem.
>
>
>Stay safe !
>
>73 de VE2JPT
>
>Jean-Pierre
>_____

>
>
Just my 2 cents worth Jean-Pierre and I wish you the best of luck on getting on the air on 10 meters and I hope to get the chance to work you.
73 and Happy New Year de KG4FET Sandor Net control for the WWD net on 28.390 Monday nights @ 7:30 Local (est) in Jacksnvile Fl One of the Longest running nets on the hf bands (44+ years)

5222. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 13:17:02 UTC
From: fractenna@aol.com
Message-ID: <20001229081702.10400.00000343@ng-ff1.aol.com>
Source record: 173570

>Fractenna <fractenna@aol.com> wrote:
>
> <crap snipped>
>
>>>
>>>The only people that seem "hot and bothered" by a possible ham connection
>>>all seem to post from fractenna@aol.com.
>>>
>>>The rest of us couldn't seem to care less.
>>>
>>>Jim Pennino
>>>
>
>
>> Actually Jim, I just checked dejanews and according to it, lots of folks in
>> several different NG's seem very interested.
>
>And I can't imagine why...
>
>Any of them have NOTHING to do with ham radio?
>
>
>> I hope you will agree with me that this is all very much off base until
>shown
>> otherwise.
>
>> 73
>> Chip N1IR
>
>Then why did you start this crap in the first place?
>
>Jim Pennino
>
>

Jim,

You really do like disseminating lies.

Why don'y you do something constructive like CALL this guy KB1EVA?

Listen carefully. You need to DROP me as your focus. The new year arrives soon
and it's up to you to make sure its a good one.

73
Chip N1IR

5223. Re: Butternut Mini-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 13:46:42 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <6B036.39713$3B5.1640220@newsread2.prod.itd.earthlink.net>
Source record: 173571

I recall several comments about problems tuning the HF5B - check the old newsgroup entries via deja.com. Also, check the manufacturer's claims for gain and f/b for all five bands. Don't forget that the HX-5B hexbeam has 10 elements - driven element and reflector for each of the 5 bands. And - there is no tuning required. On 17 meters, the Butternut information says it performs as a rotary dipole - no gain, no f/b. The hexbeam exhibits its best front/back ratio on 17.

K8AC

"Bill" <bill@hovac.com> wrote in message
news:92gnbe$1b3a$1@box6.cho.cstone.net...
> Has anyone used or know of any experiencesm with the Butternut HF5B? It is
> also a 5 band mini-beam. It's about $200 cheaper than the Hex-Beam. Is
there
> a performance difference????
>
>
>

5224. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 14:37:02 UTC
From: fractenna@aol.com
Message-ID: <20001229093702.27065.00000019@ng-fm1.aol.com>
Source record: 173572

>Prof. Beaker <beaker@pim.com> wrote:
>> When did it happen whats it all about?
>
>I don't see how anyone in North America could have missed this story; it's
>all over every mass media outlet.
>
>Assuming you are somewhere else, another clown went nuts and shot up his
>workplace. See any news site if all you get is Internet news.
>
>If you are in North America, you need to get out more and find out what's
>happening in the real world.
>
>Jim Pennino
>

There's no need to be rude to this person--or anyone else there Jim. He just asked a reasonable question. Maybe he didn't make the connection with Wakefield, understandable if you are not from the Boston area.

Please lighten up. Thanks.

73
Chip N1IR

5225. FA: Laport "Radio Antenna Engineering" USA printing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 15:04:43 UTC
From: nx7u@primenet.com
Message-ID: <3a4ca7ec.33648440@news.primenet.com>
Source record: 173573

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1204645522

5226. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 16:05:18 UTC
From: richardharrison@webtv.net
Message-ID: <17749-3A4CB63E-42@storefull-118.iap.bryant.webtv.net>
Source record: 173574

David Windisch wrote:
""So Ed (Hare)..What IS the League`s major cash-cow, now that you`ve implied that there may be one?"

Ed`s answer hasn`t appeared on my screen yet.

The League is incorporated in connecticut, and for tax purposes qualifies as an exempt (not for profit corporation) organization under U.S. law.

The League can`t legally distribute surplus cash as dividends to member/owners. It spends its revenes on operations.

I think the League should be required to give a full and detailed periodic financial report to its members. If so, Ed Hare could answer the "cash cow" question by reference to the latest financial report to the members.

I looked through a 1998 QST issue received when I was a member, and found no circulation numbers nor commercial ad rates.

Ed implied that an ARRL book price was low and thus no "cash cow". Maybe ARRL hopes to make up in volume what it loses in price.

I would speculate that ad sales in QST produce more income to ARRL than member dues or publication sales. Being tax exempt is unfair to other publishers. Tax payers are real contributors to QST`s advertising business. Tax payers push the wagon while ARRL HQ gets a free ride.

Best regards, Richard Harrison, KB5WZI

5227. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:06:19 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Fx336.333$e5.869245@news.ntplx.net>
Source record: 173576

Richard Harrison <richardharrison@webtv.net> wrote:

> ""So Ed (Hare)..What IS the League`s major cash-cow, now that you`ve
> implied that there may be one?"

> Ed`s answer hasn`t appeared on my screen yet.

If my answers do start appearing on your screen before I send them, please
don't tell me... :-)

> The League is incorporated in connecticut, and for tax purposes
> qualifies as an exempt (not for profit corporation) organization under
> U.S. law.

> The League can`t legally distribute surplus cash as dividends to
> member/owners. It spends its revenes on operations.

> I think the League should be required to give a full and detailed
> periodic financial report to its members. If so, Ed Hare could answer
> the "cash cow" question by reference to the latest financial report to
> the members.

http://www.arrl.org/announce/annualreport/

> I looked through a 1998 QST issue received when I was a member, and
> found no circulation numbers nor commercial ad rates.

I believe that such circulation figures appear quarterly, per federal regs.
The last one is posted at:

http://www.arrl.org/ads/circ.html

Last time I looked it up, the membership figures were 163,714.

The commercial ad rates are available at:

http://www.arrl.org/ads/

> Ed implied that an ARRL book price was low and thus no "cash cow". Maybe
> ARRL hopes to make up in volume what it loses in price.

The last time I looked at the sales figures for RF Exposure and You, it was
around 150 copies per month.

73,
Ed Hare, W1RFI

5228. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:18:58 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A4CC782.2B2B@pacbell.net>
Source record: 173586

Cecil wrote:
>
> Fractenna wrote:
> > How many OTHER hams have been murderers??!
>
> I have been keeping mental track for 50 years. The answer is:
> a bunch. Of course, there are lots of hams. My observation
> is that a lot of antisocial males become hams. I know quite a
> number of them. Consider the number of hams who would rather
> cuddle up to a warm radio than a warm woman.
> --
> http://www.mindspring.com/~w6rca

I prefer 'em hot and chubby, myself. (The women, not the radios.) Since the power situation here in California is forcing us to run our heaters qrp, a warm woman is becoming more and more a necessity. As for hams being killers, consider this: National Rifle Association members presumably have a lot of guns, but one rarely reads of a killer who is also a member of the National Rifle Association. Hams own radios, but it's not uncommon to hear of a ham bumping someone off. Does this mean we should invent a new slogan, "Guns don't kill people, radios kill people!"

Tom Donaly KA6RUH

5229. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:26:04 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <cfhi29.k55.ln@mail.specsol.com>
Source record: 173577

Richard Harrison <richardharrison@webtv.net> wrote:
> David Windisch wrote:
> ""So Ed (Hare)..What IS the League`s major cash-cow, now that you`ve
> implied that there may be one?"

> Ed`s answer hasn`t appeared on my screen yet.

> The League is incorporated in connecticut, and for tax purposes
> qualifies as an exempt (not for profit corporation) organization under
> U.S. law.

> The League can`t legally distribute surplus cash as dividends to
> member/owners. It spends its revenes on operations.

> I think the League should be required to give a full and detailed
> periodic financial report to its members. If so, Ed Hare could answer
> the "cash cow" question by reference to the latest financial report to
> the members.

> I looked through a 1998 QST issue received when I was a member, and
> found no circulation numbers nor commercial ad rates.

> Ed implied that an ARRL book price was low and thus no "cash cow". Maybe
> ARRL hopes to make up in volume what it loses in price.

> I would speculate that ad sales in QST produce more income to ARRL than
> member dues or publication sales. Being tax exempt is unfair to other
> publishers. Tax payers are real contributors to QST`s advertising
> business. Tax payers push the wagon while ARRL HQ gets a free ride.

> Best regards, Richard Harrison, KB5WZI

The same things can be said for just about any exempt organization; Sierra
Club, Greenpeace, MADD, Catholic Church, etc.

Do you want to change the exempt rules in general or do you just have
an ax to grind with the ARRL?

BTW, anyone else hear about the enviro group (forget which one it was)
that was selling mouse pads and had to recall them because they were
contaminated with some Brazilian jungle fungus?

Jim Pennino

5230. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:36:41 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <6_336.335$e5.871193@news.ntplx.net>
Source record: 173578

David J. Windisch <davidw@copper.net> wrote:

> What IS the League's major cash-cow, now that you've implied that there may
> be one?

Do you really believe that saying that a particular book is not a cash cow means anything other than that the book is not a cash cow?

Although such "flagship" publications as the ARRL Handbook and ARRL Antenna Book are a significant revenue source, I don't think that either of them is priced such that I would call them cash cows. The last time I was at a major book store, I got sticker shock by looking at the prices of some of the equivalent books.

73,
Ed Hare, W1RFI

5231. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:42:36 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ceii29.k55.ln@mail.specsol.com>
Source record: 173582

Fractenna <fractenna@aol.com> wrote:

> Jim,

> You really do like disseminating lies.

What lie? You mean the question of why you started this crap in the first
place?

The word "you" can be singular or plural; posters from fractenna@aol.com
started and keep adding to this crap. Where's the lie?

If you (singular) don't like the association of your (plural) postings,
get a separate account.

> Why don'y you do something constructive like CALL this guy KB1EVA?

A totally insane comment not worthy of reply.

> Listen carefully. You need to DROP me as your focus. The new year arrives soon
> and it's up to you to make sure its a good one.

> 73
> Chip N1IR

Read carefully...

You are truely mentally distubed if you think you are a "focus" for me,
much like someone else we've been discussing thought the personel
department of his company was "focusing" on him.

Since you've bestowed the power upon me to make sure the new year is a
good one, I hearby declare peace in the Middle East, the end of malaria
in third world countries, and unlimited electrical power to all nations.

Jim Pennino

5232. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:43:01 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <e5mDi8bcAHA.268@cpmsnbbsa07>
Source record: 173588

Bill Nelson wrote:

>A dipole (inverted V) is probably the easiest to set up and match. Save
>the long wire for later.

Agreed: The dipole tuned for 28.4 will go up in a flash, and will get him on the air where he can enjoy radio. It will also serve as a reference antenna for the 3 el yagi that he will need as the band condx declines. With a low power radio and a dipole, you can hear more than you can work. The Cushcraft 10-3 at 30-35 feet will seem like a miracle!!!

See you guys around 28.4

Mike Lucas W5CHR
Memphis, Tenn.

5233. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:52:24 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o0ji29.k55.ln@mail.specsol.com>
Source record: 173581

Fractenna <fractenna@aol.com> wrote:
>>Prof. Beaker <beaker@pim.com> wrote:
>>> When did it happen whats it all about?
>>
>>I don't see how anyone in North America could have missed this story; it's
>>all over every mass media outlet.
>>
>>Assuming you are somewhere else, another clown went nuts and shot up his
>>workplace. See any news site if all you get is Internet news.
>>
>>If you are in North America, you need to get out more and find out what's
>>happening in the real world.
>>
>>Jim Pennino
>>

> There's no need to be rude to this person--or anyone else there Jim. He just
> asked a reasonable question. Maybe he didn't make the connection with
> Wakefield, understandable if you are not from the Boston area.

> Please lighten up. Thanks.

> 73
> Chip N1IR

"WAKEFIELD, Mass. -- An employee wielding a semiautomatic rifle and a
shotgun opened fire at an Internet consulting company Tuesday, killing seven
co-workers before being subdued by police, authorities said."

Orange County Register (California) December 27, 2000; note the capitalized,
by the paper, first word.

Take your prozac. Thanks.

Jim Pennino

5234. Re: Murders/Hams/Stats

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:54:22 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <e4ji29.k55.ln@mail.specsol.com>
Source record: 173580

Pete Holden <peholden@home.com> wrote:
> Let me interject a little bit of sanity here....

> The overall U.S. murder rate is 6.8 murders per 100,000 population. So, if
> hams were representative of the population, we would be seeing about 44
> ham-committed murders a year (based on a ham population of 650,000).

> My guess is that it is nowhere near that high.

> Stop worrying, folks.

> Pete, KA0TZK

Aw, there you go using numbers and science to spoil the fun of the paranoids.

Jim Pennino

5235. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 17:55:57 UTC
From: rwclark@seanet.com
Message-ID: <3a5bca46.512405750@news.seanet.com>
Source record: 173579

On Thu, 28 Dec 2000 18:33:03 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:

>Fractenna <fractenna@aol.com> wrote:
>>>Hi Jim,
>>>
>>>The first to note the obvious, congrats!
>>>
>>>And to expect it is someone ELSEs responsibility (the ARRL) to enforce
>>>a prohibition is even more remarkable in that it would necessarily
>>>have to start with the poster of this trash.
>>>
>>>73's
>>>Richard Clark, KB7QHC
>>>
>
>> Yeh Richie there sure are some messed up hams out there that think they can
>> just break the law and nothing happens. Well, speaking of that I overheard
>> something last week that surely will make YOUR millenium!
>
>> hahhhaha!
>
>> Calling ME trash!? HAHAHAHA!!! Wait til you get to know the legal system
>> better:-)!
>
>> Phil de N1ZKT
>
>Oh geez, another threat to "get even".
>
>Someone make sure this clown doesn't have any weapons before we read about
>him in the mass media.
>
>Jim Pennino

C'mon Jim,

Getting even? Look at the other postings to observe the severe
back-pedaling going on - getting behinder is more like it. ;->

Odd how we hear of calamities from this source and they always seem to
be workplace related and an issue of dysfunctional relationships.
Remember the claim that hackers destroyed their site? The server
technicians pointed out that this was a problem of insiders, not
faceless hacks. How about the "anonymous" e-mail to the U? Again
server technicians pointed out that the source was internal.

73's
Richard Clark, KB7QHC

5236. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:04:54 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4CD246.F0672DD0@pim.com>
Source record: 173583

Stick it up you ass.

Jim Pennino wrote:

> Prof. Beaker <beaker@pim.com> wrote:
> > When did it happen whats it all about?
>
> I don't see how anyone in North America could have missed this story; it's
> all over every mass media outlet.
>
> Assuming you are somewhere else, another clown went nuts and shot up his
> workplace. See any news site if all you get is Internet news.
>
> If you are in North America, you need to get out more and find out what's
> happening in the real world.
>
> Jim Pennino

5237. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:06:27 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4CD2A2.6DAAA8DE@pim.com>
Source record: 173584

You take YOUR prozac Pennino. Do you think everyone has
their eyes glued to the TV all day long like yourself?

Jim Pennino wrote:

> Fractenna <fractenna@aol.com> wrote:
> >>Prof. Beaker <beaker@pim.com> wrote:
> >>> When did it happen whats it all about?
> >>
> >>I don't see how anyone in North America could have missed this story; it's
> >>all over every mass media outlet.
> >>
> >>Assuming you are somewhere else, another clown went nuts and shot up his
> >>workplace. See any news site if all you get is Internet news.
> >>
> >>If you are in North America, you need to get out more and find out what's
> >>happening in the real world.
> >>
> >>Jim Pennino
> >>
>
> > There's no need to be rude to this person--or anyone else there Jim. He just
> > asked a reasonable question. Maybe he didn't make the connection with
> > Wakefield, understandable if you are not from the Boston area.
>
> > Please lighten up. Thanks.
>
> > 73
> > Chip N1IR
>
> "WAKEFIELD, Mass. -- An employee wielding a semiautomatic rifle and a
> shotgun opened fire at an Internet consulting company Tuesday, killing seven
> co-workers before being subdued by police, authorities said."
>
> Orange County Register (California) December 27, 2000; note the capitalized,
> by the paper, first word.
>
> Take your prozac. Thanks.
>
> Jim Pennino

5238. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:07:29 UTC
From: richardharrison@webtv.net
Message-ID: <18077-3A4CD2E1-47@storefull-112.iap.bryant.webtv.net>
Source record: 173587

Ed Hare made a very nice response to the ARRL questions. From the rates ARRL quotes for QST ads, and from the ad space counted in an issue of QST, several hundred thousand dollars a month are received in ad revenues.

If member numbers are multiplied by dues and divided by 12, this income would exceed ad income for at least some of the months, if I calculated correctly using insufficient information.

ARRL probably does not credit QST with all dues receipts as the subscription to QST may be considered only part of ARRL`s service to its members.

Ed is well justified on the basis of quoted sales of the little book in saying that the book is "no cash cow". I hope sales improve.

Best regards, Richard Harrison, KB5WZI

5239. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:08:16 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4CD310.97F3A9BE@pim.com>
Source record: 173585

What is your real problem Pennino. We're all very curious.

Jim Pennino wrote:

> Fractenna <fractenna@aol.com> wrote:
>
> <crap snipped>
>
> >>
> >>The only people that seem "hot and bothered" by a possible ham connection
> >>all seem to post from fractenna@aol.com.
> >>
> >>The rest of us couldn't seem to care less.
> >>
> >>Jim Pennino
> >>
>
> > Actually Jim, I just checked dejanews and according to it, lots of folks in
> > several different NG's seem very interested.
>
> And I can't imagine why...
>
> Any of them have NOTHING to do with ham radio?
>
> > I hope you will agree with me that this is all very much off base until shown
> > otherwise.
>
> > 73
> > Chip N1IR
>
> Then why did you start this crap in the first place?
>
> Jim Pennino

5240. New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:31:32 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3A4CD884.EAE828F4@aztek-eng.com>
Source record: 173589

Once again the ratio of antenna related posts to bullshit
is at a near record low. Congrats!!!

LArry, W0QE

5241. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 18:40:53 UTC
From: fractenna@aol.com
Message-ID: <20001229134053.03755.00004536@ng-md1.aol.com>
Source record: 173590

>
>David J. Windisch <davidw@copper.net> wrote:
>
>> What IS the League's major cash-cow, now that you've implied that there
>may
>> be one?
>
>Do you really believe that saying that a particular book is not a cash cow
>means anything other than that the book is not a cash cow?
>
>Although such "flagship" publications as the ARRL Handbook and ARRL Antenna
>Book are a significant revenue source, I don't think that either of them is
>priced such that I would call them cash cows. The last time I was at a
>major book store, I got sticker shock by looking at the prices of some of
>the equivalent books.
>
>73,
>Ed Hare, W1RFI
>

Hmmm...what equivalent books?

73
Chip N1IR

5242. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:08:51 UTC
From: k1bqt@aol.com
Message-ID: <20001229140851.11051.00000140@ng-fy1.aol.com>
Source record: 173591

>.....one rarely reads of a killer who is also a member of the National Rifle Association.<

....or a AAA member intentionally crossing the sidewalk to hit a pedestrian.

Ask any FBI agent....the most dangerous person is the one who feels maligned and has a score to settle.

Rick K1BQT

5243. Re: 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:15:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4CE2B4.71C4@wt.net>
Source record: 173592

Jean Pierre Magnan wrote:
>
> I am planning on putting a 10 meter antenna up. I am on a thight budget.
>
> 1st scenario: I use a friend's MFJ-16010 random length wire tuner. I could
> string a 150-200 feet insulated wire in the trees around the house. This
> would cost me next to nothing. The only problem is that I don't have the
> manual for the tuner so how should I attach the long wire to the tuner.
> There is no lug at the back of the tuner, only an SO-239 connector.
>
> 2nd scenario: I could get a Cushcraft TEN-3 beam for about 130$ (CAN). I
> figure I could use my TV rotor to rotate it. It'll be at around 25 feet
> above ground until I can get my tower up.

I'll add one I haven't seen mentioned yet...A cb antenna, or a homebrew vertical or ground plane for that matter. I'd much prefer the beam, but a GP can be mounted on a simple mast. There are many flavors. The cushcraft AR-10 is a simple fairly cheap antenna that doesn't require radials for decent operation. "A radial set can be added to further improve". Or any of the popular cb antennas will work. There is one I think is called a mako 5/8 wave GP. It's real handy as it uses a single turn loop of the type used on many 1/2 waves. So you can use the antenna either way. With the radials as a 5/8, or you can ditch the radials and shorten to a 1/2 wl and it will work fine. That is what I'm using on 10m right now. I got the antenna free but without the radials. So I use it as a 1/2 wave. The dipole will work ok for much stuff, but I'd prefer a good vertical anyday on 10m. The local coverage will be much better, and the antennas are well suited for dx which almost all the 10m activity will be. Junk cb antennas a great source for 10m antennas. 25 ft will work fine. If you can get a 36 ft radio shack mast all the better. A cb antenna at 35 ft will do great on 10. I'd rather have the beam, but much more work involved. Money too. BTW, Mines only at 20 ft right now on two sections of 10 ft fence rail. Still does ok. MK

--
http://web.wt.net/~nm5k

5244. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:47:51 UTC
From: "Dr. Vecchio" <104204.707@compuserve.com>
Message-ID: <92ipp5rof1@nnrp1.deja.com>
Source record: 173595

It seems the probe is a more complex device than I had originally
imagined (when I bought this probeless 4815a).
Thanks much for the info.
- Chris KB3FWA

In article <92gcts$9c3$1@bob.news.rcn.net>,
"Chuck O'Neal" <coneal@ultranet.com> wrote:
> I had my HP4815A probe repaired two years ago by
> the gentleman that used to run the HP line that
> made the 4815 and the probes. The last email
> address I had for him was: 72540.1345@compuserve.com
> His phone # is: 908-852-7989 He was very helpful as I
> recall.

Sent via Deja.com
http://www.deja.com/

5245. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:48:24 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4ce9b5.119460301@news.akorn.net>
Source record: 173593

On Thu, 28 Dec 2000 11:00:44 -0600, Mark Keith <nm5k@wt.net> wrote:

>Richard Clark wrote:
>
>>
>> Thus to answer your question in the context of this thread, shorter
>> radials may be effective for a MATCH condition, but have no effect in
>> the launch condition. The same answer could be applied to lengthened
>> radials (that is, until they are some 5 to 10 wavelengths long) too.
>
>Hummmm, Overall I agree except I'm not sure I would say the system in
>the near field has no effect at all. I notice reading about above ground
>counterpoises that they say the "almost perfect" above ground radial
>system has little effect on the vertical pattern due to the reason you
>give.

The "almost perfect" above ground systems using four or less radials
are certainly critical systems...since the radials couple into
everything (including the lossy dirt below them) quite well.

My idea of almost perfect is a system that always works, and isn't
fussy. It also is a system that puts the RF where I want it instead of
where luck or chance dictates.

73 Tom

5246. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:53:41 UTC
From: "Dr. Vecchio" <104204.707@compuserve.com>
Message-ID: <92iq42rtn1@nnrp1.deja.com>
Source record: 173596

Well, if anyone has a schematic & parts list for the 4815A probe I'd
like to take a stab at building one.
Even if a homebrew version doesn't have the accuracy of the original
it would still make a usefull device.
If I get a circuit to work I'll be sure to post the results.

- Chris, KB3FWA

> Hi OM,
>
> I would re-evaluate the need for "special facilities" given that
> technology has progressed since these were constructed. What I mean
> by this is that the circuitry is undoubtedly simple, but the parts
> "were" exotic at the time of manufacture.
>
> What was exotic back then is typical today. I would guess that
> surface mount components would meet every technical challenge (if you
> can reasonably find replacement values for the semiconductors
> (probably matched - and probably your greatest challenge)).
>
> 73's
> Richard Clark, KB7QHC
>

Sent via Deja.com
http://www.deja.com/

5247. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 19:54:25 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4ceb64.119891471@news.akorn.net>
Source record: 173594
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 28 Dec 2000 04:55:33 GMT, "dentronman" <w9jcm@.reno.quik.com>
wrote:

>The are known as CushCrap.

By that do you mean the engineering was as shoddy as Dentron's, or the
construction, or the materials?

73 Tom

5248. Re: hexbeam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:01:46 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4cecca.120249580@news.akorn.net>
Source record: 173597

On Thu, 28 Dec 2000 02:51:26 GMT, "Floyd Sense"
<sentek@sprintmail.com> wrote:

>Yes - I compared it on paper to several tribanders. None of them worked
>worth a hoot on 17 and 12 M. On the other bands, I compare it to tribanders
>everyday in pileups. They usually lose.
>
>
>
>K8AC

Sounds like a very subjective opinion, rather than anything
meaningful.

On the other hand, Rick compared two actual antennas at one location
at the same time. That is certainly many times more reliable and
accurate that "feelings".

73 Tom

5249. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:07:45 UTC
From: rwclark@seanet.com
Message-ID: <3a5deee5.521780710@news.seanet.com>
Source record: 173599

On Fri, 29 Dec 2000 19:53:41 GMT, Dr. Vecchio
<104204.707@compuserve.com> wrote:

>
>Well, if anyone has a schematic & parts list for the 4815A probe I'd
>like to take a stab at building one.
>Even if a homebrew version doesn't have the accuracy of the original
>it would still make a usefull device.
>If I get a circuit to work I'll be sure to post the results.
>
>- Chris, KB3FWA
>

Hi Chris,

I would be most interested in that (and the schematic).

73's
Richard Clark, KB7QHC

5250. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:09:16 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4cee4f.120638526@news.akorn.net>
Source record: 173598

On 28 Dec 2000 22:00:44 GMT, fractenna@aol.com (Fractenna) wrote:

>If you talk to biz people its disturbing how many of them think we ARE wacko.
>Some of the crud that happens right here for example does nothing to change
>that only enforce that.

Maybe the people who know you and Chip have that impression, but most
people I know think highly of Hams.

Now what could the difference be?

Everyone who "Phil" the ham knows thinks Hams are whacko.

Everyone I know thinks they are not.

Hmmmmm. There has to be a difference.

>We go to take this Macdermot thing seriously before the image of hams is
>irreparably harmed.
>Again I ask--what is ARRL's response???

I think it should be to get N1ZKT and N1IR's tickets revoked, so
people don't think all Hams are wacked-out immature idiots.

73 Tom

5251. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:13:36 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4cef85.120948076@news.akorn.net>
Source record: 173600

On Thu, 28 Dec 2000 12:53:36 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>If you feed your loop at the bottom or the top, it'll be horizontally
>polarized. The conductivity of the surrounding ground will have very
>little effect on the signal strength except at very high elevation
>angles, so it won't help to be beside a lake.

I've probably missed something, but it sounds like someone asked about
moving the feedpoint.

If it is a 1,5 meter loop on 80 meters you can feed it anywhere you
like and the pattern and loss is the same, as long as the feedline
isn't part of the radiating system and the loop isn't jammed right
against something conductive.

73 Tom

5252. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:16:06 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4cf060.121167488@news.akorn.net>
Source record: 173601

On Thu, 28 Dec 2000 15:07:23 -0800, "Prof. Beaker" <beaker@pim.com>
wrote:

>Haven't heard anything about it.

I think Wake Field is a Jewish burial ground, at a college in Boston.

I'm not sure though.

73 Tom

5253. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:19:49 UTC
From: 2w8ji@contesting.com
Message-ID: <3a4cf14d.121404951@news.akorn.net>
Source record: 173602

On Fri, 29 Dec 2000 11:31:32 -0700, Larry Benko <benko@aztek-eng.com>
wrote:

>Once again the ratio of antenna related posts to bullshit
>is at a near record low. Congrats!!!
>
>LArry, W0QE

When my server saiud there were 271 new posts in two days, I knew N1IR
was busy again.

The boy really knows how to trash a newsgroup!

73 Tom

5254. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:51:53 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9hti29.0if.ln@mail.specsol.com>
Source record: 173606

Rick Littlefield <k1bqt@aol.com> wrote:
>>.....one rarely reads of a killer who is also a member of the National Rifle
> Association.<

> ....or a AAA member intentionally crossing the sidewalk to hit a pedestrian.

> Ask any FBI agent....the most dangerous person is the one who feels maligned
> and has a score to settle.

> Rick K1BQT

Rick,

You mean someone that constantly complains of being "attacked" and the "focus"
of others; threatens to "settle" things, start suits, get people fired for
their "harassment"?

Glad there is no one like that on these newsgroups....

Jim Pennino

5255. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:53:20 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <0kti29.0if.ln@mail.specsol.com>
Source record: 173605

Prof. Beaker <beaker@pim.com> wrote:
> What is your real problem Pennino. We're all very curious.

Blithering assholes.

Any other questions about current events?

Jim Pennino

5256. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:57:21 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fW636.347$e5.886481@news.ntplx.net>
Source record: 173603

Richard Harrison <richardharrison@webtv.net> wrote

> Ed Hare made a very nice response to the ARRL questions. From the rates
> ARRL quotes for QST ads, and from the ad space counted in an issue of
> QST, several hundred thousand dollars a month are received in ad
> revenues.

That seems about right to me, although this is, if memory serves, broken down more accurately in the annual reports.

> If member numbers are multiplied by dues and divided by 12, this income
> would exceed ad income for at least some of the months, if I calculated
> correctly using insufficient information.

Again, about right, although one must remember that ad revenues are related to membership numbers. It is also a bit more complicated because some of the ad revenues go toward the costs of producing the magazine; some of the dues revenues go toward the cost of mailing the magazine, etc. As a dues-paying member (yup, I pony up every year, too), I take some consulation in the fact that some portion of what the ARRL does for me is paid for by advertisers. Much better than seeing my dues at the same level as my IEEE dues rates. :-)

> ARRL probably does not credit QST with all dues receipts as the
> subscription to QST may be considered only part of ARRL`s service to its
> members.

I am not 100% sure of what this means, but if I do understand the gist of it, I will add that the majority of ARRL's revenues come from membership dues, ad revenue, pub sales and the return on its investment portfolio. (An organization that takes on a number life members had BETTER have an investment portfolio or it all comes down like a house of cards.) A smaller amount comes from individual donations, some to specific named funds.

> Ed is well justified on the basis of quoted sales of the little book in
> saying that the book is "no cash cow". I hope sales improve.

Back full circle, the book was not created to be a revenue source. Much like the content of the RFI Book, ARRL believes that putting the most important part of that information on its public web pages is good for the Amateur Radio Service. The book was created and priced low to help hams comply with the FCC rules on RF and station evaluations. The revenues fro the book partially offset the costs ARRL incurred in working with the FCC for almost a year and in then documenting the needed material for almost any related circumstance. I say partially because the rest was funded by membership dues and ad revenues. :-)

73,
Ed Hare, W1RFI
ARRL Lab

5257. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 20:59:46 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92iu05csm1@iac5.navix.net>
Source record: 173604

****** For Immediate Release ********
To all the news media and ships at sea.
The dynamic duo at Fractenna.com would like the world to know that the despite the killings in Wakefield, and the fact the perpetrator held an amateur radio technician class license, in no way are the two related. Fracktenna states that amateur Dr. Cohen denies that in spite of his many years as an amateur radio operator, and a renowned inventor and contester that his neighbors have anything to fear. Phil, his loyal mignon was heard to say "Most hams are normal, except when they are killing people, and we just wanted to set the record straight"

"We had counted on the ARRL to make an official denial, but they apparently did not see fit to protect the hams such as myself, I think they are out to get me, in fact my attorney is at this moment drawing up papers to sue them. They will learn what the law means in 2001"

"As you can see both myself and Phil"... what do you mean you don't see Phil... your out to get me as well.. Your going to learn about the law... Where did I put my BB-gun...

"Tom W8JI" <2w8ji@contesting.com> wrote in message news:3a4cee4f.120638526@news.akorn.net...
> On 28 Dec 2000 22:00:44 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >If you talk to biz people its disturbing how many of them think we ARE wacko.
> >Some of the crud that happens right here for example does nothing to change
> >that only enforce that.
>
> Maybe the people who know you and Chip have that impression, but most
> people I know think highly of Hams.
>
> Now what could the difference be?
>
> Everyone who "Phil" the ham knows thinks Hams are whacko.
>
> Everyone I know thinks they are not.
>
> Hmmmmm. There has to be a difference.
>
> >We go to take this Macdermot thing seriously before the image of hams is
> >irreparably harmed.
> >Again I ask--what is ARRL's response???
>

> I think it should be to get N1ZKT and N1IR's tickets revoked, so
> people don't think all Hams are wacked-out immature idiots.
>
> 73 Tom

5258. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:00:55 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <CZ636.350$e5.886574@news.ntplx.net>
Source record: 173607

Fractenna <fractenna@aol.com> wrote:

> >Although such "flagship" publications as the ARRL Handbook and ARRL
Antenna
> >Book are a significant revenue source, I don't think that either of them
is
> >priced such that I would call them cash cows. The last time I was at a
> >major book store, I got sticker shock by looking at the prices of some of
> >the equivalent books.

> Hmmm...what equivalent books?

By equivalent, I meant equivalent in size and technical depth. As I recall, there was a large Windows programming manual (aftermarket, not MS) that cost about $100.00.

If you want REAL sticker shock, take a look at some of the book prices at http://shop.ieee.org/store/. :-)

73,
Ed Hare, W1RFI

5259. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:08:11 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <rfui29.0if.ln@mail.specsol.com>
Source record: 173610

Prof. Beaker <beaker@pim.com> wrote:
> You take YOUR prozac Pennino. Do you think everyone has
> their eyes glued to the TV all day long like yourself?

Do you still beat your wife? The question assumes a whole lot.

It is obvious Prof. Beaker isn't a professor of logic.

Since the story was a head line story on the Los Angeles Times,
the Orange County Register, and every little local paper around, it
would be hard to miss if you EVER read a newspaper or just glance at
a news stand in passing.

Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
News and Contra Costa Times.

You might try reading a newspaper once in a while.

It was on every news segment of every radio station of all formats; rock,
oldies, talk, easy listening, etc.

You might try listening to the radio on the way to and from work once
in a while.

It was on every news broadcast of all the TV networks.

Since you don't seem to know much about what's happening in the world,
you might also be interested to know Bush is now officially President
Elect, Elian is back in Cuba and Elvis is still dead.

Jim Pennino

5260. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:26:23 UTC
From: fractenna@aol.com
Message-ID: <20001229162623.08852.00000365@ng-ff1.aol.com>
Source record: 173608

>On Fri, 29 Dec 2000 11:31:32 -0700, Larry Benko <benko@aztek-eng.com>
>wrote:
>
>>Once again the ratio of antenna related posts to bullshit
>>is at a near record low. Congrats!!!
>>
>>LArry, W0QE
>
>When my server saiud there were 271 new posts in two days, I knew N1IR
>was busy again.
>
>The boy really knows how to trash a newsgroup!
>
>73 Tom
>

What?!

Stop your lies sir;

I believe I posted 4-5 times.
Why do you hold ME responsible for the behavior of others? What right do you have to focus on me in this very negative way?

NC

5261. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:27:51 UTC
From: fractenna@aol.com
Message-ID: <20001229162751.08852.00000366@ng-ff1.aol.com>
Source record: 173609

>
>****** For Immediate Release ********
> To all the news media and ships at sea.
>The dynamic duo at Fractenna.com would like the world to know that the
>despite the killings in Wakefield, and the fact the perpetrator held an
>amateur radio technician class license, in no way are the two related.
>Fracktenna states that amateur Dr. Cohen denies that in spite of his many
>years as an amateur radio operator, and a renowned inventor and contester
>that his neighbors have anything to fear. Phil, his loyal mignon was heard
>to say "Most hams are normal, except when they are killing people, and we
>just wanted to set the record straight"
>
>"We had counted on the ARRL to make an official denial, but they apparently
>did not see fit to protect the hams such as myself, I think they are out to
>get me, in fact my attorney is at this moment drawing up papers to sue them.
>They will learn what the law means in 2001"
>
>"As you can see both myself and Phil"... what do you mean you don't see
>Phil... your out to get me as well.. Your going to learn about the law...
>Where did I put my BB-gun...
>
>"Tom W8JI" <2w8ji@contesting.com> wrote in message
>news:3a4cee4f.120638526@news.akorn.net...
>> On 28 Dec 2000 22:00:44 GMT, fractenna@aol.com (Fractenna) wrote:
>>
>> >If you talk to biz people its disturbing how many of them think we ARE
>wacko.
>> >Some of the crud that happens right here for example does nothing to
>change
>> >that only enforce that.
>>
>> Maybe the people who know you and Chip have that impression, but most
>> people I know think highly of Hams.
>>
>> Now what could the difference be?
>>
>> Everyone who "Phil" the ham knows thinks Hams are whacko.
>>
>> Everyone I know thinks they are not.
>>
>> Hmmmmm. There has to be a difference.
>>
>> >We go to take this Macdermot thing seriously before the image of hams is
>> >irreparably harmed.

>> >Again I ask--what is ARRL's response???
>>
>> I think it should be to get N1ZKT and N1IR's tickets revoked, so
>> people don't think all Hams are wacked-out immature idiots.
>>
>> 73 Tom
>

FYI...in case anyone wonders about why the new year brings legal issues, see for yourself.

NC

5262. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:32:35 UTC
From: fractenna@aol.com
Message-ID: <20001229163235.28241.00000192@ng-ff1.aol.com>
Source record: 173611

>
>Fractenna <fractenna@aol.com> wrote:
>
>> >Although such "flagship" publications as the ARRL Handbook and ARRL
>Antenna
>> >Book are a significant revenue source, I don't think that either of them
>is
>> >priced such that I would call them cash cows. The last time I was at a
>> >major book store, I got sticker shock by looking at the prices of some of
>> >the equivalent books.
>
>> Hmmm...what equivalent books?
>
>By equivalent, I meant equivalent in size and techncial depth. As I recall,
>there was a large Windows programming manual (aftermarket, not MS) that cost
>about $100.00.
>
>If you want REAL sticker shock, take a look at some of the book prices at
>http://shop.ieee.org/store/. :-)
>
>73,
>Ed Hare, W1RFI
>

Without any disrespect, I don't believe the ARRl publications are in this category. They are worthwhile for what they are--and I own them, including the leather-bound latest ARRL Antenna book-- but I would place them in categories such as one finds with TAB, CQ, RSGB, and other publishers.

I don't feel they are a 'bargain' in comparison, but priced at the top end for what the market will bear, and priced to tradeoff volume versus price.

73
Chip N1IR

5263. Re: Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:39:14 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <5t736.995$94.79607@e420r-atl2.usenetserver.com>
Source record: 173612

Try running a wire arounr the perimeter of the garage, as high as possible,
in essence, a horizontal quad. feed with 2 -75 ohm coax, shilds connectred
together at ends, to make a ballanced feed line. use an appropriate antenna
tuner. hould work on 40 and up for an average garage.
If it don't worl as well as you'ld like, quietly take it down and try
another. A folded ZL-special might fit.
luck
bob w4mb

5264. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:42:39 UTC
From: n2ey@aol.com
Message-ID: <20001229164239.18498.00000668@nso-mh.aol.com>
Source record: 173613

In article <3A4BAC20.A27A1C28@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Joe wrote:
>> That's just great. And if he is, we can start the myth that hams are
>> mostly wacko, just like Vietnam Vets.
>
>Aren't most hams wacko?

Most of the ones I know are wonderful people and not "wacko" at all. There are rare exceptions, of course.

>Proof is on r.r.a.p.

Proof of what? Perhaps a dozen people regularly post there. That's about .00176% of the US ham population. And no way is it a representative sample.

Of that dozen, there are only a few "wacko" people. One guy says he may be a 300,000 foot tall space alien and waves his IQ around at the slightest provocation. Another isn't a ham and keeps changing his AOL screen name for some reason. A third thinks it's a chat room and mostly posts "LOL" and other nonsense.

The rest just like to argue.

What class license does this Wakefield guy have? What organizations does he belong to?

I'm amazed that we have so FEW "wacko" hams. I figure that since 1970 there have been at least a million different US citizens with ham licenses, yet only a couple of them have turned out to be violent criminals. Compare that to a random sample of a million Americans.

Note also that Timothy McVeigh didn't use any guns.

73 de Jim, N2EY

5265. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 21:50:33 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92j0vc$e67$1@iac5.navix.net>
Source record: 173614

NIKE!

"Fractenna" <fractenna@aol.com> wrote in message > FYI...in case anyone wonders about why the new year brings legal issues, see
> for yourself.
>
> NC

5266. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 22:08:15 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <92j22j$ds7@nnrp3.farm.idt.net>
Source record: 173554

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A49CDEC.6FB57D6@eznec.com...
> "Leland C. Scott" wrote:
>
> [Good and interesting calculations]
>
>
> If there was a connector at the antenna and the antenna had some means
> of matching (a gamma match for example), it could be adjusted to
> compensate for the connector. Again, the transmission line would have a
> 1:1 SWR and everything would be properly matched.
>
> The trick is to have the connector close to the point where a
> compensating matching network can be placed (or at a point where a
> network already is -- a network that can be adjusted or designed to
> compensate for the connector).

The above is very true. Since you would have a non-50 ohm load on the line,
the line would "transform" the impedance. So the closer you can keep the
mismatch to the matching network, the less the transmission line will alter
the impedance.

--
73's,

Leland C. Scott
KC8LDO

5267. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 22:20:56 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <D8836.358$e5.890977@news.ntplx.net>
Source record: 173615

Fractenna <fractenna@aol.com> wrote:

> >By equivalent, I meant equivalent in size and techncial depth. As I recall,
> >there was a large Windows programming manual (aftermarket, not MS) that cost
> >about $100.00.

> >If you want REAL sticker shock, take a look at some of the book prices at
> >http://shop.ieee.org/store/. :-)

> Without any disrespect, I don't believe the ARRl publications are in this
> category. They are worthwhile for what they are--and I own them, including the
> leather-bound latest ARRL Antenna book-- but I would place them in categories
> such as one finds with TAB, CQ, RSGB, and other publishers.

I agree that the ARRL pubs are not in the same technical category as IEEE pubs.

Some of the ARRL pubs are, IMHO, on a par with TAB's books, which tend toward the lower tech presentations, as a rule. Some, like the ARRL Handbook and Antenna Book, are on a par with the RSGB books, which tend toward the higher tech end.

> I don't feel they are a 'bargain' in comparison, but priced at the top end for
> what the market will bear, and priced to tradeoff volume versus price.

I don't imagine that any major publisher would consider ARRL books to be "volume" in any sense of the word. Do you feel that the couple of hundred RFX books sold any month are trading volume for price? The RFI Book, another book that I reasonably closely monitor, also sells 100-200 per month.

The >1000 page ARRL Handbook sells for $32.00. Do you believe it would be possible to produce a book that sells in the tens of thousands per year at a significantly lower price?

I do think that the pricing on the books is set at whatever reasonable level is believed will maximize revenues minus cost. OTOH, the ARRL Board of Directors would never stand for pricing it believed to be predatory. :-)

73,
Ed Hare, W1RFI

5268. ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 22:51:26 UTC
From: tgirwf@bigfoot.com
Message-ID: <92j4h7$2b2$1@bob.news.rcn.net>
Source record: 173616

I know this post might be off-topic but could find no other newsgroup that had "antenna" in its name. I'd be most appreciative if someone could point to a more suitable discussion or other source of information.

I've seen advertised a device that claims to allow you to use the electrical wiring of your house as a tv antenna. You plug this device into an outlet, and then use connections it provides as your tv antenna.

I'm trying to find out if this actually works but have not been able to find any reviews.

Pointers to sources of information would be appreciated.
Email please, to tgirwf@bigfoot.com

Thanks in advance,
and please excuse this "close-to-off-topic" post

Richard

5269. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 22:53:53 UTC
From: johnl84238@aol.com
Message-ID: <20001229175353.05599.00000237@ng-fo1.aol.com>
Source record: 173617

I think I may have discovered an important correlation:
1)The latest QST on p.9 implies that hams who are cw ops are more satisfied hams.They get more satisfaction because they know the code.....I am a cw op...and I know I do.
2)This guy's was probably a NO-CODE Tech, hence didn't know the code, wasn't a cw op....was not satisfied with just being a NO CODE Tech....and hence...
3)Capped all those poor innocent people.
Maybe the FCC should start doing background checks before issuing NO-CODE Tech licenses.
Seasoned CW ops are satisfied, happy people and would never hurt anyone.
73,
dah-dit dah

5270. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:19:05 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <956j29.gkf.ln@mail.specsol.com>
Source record: 173519

Richard Friday <tgirwf@bigfoot.com> wrote:
> I know this post might be off-topic but could find no other newsgroup that
> had "antenna" in its name. I'd be most appreciative if someone could point
> to a more suitable discussion or other source of information.

> I've seen advertised a device that claims to allow you to use the
> electrical wiring of your house as a tv antenna. You plug this device
> into an outlet, and then use connections it provides as your tv antenna.

> I'm trying to find out if this actually works but have not been able to
> find any reviews.

> Pointers to sources of information would be appreciated.
> Email please, to tgirwf@bigfoot.com

> Thanks in advance,
> and please excuse this "close-to-off-topic" post

> Richard

Those devices have been around for years. Most of them, if they contain
anything at all, contain a couple of capacitors.

The cheapest pair of rabbit ears sold by Radio Shack will work better
than one of these things.

Jim Pennino

5271. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:20:08 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4D1C28.6080802@hiwaay.net>
Source record: 173618

Fracky- I counted at least 19 posts from the first 'wakefield' post- why
do YOU lie about it.?
Come to think about it, your very presence is enough to trash the group-
so many people are so tired of your crap, they respond out of irritation.

Hope this helps

Bill

Fractenna wrote:

>> On Fri, 29 Dec 2000 11:31:32 -0700, Larry Benko <benko@aztek-eng.com>
>> wrote:
>>
>>
>>> Once again the ratio of antenna related posts to bullshit
>>> is at a near record low. Congrats!!!
>>>
>>> LArry, W0QE
>>
>> When my server saiud there were 271 new posts in two days, I knew N1IR
>> was busy again.
>>
>> The boy really knows how to trash a newsgroup!
>>
>> 73 Tom
>>
>
>
>
> What?!
>
> Stop your lies sir;
>
> I believe I posted 4-5 times.
> Why do you hold ME responsible for the behavior of others? What right do you
> have to focus on me in this very negative way?
>
> NC

5272. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:31:33 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Ra936.362$e5.892863@news.ntplx.net>
Source record: 173520

Richard Friday <tgirwf@bigfoot.com> wrote in message
news:92j4h7$2b2$1@bob.news.rcn.net...

> I know this post might be off-topic but could find no other newsgroup that
> had "antenna" in its name. I'd be most appreciative if someone could point
> to a more suitable discussion or other source of information.

> I've seen advertised a device that claims to allow you to use the
> electrical wiring of your house as a tv antenna. You plug this device
> into an outlet, and then use connections it provides as your tv antenna.

> I'm trying to find out if this actually works but have not been able to
> find any reviews.

This device will receive some signals. However, house electrical wiring is
not a very good VHF antenna system for a couple of reasons:

First, it is very difficult to predict the direction that the house wiring
will best receive from. It is quite likely that the antenna pattern will
have all sorts of peaks and nulls, sort of as if you had a rotatable TV
antenna that was pointing in several directions at once. This may not pick
up much of the TV signal you want to pick up or may have multiple responses,
resulting in ghosts.

Also, an electrical power line can be a very noisy place. All sorts of
electronic devices on the line, from power-line equipment itself to every
motor or power supply plugged in near you may create noise that will
interfere with the signal you want to receive.

If you have no other antenna choice, that device may be useable, but I don't
think it will work as well as a good set of "rabbit ears" on top of your TV.

Ed Hare, W1RFI

5273. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:36:11 UTC
From: rwclark@seanet.com
Message-ID: <3a60102c.530299009@news.seanet.com>
Source record: 173521

On Fri, 29 Dec 2000 17:20:56 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>
>The >1000 page ARRL Handbook sells for $32.00. Do you believe it would be
>possible to produce a book that sells in the tens of thousands per year at a
>significantly lower price?
>

Hi Ed,

In all practicality, this is a vanity publication given that your
contributors are unpaid - correct me if this impression (that is all
it is at this point) is out of kilter. Of course there are probably a
number of other (trade) journals that qualify for my aspersion of
being vanity pub.s too. (yeah, I am painting with a very broad
brush.)

This, however says nothing of the greater good of providing a means
for those who wish to publish, and wish to publish to their peers. No
professional outlet (acadmic/business based) would serve this need.
Hence, as I see it, the job of publishing these tomes is found in the
editorial work of combining, assembling and proofing copy.

There is also the issue of the intended audience (once again this
relates to the notion of peerage - not to be confused with those
holding title or the initials KBE). Here, there are no other
"equivalent" works aside from those already identified (TABS and etc.)
which sometimes actually go beyond the imposed label of "professional"
coverage (this is a point of contention because many professionals use
these publications too - hence the field becomes somewhat hazy when
"professional" is tossed around like academic honorifics are here in
this group).

Some here would hold the ARRL to higher standards (read: inappropriate
expectations to meet professional/academic standards) and yet decry
every posting of a passage from such an example of a superlative text
as being name-dropping (standard trolling). The higher standard is
not in the factual accuracy, it is in the conveyance of idea in a form
suitable to the intended audience (there is no such thing as a single
source of knowledge). In other words, those critics are guilty of
effete snobbism. Frederick Terman's works were classics of writing
and being easily absorbed (at least one such snob insisted this was a
function of plagiarism - imagine footnotes are proof of stolen work,
where the refusal to reveal source material is perverted proof of an
original unzipped idea - yeah sure).

Now to return to this notion of vanity press and your question about the price of the book and its comparison to 1000 pages (rather inappropriately posed question which suggests that knowledge is bundled by the pound). Given a score of willing unpaid contributors and my own effort to shepherd these writers into a coherent book, then yes I could do it cheaper. However, I don't have the overhead costs of the ARRL (not an issue whatever that burden may be) and I could probably employ "predatory" practices to come in at less than $20 and still make a buck for my effort. However, that is not a very viable enterprise - a poor business choice even if it is profitable... once.

One fact of life that is lost on many AMATEURS is that most professional reference materials come from vendors in the form of application notes. What these notes lack in credentials they more than make up in actual REAL data with REAL WORKING implementations that actually conform to theory (but don't expect a doctoral thesis proving it). 10 pages of this material is worth 10,000 pages published by the IEEE. I think that Richard Harrison would agree that some titles published by TABS are far more oriented towards the professional than the academic or amateur. Fortunately, lacking that anemic academic perspective makes these same professional treatises accessible to the amateur.

Back to your question (again - suitable for quoting): Could I do it cheaper?

The short answer is Yes - but why - and not for long. The ARRL already does it well, has the appropriate focus, is already known to the target audience, and has committed contributors. These factors are the more compelling than the simple list price or tonnage. ;-)

73's
Richard Clark, KB7QHC

5274. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:40:27 UTC
From: fractenna@aol.com
Message-ID: <20001229184027.02406.00000061@ng-fm1.aol.com>
Source record: 173522

>
>Fractenna <fractenna@aol.com> wrote:
>
>> >By equivalent, I meant equivalent in size and techncial depth. As I
>recall,
>> >there was a large Windows programming manual (aftermarket, not MS) that
>cost
>> >about $100.00.
>
>> >If you want REAL sticker shock, take a look at some of the book prices at
>> >http://shop.ieee.org/store/. :-)
>
>> Without any disrespect, I don't believe the ARRl publications are in this
>> category. They are worthwhile for what they are--and I own them, including
>the
>> leather-bound latest ARRL Antenna book-- but I would place them in
>categories
>> such as one finds with TAB, CQ, RSGB, and other publishers.
>
>I agree that the ARRL pubs are not in the same technical category as IEEE
>pubs.
>
>Some of the ARRL pubs are, IMHO, on a par with TAB's books, which tend
>toward the lower tech presentations, as a rule. Some, like the ARRL
>Handbook and Antenna Book, are on a par with the RSGB books, which tend
>toward the higher tech end.
>
>> I don't feel they are a 'bargain' in comparison, but priced at the top end
>for
>> what the market will bear, and priced to tradeoff volume versus price.
>
>I don't imagine that any major publisher would consider ARRL books to be
>"volume" in any sense of the word. Do you feel that the couple of hundred
>RFX books sold any month are trading volume for price? The RFI Book,
>another book that I reasonably closely monitor, also sells 100-200 per
>month.
>

That wasn't the example I cited...

>The >1000 page ARRL Handbook sells for $32.00. Do you believe it would be
>possible to produce a book that sells in the tens of thousands per year at a
>significantly lower price?
>

Absolutely. This is a paperback! With very little advertising expense, defined distribution, and so forth, the ARRL must be making at least $8-10 per copy. It's likely that the Handbook keeps the ARRL afloat with a cash float of $500K-$800K/year. I am not suggesting this is money wasted; it probably is barely enough to keep the organization solvent.
.
>I do think that the pricing on the books is set at whatever reasonable level
>is believed will maximize revenues minus cost. OTOH, the ARRL Board of
>Directors would never stand for pricing it believed to be predatory. :-)
>

Not predatory, just realistic. The Handbook is certainly not priced to 'break even'. Nor should it be IMHO.

The tradeoff for most hams has become not whether they should buy the Handbook--but whether they should buy one each YEAR. In recent years the trend has been for hams to buy a new handbook every few years. Hence the volume sales has decreased , but offset by the repeat-delay sales, have plateaued at a comfortable level.

A good friend of mine is a publisher BTW:-)

>73,
>Ed Hare, W1RFI
>

73
Chip N1IR

5275. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:49:45 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <92j7tfmfk1@slb7.atl.mindspring.net>
Source record: 173523

"Prof. Beaker" <beaker@pim.com> wrote in message
news:3A4CD246.F0672DD0@pim.com...

> Stick it up you ass.
>

Another PhD shows their talents.

5276. ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:50:58 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <0t936.365$e5.894142@news.ntplx.net>
Source record: 173524

Richard Clark <rwclark@seanet.com> wrote:

> >The >1000 page ARRL Handbook sells for $32.00. Do you believe it would
be
> >possible to produce a book that sells in the tens of thousands per year
at a
> >significantly lower price?

> In all practicality, this is a vanity publication given that your
> contributors are unpaid - correct me if this impression (that is all
> it is at this point) is out of kilter. Of course there are probably a
> number of other (trade) journals that qualify for my aspersion of
> being vanity pub.s too. (yeah, I am painting with a very broad
> brush.)

The contributors to the Handbook are paid at a rate of $65.00 a page and up. "And up" is dependent on whether they can send material pretty much page-layout ready. When I wrote a few chapters for the Handbook on my own time, I didn't qualify for any more than the basic rate -- the editors here all think I am too wordy. :-)

> There is also the issue of the intended audience (once again this
> relates to the notion of peerage - not to be confused with those
> holding title or the initials KBE). Here, there are no other
> "equivalent" works aside from those already identified (TABS and etc.)
> which sometimes actually go beyond the imposed label of "professional"
> coverage (this is a point of contention because many professionals use
> these publications too - hence the field becomes somewhat hazy when
> "professional" is tossed around like academic honorifics are here in
> this group).

The Handbook is NOT an engineering-level publication, although when I give "bent-cover" or last-year's copies to some of the non-ham engineers with whom I work, they are generally appreciative. It does contain a fair amount of practical information lacking in most engineering-level books. Its technical presentation is probably suitable for the more advanced amateur; it is not, IHMO, a book for a relatively beginning ham, although I do hope that most hams will grow to the point where they can derive some value from parts of the book. The Troubleshooting, Circuit Construction and RFI chapters are the most useful ones, of course. :-)

> Some here would hold the ARRL to higher standards (read: inappropriate
> expectations to meet professional/academic standards) and yet decry
> every posting of a passage from such an example of a superlative text
> as being name-dropping (standard trolling).

IMHO, the Handbooks of today have become a bit too high tech; IO would not want to see them made to a higher technical standard than they are if by that one meant a more complex technical content.

> Now to return to this notion of vanity press and your question about
> the price of the book and its comparison to 1000 pages (rather
> inappropriately posed question which suggests that knowledge is
> bundled by the pound). Given a score of willing unpaid contributors
> and my own effort to shepherd these writers into a coherent book, then
> yes I could do it cheaper. However, I don't have the overhead costs
> of the ARRL (not an issue whatever that burden may be) and I could
> probably employ "predatory" practices to come in at less than $20 and
> still make a buck for my effort. However, that is not a very viable
> enterprise - a poor business choice even if it is profitable... once.

By "predatory" I meant charging $100,000 for each book for the three people who might actually pay it. :-) And the reason I cited the >1000 pages was to give people a rough idea of the relative production and printing costs, and to let them compare the $32 against similarly sized somewhat technical publications.

73,
Ed Hare, W1RFI
ARRL Lab

5277. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:53:29 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4D23F8.D9B683D6@pim.com>
Source record: 173525

You are sure a nutcase aren't you Pennino?
Just what is your real problem?
Wife beating? Wow that really came out of left field.
I bet YOU ARE the one with a domestic abuse conviction.
Have a happy new year Pennino you fucking loser.
Are you a spick or Italian?

Jim Pennino wrote:

> Prof. Beaker <beaker@pim.com> wrote:
> > You take YOUR prozac Pennino. Do you think everyone has
> > their eyes glued to the TV all day long like yourself?
>
> Do you still beat your wife? The question assumes a whole lot.
>
> It is obvious Prof. Beaker isn't a professor of logic.
>
> Since the story was a head line story on the Los Angeles Times,
> the Orange County Register, and every little local paper around, it
> would be hard to miss if you EVER read a newspaper or just glance at
> a news stand in passing.
>
> Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> News and Contra Costa Times.
>
> You might try reading a newspaper once in a while.
>
> It was on every news segment of every radio station of all formats; rock,
> oldies, talk, easy listening, etc.
>
> You might try listening to the radio on the way to and from work once
> in a while.
>
> It was on every news broadcast of all the TV networks.
>
> Since you don't seem to know much about what's happening in the world,
> you might also be interested to know Bush is now officially President
> Elect, Elian is back in Cuba and Elvis is still dead.
>
> Jim Pennino

5278. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:54:05 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4D241C.F3016FF5@pim.com>
Source record: 173526

Pennino regularly shops at Radio Shack.

Jim Pennino wrote:

> Richard Friday <tgirwf@bigfoot.com> wrote:
> > I know this post might be off-topic but could find no other newsgroup that
> > had "antenna" in its name. I'd be most appreciative if someone could point
> > to a more suitable discussion or other source of information.
>
> > I've seen advertised a device that claims to allow you to use the
> > electrical wiring of your house as a tv antenna. You plug this device
> > into an outlet, and then use connections it provides as your tv antenna.
>
> > I'm trying to find out if this actually works but have not been able to
> > find any reviews.
>
> > Pointers to sources of information would be appreciated.
> > Email please, to tgirwf@bigfoot.com
>
> > Thanks in advance,
> > and please excuse this "close-to-off-topic" post
>
> > Richard
>
> Those devices have been around for years. Most of them, if they contain
> anything at all, contain a couple of capacitors.
>
> The cheapest pair of rabbit ears sold by Radio Shack will work better
> than one of these things.
>
> Jim Pennino

5279. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:55:33 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4D2474.86DE8493@pim.com>
Source record: 173527

Fucking loser asshole Pennino. You must be a wetback.

Jim Pennino wrote:

> Prof. Beaker <beaker@pim.com> wrote:
> > What is your real problem Pennino. We're all very curious.
>
> Blithering assholes.
>
> Any other questions about current events?
>
> Jim Pennino

5280. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-29 23:56:37 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <jy936.366$e5.894520@news.ntplx.net>
Source record: 173529

Fractenna <fractenna@aol.com> wrote:

> The tradeoff for most hams has become not whether they should buy the
> Handbook--but whether they should buy one each YEAR. In recent years the
trend
> has been for hams to buy a new handbook every few years. Hence the volume
sales
> has decreased , but offset by the repeat-delay sales, have plateaued at a
> comfortable level.

Before I came to work for ARRL HQ, I bought a new Handbook about every three or four years. This seems about typical. If I leave HQ and have to buy them again (desk and personal copies of ARRL pubs are a fringe benefit; we get to pony up dues just like everybody else, though), I would probably stick to the same pattern. Although there have been two major revisions to the Handbook over the 15 years I have been here, it is more likely that each year, several new projects will be added and some revisions made to each chapter. I know for 2001, the significant revision was a revised DSP chapter.

With the availability of lots of projects on the WWW (including the ARRL TIS web pages -- the Lab has made >500 QST articles available for download), the projects are not necessarily the major selling factor they were back when I used to buy a new Handbook when I liked the new projects it contained. :-)

73,
Ed Hare, W1RFI
ARRL Lab

5281. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:03:17 UTC
From: rwclark@seanet.com
Message-ID: <3a6124f8.535623876@news.seanet.com>
Source record: 173530

On Fri, 29 Dec 2000 18:50:58 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>The contributors to the Handbook are paid at a rate of $65.00 a page and up.

Yow! $65K for the Handbook's contributors? I suppose the burden rate
for index and contents goes for something less. ;-)

Soooo, not a vanity issue at all - and perhaps a bargain to boot
considering man-hours required and calendar-hours available. I will
withdraw my offer to take over.

73's
Richard Clark, KB7QHC

5282. Re: Interfaceing Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:05:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <92j89g$2v7s$1@newsreader.cetlink.net>
Source record: 173528

Go to the amsat.org website and look under the files section. There is a program called fodtrack. Free tracking program for the sats. In it is a schematic for a rotor tracking device. It might give you an idea as how to do it using the parallel port of your computer.
The interface is very simple.

> Name is Adrian G7TYV,am looking for someone who has interfaced a Yaseu 5400
> rotator to the computer.
> Is it costley or can you make your own.
> Adrian.......
>
>

5283. Re: Where is Wakefield, when did he murder

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:08:33 UTC
From: rwclark@seanet.com
Message-ID: <3a6226b8.536071670@news.seanet.com>
Source record: 173531

On Thu, 28 Dec 2000 19:26:38 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>Ummmm .. okay. I'm telling you that it is a random correlation.
>
>Other random correlations: the race-baiters haven't shown up yet.
>
>K3BHJ
>

Hi Dave,

Well, at least not for a day. Then the academicians stepped in with a
vengeance.

73's
Richard Clark, KB7QHC

5284. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:16:14 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <SSlNOtWRQ5D+vOTSxRaMgg4z4mMW@4ax.com>
Source record: 173532

rwclark@seanet.com (Richard Clark) wrote:

>On Fri, 29 Dec 2000 18:50:58 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
>wrote:
>
>>The contributors to the Handbook are paid at a rate of $65.00 a page and up.
>
>Yow! $65K for the Handbook's contributors? I suppose the burden rate
>for index and contents goes for something less. ;-)
>
>Soooo, not a vanity issue at all - and perhaps a bargain to boot
>considering man-hours required and calendar-hours available. I will
>withdraw my offer to take over.
>
>73's
>Richard Clark, KB7QHC

I count 1190 pages. With photos and/or charts or illustrations on
virtually every page. Plus full-color printing on the soft cover,
front and back. At $32 it's a bargain.

I'd challenge anyone to find a book with more pages, photos, charts
and illustrations -- at $32.

Jeeze... good-god-mighty... some people ??!!!!

Bob
k5qwg

5285. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:21:11 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <3ClNOnFiQuVNH0BmP2GibOVvS72h@4ax.com>
Source record: 173533

"Prof. Beaker" <beaker@pim.com> wrote:

>Fucking loser asshole Pennino. You must be a wetback.

Pardon me, but as an American-Mexican, I take extreme offense to your
comment about "wetback." When was the last time you swam across a
river to a strange country to better yourself?

You don't have the friggin' guts.

Talk about a-holes.

Bob
k5qwg

>
>
>Jim Pennino wrote:
>
>> Prof. Beaker <beaker@pim.com> wrote:
>> > What is your real problem Pennino. We're all very curious.
>>
>> Blithering assholes.
>>
>> Any other questions about current events?
>>
>> Jim Pennino
>
>

5286. Re: FS: Portable Dipole's

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:25:18 UTC
From: Steve <mcsp@usa.net>
Message-ID: <3A4D2B6E.F3179173@usa.net>
Source record: 173534
Cross-posted to:
rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,alt.ham-radio.marketplace,rec.radio.amateur.swap

Is this like the pocket fisherman?

SideValve wrote:

> Dipoles and antennas, not dipole's and antenna's...
>
> On Tue, 19 Dec 2000 16:53:27 -0500 (EST), ARS--KC8BCR@webtv.net (Bill)
> scribbled:
>
> >[Several hams have suggested I take TWO of my portable wind-up reel
> >[antenna's and manufacture them together to make a portable dipole
> >[system. So that's what I've done. If you'd like a portable dipole
> >[system made with our wind-up reel antenna's and custom made with ANY
> >[kind of plug on the end...PL-259, 1/8" phone, BNC, etc...just let me
> >[know and I'll
> >[be happy to do it AT NO EXTRA COST. And the shipping is free when you
> >[order two of the reel antenna's, too. To see a photo and to get further
> >[info on the wind-up reel antenna's, just go to http://qth.com/dwm and
> >[click the "Yo-Yo-Tenna" section.
> >[
> >[73 and happy holidays;
> >[
> >[Bill, WA8MEA @ Jackson, MI QRP Club station: KC8BCR
> >[

5287. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:32:24 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92jaesimr1@iac5.navix.net>
Source record: 173535

One is always pleased to see a learned Professor who has such a command of the English language. Your limited use of the English language is more in line with some of the uneducated morons that drop by from time to time, or perhaps you are over stating your qualifications.

"Prof. Beaker" <beaker@pim.com> wrote in message
news:3A4D23F8.D9B683D6@pim.com...
> You are sure a nutcase aren't you Pennino?
> Just what is your real problem?
> Wife beating? Wow that really came out of left field.
> I bet YOU ARE the one with a domestic abuse conviction.
> Have a happy new year Pennino you fucking loser.
> Are you a spick or Italian?
>
>
>
> Jim Pennino wrote:
>
> > Prof. Beaker <beaker@pim.com> wrote:
> > > You take YOUR prozac Pennino. Do you think everyone has
> > > their eyes glued to the TV all day long like yourself?
> >
> > Do you still beat your wife? The question assumes a whole lot.
> >
> > It is obvious Prof. Beaker isn't a professor of logic.
> >
> > Since the story was a head line story on the Los Angeles Times,
> > the Orange County Register, and every little local paper around, it
> > would be hard to miss if you EVER read a newspaper or just glance at
> > a news stand in passing.
> >
> > Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> > News and Contra Costa Times.
> >
> > You might try reading a newspaper once in a while.
> >
> > It was on every news segment of every radio station of all formats;
rock,
> > oldies, talk, easy listening, etc.
> >
> > You might try listening to the radio on the way to and from work once
> > in a while.
> >
> > It was on every news broadcast of all the TV networks.

> >
> > Since you don't seem to know much about what's happening in the world,
> > you might also be interested to know Bush is now officially President
> > Elect, Elian is back in Cuba and Elvis is still dead.
> >
> > Jim Pennino
>
>
>

5288. Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:46:19 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4D3060.7B02FA70@att.com>
Source record: 173536
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,alt.radio.scanner

[Followup set to rec.radio.amateur.antenna]

Hello,

I've been receiving weather sat images for several weeks.
I've progressed from an unmodified Radio Shack 2006 scanner
with a Discone antenna, to a Hamtronix R139 receiver with a
home-brew QFH antenna. My image quality has improved as I've
modified/upgraded the hardware. However, I'm at a loss how
to improve further.

My present setup:

Receiver:
-Hamtronix R139 Weather Sat Receiver
http://www.hamtronics.com/

Antenna:
-Home-brew QFH antenna, located at ground level
-50' interconnect, RG-213U coax, soldered PL259 and BNC
-antenna made with RG-58 coax per the following.
http://www.rig.org.uk/Members/Software/body_software.html

Demodulator:
-Dell 600Mhz, Turtle Beach Montego II A3D 320 sound card
-SatMon
http://www.satsignal.net/

I am getting vertical noise lines across the image. It appears
to be 60Hz related as there are 30 lines across one of the .250sec
NOAA horizontal scans. (120Hz) I've located the receiver ~10 feet away
from my PC, I've located the antenna as far away from the PC as possible,
I've tried disconnecting the power supplys for the speakers
and printers. I've turned off the monitor. I've moved the feed cables around
(with respect to my PC and PC power lines) but note little noise improvement.

I had the QFH located in the attic at one time. However it was connected
with RG-58 and had similar noise problems. I'm quite sure it I re-install
it (even with my improved RG-213U coax) I'd see the same noise.

I note the noise does decreases slightly as the bird overflys. This leads me
to believe the noise is entering on the antenna rather than my demodulated
(and screened) audio feed.

I do have a cell tower located 1/4 mile from me.

This appears to be my last major hurdle before obtaining quality images.

Any help would be greatly appreciated!!

This is a link to an example file.
http://home.att.net/~valued_customer/12292147.jpg

Followup set to rec.radio.amateur.antenna

5289. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 00:47:02 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4D3086.3090801@hiwaay.net>
Source record: 173537

Fracky has apparently re-set his Browser preferences. He has answered my post, above, directly to me, and it has not (yet) shown up here on the NG. Surprise!- he disputes my count of '19' posts, and further, tells me I cant complain to his boss, because he is in Jamaica.

As if I cared, or would send anything to the 'boss', even if I knew who it was.

His post was signed Chip N1IR, so I guess it wasn't 'Phil'.

Bill-W4BSG

Bill Aycock wrote:

> Fracky- I counted at least 19 posts from the first 'wakefield' post- why
> do YOU lie about it.?
> Come to think about it, your very presence is enough to trash the group-
> so many people are so tired of your crap, they respond out of irritation.
>
> Hope this helps
>
> Bill
>
>

5290. Re: Don't Dump on KB1EVA ...yet

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:00:37 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <l3cj29.dc5.ln@mail.specsol.com>
Source record: 173538

Prof. Beaker <beaker@pim.com> wrote:
> Fucking loser asshole Pennino. You must be a wetback.

> Jim Pennino wrote:

>> Prof. Beaker <beaker@pim.com> wrote:
>> > What is your real problem Pennino. We're all very curious.
>>
>> Blithering assholes.
>>
>> Any other questions about current events?
>>
>> Jim Pennino

Are you related to potty mouth Phil? Your language and grammar are
almost identical.

Or are you the Prof. Beaker that appears on the Muppets?

Jim Pennino

5291. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:06:27 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <jecj29.dc5.ln@mail.specsol.com>
Source record: 173539

Prof. Beaker <beaker@pim.com> wrote:
> You are sure a nutcase aren't you Pennino?
> Just what is your real problem?
> Wife beating? Wow that really came out of left field.
> I bet YOU ARE the one with a domestic abuse conviction.
> Have a happy new year Pennino you fucking loser.
> Are you a spick or Italian?

> Jim Pennino wrote:

>> Prof. Beaker <beaker@pim.com> wrote:
>> > You take YOUR prozac Pennino. Do you think everyone has
>> > their eyes glued to the TV all day long like yourself?
>>
>> Do you still beat your wife? The question assumes a whole lot.
>>
>> It is obvious Prof. Beaker isn't a professor of logic.
>>
>> Since the story was a head line story on the Los Angeles Times,
>> the Orange County Register, and every little local paper around, it
>> would be hard to miss if you EVER read a newspaper or just glance at
>> a news stand in passing.
>>
>> Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
>> News and Contra Costa Times.
>>
>> You might try reading a newspaper once in a while.
>>
>> It was on every news segment of every radio station of all formats; rock,
>> oldies, talk, easy listening, etc.
>>
>> You might try listening to the radio on the way to and from work once
>> in a while.
>>
>> It was on every news broadcast of all the TV networks.
>>
>> Since you don't seem to know much about what's happening in the world,
>> you might also be interested to know Bush is now officially President
>> Elect, Elian is back in Cuba and Elvis is still dead.
>>
>> Jim Pennino

Congratulations, you are the first person from this newsgroup that I have
kill filed. Though tempted by others, you are the first to have totally
worthless postings; not even amusement value.

Since you probably don't know what "kill filed" means, I'll explain it to you.

I will NEVER see ANY post from you ever again.

So from now on you're screaming and swearing like a little child in an empty room.

PLONK

Jim Pennino

5292. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:09:52 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <0lcj29.dc5.ln@mail.specsol.com>
Source record: 173540

Prof. Beaker <beaker@pim.com> wrote:
> Pennino regularly shops at Radio Shack.

Yes, I do, as a matter of fact.

Why do you care? Oh, I get it; this was a brilliant retort.

> Jim Pennino wrote:

>> Richard Friday <tgirwf@bigfoot.com> wrote:
>> > I know this post might be off-topic but could find no other newsgroup that
>> > had "antenna" in its name. I'd be most appreciative if someone could point
>> > to a more suitable discussion or other source of information.
>>
>> > I've seen advertised a device that claims to allow you to use the
>> > electrical wiring of your house as a tv antenna. You plug this device
>> > into an outlet, and then use connections it provides as your tv antenna.
>>
>> > I'm trying to find out if this actually works but have not been able to
>> > find any reviews.
>>
>> > Pointers to sources of information would be appreciated.
>> > Email please, to tgirwf@bigfoot.com
>>
>> > Thanks in advance,
>> > and please excuse this "close-to-off-topic" post
>>
>> > Richard
>>
>> Those devices have been around for years. Most of them, if they contain
>> anything at all, contain a couple of capacitors.
>>
>> The cheapest pair of rabbit ears sold by Radio Shack will work better
>> than one of these things.
>>
>> Jim Pennino

Jim Pennino

5293. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:28:46 UTC
From: marsgal42@hotmail.com
Message-ID: <92jdoa$bj1$1@nnrp1.deja.com>
Source record: 173541
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3A4D326E.6C500A90@att.com>,
Pervert_Extraordinaire <valued_customer1@att.com> wrote:

> I've been receiving weather sat images for several weeks...
> (snip...)
> I am getting vertical noise lines across the image. It appears
> to be 60Hz related as there are 30 lines across one of the .250sec
> NOAA horizontal scans...

(rec.radio.amateur.space added to newsgroups - this
is exactly the sort of thing the newsgroup talks about)

You should hear the buzz on the downlink. I had a bad
power line insulator a while ago that even clobbered
NOAA-16's deafening roar. You may have something similar.

Remember all those ham fox hunts and similar activities?
Now it's time to put those skills to use to find where the
noise is coming from. I got some really weird looks but
found the offending power pole in about 10 minutes...

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..." - Hospital/Shafte

Sent via Deja.com
http://www.deja.com/

5294. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:40:59 UTC
From: rwclark@seanet.com
Message-ID: <3a633ce0.541743325@news.seanet.com>
Source record: 173542

On Sat, 30 Dec 2000 00:16:14 GMT, Bob Miller <bamiller@texas.net>
wrote:

>rwclark@seanet.com (Richard Clark) wrote:
>
>>On Fri, 29 Dec 2000 18:50:58 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
>>wrote:
>>
>>>The contributors to the Handbook are paid at a rate of $65.00 a page and up.
>>
>>Yow! $65K for the Handbook's contributors? I suppose the burden rate
>>for index and contents goes for something less. ;-)
>>
>>Soooo, not a vanity issue at all - and perhaps a bargain to boot
>>considering man-hours required and calendar-hours available. I will
>>withdraw my offer to take over.
>>
>>73's
>>Richard Clark, KB7QHC
>
>I count 1190 pages. With photos and/or charts or illustrations on
>virtually every page. Plus full-color printing on the soft cover,
>front and back. At $32 it's a bargain.
>
>I'd challenge anyone to find a book with more pages, photos, charts
>and illustrations -- at $32.
>
>Jeeze... good-god-mighty... some people ??!!!!
>
>Bob
>k5qwg

Hi Bob,

The GPO can do this in a heart-beat if all you are looking for is
>more pages, photos, charts
>and illustrations

Some pubs are free too.

73's
Richard Clark, KB7QHC

5295. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:47:06 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <3A4D3E9A.DF5884B5@amsat.org>
Source record: 173543

You might want to try using a small audio transformer to give you some isolation between the receiver audio output and the sound card input. Radio Shack has some that are suitable for this purpose. We had a similar problem at our club station, and this cleared it up.
73, Jim

5296. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 01:53:10 UTC
From: k1bqt@aol.com
Message-ID: <20001229205310.05325.00000213@ng-fl1.aol.com>
Source record: 173544

Sorry, in a way, I ever started this flap. Nobody--including the ARRL's "for profit" pulication department--is getting rich off ham radio. It was a somewhat unfair of me to overplay the devil's advocate and suggest the League is parlaying a fat profit by scaring the beeejezuz out of hamdom by disseminating technical information about RF exposure. They aren't. The whole industry is struggling to survive right now, and any ham with a kid in engineering school knows the ARRL Handbook remains a "best buy".

Rick K1BQT

5297. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 02:03:40 UTC
From: k1bqt@aol.com
Message-ID: <20001229210340.05325.00000215@ng-fl1.aol.com>
Source record: 173545

>Glad there is no one like that on these newsgroups....<

Me too, Jim. Otherwise I might begin to feel uneasy...especially about unhappy people who know where I live and have been a guest in my house!

Rick K1BQT

5298. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 02:07:20 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4D435D.8AB637B1@att.com>
Source record: 173546
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

marsgal42@hotmail.com wrote:
>
> In article <3A4D326E.6C500A90@att.com>,
> Pervert_Extraordinaire <valued_customer1@att.com> wrote:
>
> > I've been receiving weather sat images for several weeks...
> > (snip...)
> > I am getting vertical noise lines across the image. It appears
> > to be 60Hz related as there are 30 lines across one of the .250sec
> > NOAA horizontal scans...
>
> (rec.radio.amateur.space added to newsgroups - this
> is exactly the sort of thing the newsgroup talks about)

Thanks!

> You should hear the buzz on the downlink. I had a bad
> power line insulator a while ago that even clobbered
> NOAA-16's deafening roar. You may have something similar.

Did you see the "wavy-ness" of the noise? I've been told
a 60Hz noise should be more fixed in period. Now I'm wondering
if it's something else?

> Remember all those ham fox hunts and similar activities?
> Now it's time to put those skills to use to find where the
> noise is coming from. I got some really weird looks but
> found the offending power pole in about 10 minutes...

Any suggestions on how to attack this. How does one
identify a bad insulator? Look for carbon tracks. ;-)

Thanks for the response!

5299. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 02:11:07 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4D443E.168558BA@att.com>
Source record: 173547

Jim Jerzycke wrote:
> You might want to try using a small audio transformer to give you some
> isolation between the receiver audio output and the sound card input.
> Radio Shack has some that are suitable for this purpose. We had a
> similar problem at our club station, and this cleared it up.
> 73, Jim

In other words, inductively couple the receivers audio out to the
sound cards audio in? I suppose this would alleviate any ground
offset/loop problems between my receiver and my PC.

Am I correct?

5300. WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 02:40:26 UTC
From: kb2sin <kb2sin@stny.rr.com>
Message-ID: <uWb36.71066$7I.8766128@typhoon.nyroc.rr.com>
Source record: 173548

I am looking for a Ginpole or Ginpole bracket to fit a Rohn 45-G tower. If
you have such item, please e-mail me with the price and shipping cost to zip
code 13833 in Port Crane, NY. My e-mail is: kb2sin@stny.rr.com
thank you and 73's
de Kb2sin
www.kb2sin.homestead.com/kb2sin.html

--
Caution... NEVER drive Faster than your Angels can Fly!!!

5301. Re: WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 03:10:51 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92jjo0nku1@iac5.navix.net>
Source record: 173549

Angels that guard you when you drive usually retire at 65 - Burma Shave-

"kb2sin" <kb2sin@stny.rr.com> wrote in message news:uWb36.71066$> Caution...
NEVER drive Faster than your Angels can Fly!!!
>
>
>

5302. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 03:39:15 UTC
From: dmccord@usol.com
Message-ID: <3a4d569c.8811194@news.usol.com>
Source record: 173075
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

A Few Weeks ago I had put out a message saying that Cushcraft had given me poor customer service. I had a R8 Vertical (6-40 Meters) and it had been working well and all of a sudden it just stopped working. I talked to them and they had me send the matching network back (The Black Box). A week after I returned it I got it back with a form letter saying it had been tested and it was fine. To say the lest I was unhappy with them.

Well I have to say that 3 days after I got the matching network back they called and left a message on our machine saying that they had sent me the wrong matching network and was sending a NEW one out that day. New Years Day I put it all back together and my Son and Neighbor helped me put it back up and its now WORKING GREAT AGAIN!

It took some time but CUSHCRAFT TOOK CARE OF ME!

I thought it only fair that I let everyone know after I had told everyone about the trouble I had.....

I still have the old matching box and if Cushcraft does not ask for the one one back I am going to take it apart and see what I can see. I think its a bad soder connection. It also had a much larger Cap, its the same value but its larger in size.... Hmmmmmm I realy want to tear it apart and figure it out.

73's Everyone and thanks for all the help from the group

Delbert McCord
KA8OCN

5303. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 05:14:57 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92jr0h$74q$0@208.207.71.170>
Source record: 173550

Fractenna wrote:
>
> As suggested I did a name search on qrz.com. The Boston papers report this guy
> lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
>
> K-B-1-E-V-A
>
> Maybe this is his dad?? I don't think so myself. Sure looked familiar....He
> sure LOOKS like one of those guys you see at the MIT FLEA!!!
>
> If it IS him this only reinforces the notion to the public that hams have
> lunatics in thier midst.
>
> So much for Dr. Cohen being paranoid and stopping public ham appearances and
> ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
> think Tom Rouch would do well to distribute that prozac he talks about!!
>
> 73
> Phil de N1ZKT

You get the first dose, Dokter Conehead the second.

5304. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 05:27:59 UTC
From: dentronman
Message-ID: <zne36.678$BG.992685@newsfeed.intelenet.net>
Source record: 173551
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

All of it Tommy Boy. The customer service, instructions materials all junk.
Go with M2 10 times better quality and better service!
"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a4ceb64.119891471@news.akorn.net...
> On Thu, 28 Dec 2000 04:55:33 GMT, "dentronman" <w9jcm@.reno.quik.com>
> wrote:
>
> >The are known as CushCrap.
>
> By that do you mean the engineering was as shoddy as Dentron's, or the
> construction, or the materials?
>
> 73 Tom

5305. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 05:36:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4D744F.695FDD69@eznec.com>
Source record: 173552

You're right as usual.

I was thinking of a larger loop, like a quad loop, where changing the feedpoint from the side to the top or bottom (assuming it's mounted vertically) changes the polarization. With a small vertical loop, changing the feedpoint doesn't noticeably change the polarization, like you said.

You can change the polarization of a small loop by rotating it from vertical to horizontal. But when it's very low, like the one the original poster described, you don't want to do this -- the signal is GREATLY attenuated when it's horizontal.

Roy Lewallen, W7EL

Tom W8JI wrote:
>
> On Thu, 28 Dec 2000 12:53:36 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >If you feed your loop at the bottom or the top, it'll be horizontally
> >polarized. The conductivity of the surrounding ground will have very
> >little effect on the signal strength except at very high elevation
> >angles, so it won't help to be beside a lake.
>
> I've probably missed something, but it sounds like someone asked about
> moving the feedpoint.
>
> If it is a 1,5 meter loop on 80 meters you can feed it anywhere you
> like and the pattern and loss is the same, as long as the feedline
> isn't part of the radiating system and the loop isn't jammed right
> against something conductive.
>
> 73 Tom

5306. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 07:10:58 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92k1q8$1in$1@iac5.navix.net>
Source record: 173553

Yikes! Things may not yet be concluded in Mass...

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001229140851.11051.00000140@ng-fy1.aol.com...
> >.....one rarely reads of a killer who is also a member of the National
Rifle
> Association.<
>
> ....or a AAA member intentionally crossing the sidewalk to hit a
pedestrian.
>
> Ask any FBI agent....the most dangerous person is the one who feels
maligned
> and has a score to settle.
>
> Rick K1BQT

5307. Re: power cord Z

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 08:13:00 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01c07238$cd14c780$1c8127d4@f6awn.cpod.fr>
Source record: 173557

Good morning,

Reg Edwards <g4fgq.regp@btinternet.com> a crit dans l'article
<92gj0l$4eg$1@uranium.btinternet.com>...
> Francis, your measurement of Zo = 100 ohms is probably
> correct for a power cable. VF = 0.66 is also OK.
>
///

Fine ...

> But your attenuation measurements do not look good. When
> the frequency is 10 times higher your attenuation is also 10
> times higher. This is what happens when measured loss is
> due to reflections and mismatch at the cable's terminations.
>

Tried to adapt the line ... Only tried ;-)
But,

> Your matching transformers may have as much loss as the
> cable you are trying to measure. The transformer impedance
> ratio may also be different from you think it is.
>

The transformers were tested with the noise bridge 1/30 MHz and back to
back with the Bird (50 Ohms).
The loss are not important : the two transformers are in the line of mesure
and the ref. power set before the insertion of the tested line ... Then, I
increase power, by decreasing the step attenuator, to restore the set
level.

> Your figures would be be better if Decibels = constant *
> Squareroot of Frequency. Which is what usually happens on
> cables at HF.
>

Not sure. I suspect that the real problem is the dielectric. Beautiful
black and red, but perhaps not fine in presence of HF ... and perhaps not
prop. to F^1/2.

> If you still have some of the cable perhaps you could
> measure or estimate wire diameter over the stranding. Also
> estimate distance between the two wire centres. I would be
> interested to know these two dimensions please, in 1/10
> millimetres if possible.

Perhaps ...
I am going to dig in the junk box that week-end :-))
Come back soon.

73, Reg.
Thanks for interest in my amateur test ;-)

Francis
F6AWN

> ---
> **********
> Regards from Reg, G4FGQ
> For free radio modelling software go to:
> http://www.btinternet.com/~g4fgq.regp
>
> **********
> awn <samuel.morse@nomail.cpod.fr> wrote in message
> news:01c070e7$9ba964a0$208127d4@f6awn.cpod.fr...
> > Reg Edwards <g4fgq.regp@btinternet.com> a crit dans
> l'article
> > <92d8n4$56h$1@uranium.btinternet.com>...
> >
> > > Francis, by what method did you make the measurements ?
> The
> > > increase in loss with increasing frequency is too large.
> > > ---
> > > Reg, G4fgq
> > > ==========
> >
> >
> > Good evening Reg,
> >
> > Hummm ... "method" you said ? ;-)
> >
> > Well, it was seven years ago and I was not so competent as
> now, hi ...
> > (I do read your messages and those of some other
> contributors I appreciate
> > only from two years ;-))
> >
> > If I remember and with the few notes i have conserved :
> >
> > I have get the Zc and Vf with a noise bridge, an
> adjustable R and my
> > receiver.
> > I have used some 20 meters long piece of wire.
> > I have found about 100 Ohms for Zc and 0,66 for Vf.
> >
> > I have realised two 1/2 transformers on toroids. (50/100

> Ohms)
> >
> > and for the attenuation :
> >
> > TX / 6 dB power Pad / Step attenuator (HP) / Bird
> Wattmeter / T1: 50-100 /
> > T2: 100-50 / Wattmeter for reference at the end of the
> line.
> >
> > I set the power for a reference d&#65533;viation at the end of
> the test line.
> >
> > I insert the line between T1 and T2 and use the step
> attenuator (reducing
> > the value ...) to come back to the standard deviation at
> the end (10 W ?
> > don't remember ...)
> >
> > The step att. give the attenuation and the Bird another
> very similar value
> > of power increase.
> >
> > Something empiric, is'nt it ?
> >
> > But in fact, enough to say it's not a good choice for a
> performant antenna
> > !
> >
> > Another information : I have suspended the line some one
> meter above the
> > ground, outside the shack ...
> >
> > 73,
> >
> > Francis
> > F6AWN
> > -----
> >
>
>
>

5308. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 08:22:43 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <92k61nrph1@slb2.atl.mindspring.net>
Source record: 173555

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:jecj29.dc5.ln@mail.specsol.com...

>
> Congratulations, you are the first person from this newsgroup that I have
> kill filed. Though tempted by others, you are the first to have totally
> worthless postings; not even amusement value.
>
> Since you probably don't know what "kill filed" means, I'll explain it
> to you.
>
> I will NEVER see ANY post from you ever again.
>
> So from now on you're screaming and swearing like a little child in an
> empty room.
>
> PLONK
>
> Jim Pennino
>
>
It was the Plonk heard round the world.I second plonk your plonk and also
plonk him...
Plink!...errrrr PLONK

5309. FM-Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 08:43:36 UTC
From: Robert Bukowski <r.bukowski@gmx.at>
Message-ID: <3A4DA038.2591400D@gmx.at>
Source record: 173556

I am in search of an amplifier, which can selectively amplify a specific

frequeny (94.3 MHz) wihout extinguishing the other radio stations.
Does someone know if and where I can buy such an amplifier?
Thx
Robert

5310. Re: Propagation Software & Antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 09:28:24 UTC
From: nospam@libero.it
Message-ID: <3a4daa51.2710500@News.CIS.DFN.DE>
Source record: 173559

On Thu, 28 Dec 2000 15:20:10 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>http://elbert.its.bldrdoc.gov/hf.html
>
>This is quite impressive, and the price is right. :-) It goes WAY past MUF
>and gives really nice charts and maps.

yes, now it's free ! Last version december 4, 2000.
http://elbert.its.bldrdoc.gov/pc_hf/hfwin32.html
Enjoy it!

Arturo IK7JWY
www.qsl.net/ik7jwy
www.qsl.net/ari-lecce

5311. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 09:31:27 UTC
From: Bigdad <Bigdad@rworld.com>
Message-ID: <PXh36.3997$1%2.194337@sjc-read.news.verio.net>
Source record: 173558

"Pervert_Extraordinaire" <valued_customer1@att.com> wrote in message
news:3A4D3060.7B02FA70@att.com...
> [Followup set to rec.radio.amateur.antenna]
>
> Hello,
>
> I've been receiving weather sat images for several weeks.
> I've progressed from an unmodified Radio Shack 2006 scanner
> with a Discone antenna, to a Hamtronix R139 receiver with a
> home-brew QFH antenna. My image quality has improved as I've
> modified/upgraded the hardware. However, I'm at a loss how
> to improve further.
>

If i remember correctly this interference can be from another bird on the same freq. Back when i was messing with APT images NOAA shut off NOAA 12 for a while due to interference problems with NOAA 15. At that time i saw the same type of problem. I also had a problem with my pre-amp that gave me almost the same look, with that receiver you are using i doubt if you have a pre-amp...if you do try removing it for a pass or 2.

5312. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 11:00:42 UTC
From: njradiodude@aol.com
Message-ID: <20001230060042.12094.00000583@ng-cd1.aol.com>
Source record: 173560

My ex-wife would not let me put up a loop either...so, I used her as a center insulator for a nice 1/2 wave dipole. Getting the feed point to near 50 ohms was a little difficult, but...well, just food for thought. :)

5313. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 11:34:53 UTC
From: Gian Luca Cazzola <glcazzola@iol.it>
Message-ID: <xLj36.207461$hk4.7801385@news.infostrada.it>
Source record: 173561

Hy Tom,
I agree with you THAT REALLY WE ALSO SHOULD BE CRAZY MEN to reply to Mr. Cohen and contribute to transform Antenna reflector in Trash-Junk-Foolish reflector.
People please stop this foolish thing! Please return to chat about antennas! Please use your Internet program to filter Mr. Cohen messages! Please stop write junk e-mail! Please remember that we are radio amateurs on an Antennas reflector!!!!!!!!!!!!!!!!!!!!
73 es hny
Ian IK4EWX

"Tom W8JI" <2w8ji@contesting.com> ha scritto nel messaggio news:3a4cf14d.121404951@news.akorn.net...
> On Fri, 29 Dec 2000 11:31:32 -0700, Larry Benko <benko@aztek-eng.com>
> wrote:
>
> >Once again the ratio of antenna related posts to bullshit
> >is at a near record low. Congrats!!!
> >
> >LArry, W0QE
>
> When my server saiud there were 271 new posts in two days, I knew N1IR
> was busy again.
>
> The boy really knows how to trash a newsgroup!
>
> 73 Tom

5314. RV installation trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 11:34:57 UTC
From: Bill Clarke <billclarke@bigfoot.com>
Message-ID: <92khmj$t8k$1@newsfeed.logical.net>
Source record: 173565

Here is the problem:

Using an FT-100 in a 29' travel trailer equipped with a DuoTherm AC unit. The AC unit is controlled by a low voltage thermostat which also controls the furnace.

When keying the transmitter, the problem is the AC unit attempts to turn on - whether the thermostat is on or off has no control over the problem. The AC unit will partially run (at a low compressor RPM).

I have tried several "mobile type" antennas and still have the problem (screwdriver, Hustler, and Lakeview). It doesn't seem to make any difference - nor is the problem band sensitive. The transmitter will key the AC unit on 80, 40, and 20 in all modes (CAW, AM, & SB).

I found by using a pair of Lakeviews fed as a dipole the problem diminished about 80%. If I use a wire dipole, the problem goes away completely. The wire antenna can be in any proximity to the trailer - no problem.

The "mobile type" antennas were all mounted on the tongue and were well grounded. I tried various additional means of grounding such as radials - to no avail.

DuoTherm company said they never heard of such a problem, which is not a surprising answer. From a manufacturer I would expect such an answer. The dealer also had no suggestions.

Anyone else have this problem or have ideas about a possible fix?

Bill W2BLC

5315. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 11:58:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92kikpmuf1@neptunium.btinternet.com>
Source record: 173562

Tom, for once I entirely agree with you. The position of the feedpoint on a small magloop, say less than a 1/5-wave in circumference, has no effect on the radiation pattern or on the polarisation of a received signal.

Also the ground induced loss is negligible when the bottom edge of the loop is higher than about 1.5 loop diameters above ground regardless of frequency.

The low-angle DX potential of a vertical magloop is quite good in the direction of the plane of the loop because the low-angle radiation in that plane is vertically polarised as from a short vertical.

Reg, G4FGQ

5316. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 12:00:48 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Fs5NOrFPRjcV0HH4mYZtzECefJt6@4ax.com>
Source record: 173563

rwclark@seanet.com (Richard Clark) wrote:

>
>Hi Bob,
>
>The GPO can do this in a heart-beat if all you are looking for is
>>more pages, photos, charts
>>and illustrations
>
>Some pubs are free too.

Well, the GPO is supported by taxes.

Bob
k5qwg

>
>73's
>Richard Clark, KB7QHC

5317. J - Pole question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 12:18:31 UTC
From: Ken <klajr2@swbell.net>
Message-ID: <xnk36.1528$F8.231913@nnrp3.sbc.net>
Source record: 173564

Can someone help me out with the specifics on how to tune the feed
line that connects to
the main element? I have the unit built, but am not sure how to tune it .
Raise the driver element up or down, or the feed line up or down on the
driver element?
Thanks,
Ken

5318. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 13:31:45 UTC
From: "Dr. Conrad Connie" <coontail@my-deja.com>
Message-ID: <92ko42$8ma$1@nnrp1.deja.com>
Source record: 173566

In article <3A4BD401.39B91B41@earthlink.net>,
Cortland Richmond <ka5s@earthlink.net> wrote:
> If you mount a small magnetic loop so that it stands vertically, it
radiates
> equally well (or, equally poorly!) at all vertical angles, with nulls
in the
> directions perpendicular to the loops plane; if you sight through the
circle,
> you are sighting along the null direction. If you mount such a loop
> horizontally, it will radiate equally well in all azimuth directions,
with nulls
> at 90 degrees and 180 degrees elevation.
>
> A small loop is NOT very efficient. Neither is ANY small antenna.
>

Although theory predicts short antennas have low effeciency, the fact remains that many mobile antennas, which are very short for either 40 or 75 meters, appear to equal and often out perform large dipoles.
I have been active in a net which attracts both mobile and fixed stations on 40 and 75. I am very surprised by the performance of SOME mobiles at distances equalling the radius of the USA. This is true on 40 and to lesser extent on 75. In fact I have copied mobiles on 160 at about 500 miles with very good signals.
Many times these mobiles are as much as 6 or more db stronger than an equivalent fixed station.

I can only conclude, without absolute proof, small vertical antenna do radiate at low angles and the more power used allows these antennas to sound like high dipoles in some instances. The quality of the ground plane seems very significant. Usually best mobiles are 18 wheelers.

-

Sent via Deja.com
http://www.deja.com/

5319. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 13:45:15 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92kosj$fe5$1@uranium.btinternet.com>
Source record: 173567

Rich,

The skin depth of radio waves in the ground is MUCH less
than 1/2-wavelength. At LF to VHF the characteristics of
ordinary sorts of soil at depths of more than a few feet has
little effect on the above-ground propagation of radio
waves, either for absorption or reflection.

Examples for -
Soil resistivity = 100 ohm.metres
Permittivity = 15.

Freq MHz	Skin Depth Feet
0.2	36
2	12
15	6
50	6
144	6

Skin depth in sea water at 2 MHz is less than 7 inches.

Sommerfeld sorted it out about 95 years ago. Terman had got
the hang of it around 1940.

It would appear Ed did the right things for the wrong
reasons. But that's how most of us operate anyway. Even
Tesla cooked the books.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

5320. Re: RV installation trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 13:57:43 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001230085743.12500.00000562@ng-cd1.aol.com>
Source record: 173568

Try the Ferrite clip on rectangular pieces on the thermostat wire right at the heater unit. It might help to have one or 2 at the Thermostat, too.
Id it's a Mechanical T-stat, connect .01 Mfd caps across the T-stat wires & to ground @ the Heater....
The parts can be found at Radio Shack..

Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

5321. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 14:21:15 UTC
From: "Dr. Conrad Connie" <coontail@my-deja.com>
Message-ID: <92kr0makb1@nnrp1.deja.com>
Source record: 173469

In article <92j4h7$2b2$1@bob.news.rcn.net>,
tgirwf@bigfoot.com (Richard Friday) wrote:

> I'm trying to find out if this actually works but have not been able to
> find any reviews.
>
> Pointers to sources of information would be appreciated.
> Email please, to tgirwf@bigfoot.com
>
> Thanks in advance,
> and please excuse this "close-to-off-topic" post

You're not off topic Richard. Lots of folks here know about antennas.
I'd say don't buy it as its largely a scam. Its also DANGEROUS if it plugs to 120 vac.
The reason these things do-not work is TV and FM radio transmit at high frequencys. As you increase the antenna length you easily introduce impedances (a kind of resistance) which in most undesigned cases, makes the long wires useless.
Get a set of rabbit ears or a good outside antenna from some TV antenna supplier. Don't fall for the house wiring antenna scams.

Sent via Deja.com
http://www.deja.com/

5322. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 14:24:20 UTC
From: "Dr. Conrad Connie" <coontail@my-deja.com>
Message-ID: <92kr6g$al8$1@nnrp1.deja.com>
Source record: 173470

In article <20001229093702.27065.00000019@ng-fm1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> >Prof. Beaker <beaker@pim.com> wrote:

> asked a reasonable question. Maybe he didn't make the connection with
> Wakefield, understandable if you are not from the Boston area.
>
> Please lighten up. Thanks.
>
> 73
> Chip N1IR

Rudeness seems to be the current era credo of the ham op.

--

Sent via Deja.com
http://www.deja.com/

5323. Re: 75m antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 15:12:52 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a4dfb73_1@news.cybertours.com>
Source record: 173471

<ki8fb@my-deja.com> wrote in message news:92go3n$a55$1@nnrp1.deja.com...
> i need antenna suggestions for a 75 meter antenna. here is what i have.
>
> 66 foot by 66 foot corner lot. house more or less in the middle,garage
> on the side of the house. no trees on lot . 40 foot tower on the
> opposite side of house from the garage. i can't put up a loop(xyl).
>
> any ideas?

Well It really does depend on what you hope to work on 75 DX? or Local?
With your setup if it's DX you after I'd put up a 1/2 Sloper system maybe
three 1/4 wires with remote switching fed at the top of the tower. If
Locally ragchew the go with an inverted vee.. it may be shortened if need be
by coils in each leg. this will narrow the band width though
Hpy New Yr. 73 DAVE

5324. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 16:15:29 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4E0A21.868@wt.net>
Source record: 173472

Tom W8JI wrote:

>
> The "almost perfect" above ground systems using four or less radials
> are certainly critical systems...since the radials couple into
> everything (including the lossy dirt below them) quite well.

The example I was thinking of was the one in the arrl ant book where they did a test on 10m, using an above ground counterpoise of 64 radials. Much better than 4 low radials. I think they proved it to be "near perfect" as they even had the test gear under the counterpoise with no problems at all. But very few hams put up a counterpoise that good on the low bands. I found 4 radials on a gp at 1/4 wl up to work very well. But that is the lowest I would go with only 4. And even at that height you could see an improvement by going to about 8-10. But I don't think it would be a huge difference. But I agree, stick 4 radials at an 1/16 wl or lower and you have quite a bit of loss. Going from it to a GP at 1/4 wl up with 4 radials is like night and day. The 1/4 wl high version pretty close to 50-60 radials on the ground in theory, and seemed to work the same in the real world. It'll eat the low antenna for lunch. I consider 4 radials near the ground a "not even close to perfect" ground...:{ MK

-
http://web.wt.net/~nm5k

5325. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 16:25:43 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20001230112543.11051.00000305@ng-fy1.aol.com>
Source record: 173473

<<Don't fall for the house wiring antenna scams.>>

My mom bought one of them pieces of GARBAGE.
I tried to get it to work for 2 hours... The bent coat hangers worked better.
Took it apart & found capacitors rated @ 125 volts... I wouldn't use anything
that wasn't rated for DOUBLE the voltage when using the house wiring...
(Electrician for 15 years)

Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

5326. Need Match Box for R-7000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 16:54:37 UTC
From: markem@primenet.com
Message-ID: <901A6517Emarkemprimenetcom@206.165.3.80>
Source record: 173474

I need the matching box for a Cushcraft R-7000. The part number is MN-7000. Cushcraft's price for it is just shy of a whole new antenna so I was hoping someone might have one from a junked R-7000. If so, please let me know. Or, if anyone has a wiring diagram I might be able to repair it. It was damaged by a lightning strike.

Or, if someone wants a junk R-7000, let me know. It looks fine except for the box. I don't see any other damage at all. I'd expect to see something else damaged by the strike but I sure don't see anything obvious. I don't think it was a direct strike. It also wiped out some of my computer gear, telephones, answering machine, and $250 damage to my roof-top A/C unit. No damage to the house except we might have to re-upholster the chair I was sitting in... :-)

73... Mark AA7TA

5327. Re: Q Value Measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 17:05:03 UTC
From: dc6022@my-deja.com
Message-ID: <92l4ju$h93$1@nnrp1.deja.com>
Source record: 173475

Brooke,

I am not sure if our instrument is -A or -B. Let me check it out when
I get in the office. However, I have measured the Q at 1MHz and full
span with that instrument. The wave was vibrating severely. I doubt
its viability.

All,

Thanks for those who has advised me relevant methods. Your advice does
get my brain some exercises. Summary:

-Working on simulation: rough but interesting in ckt view.
-Frequency resonance method seems to be the way out with high test
frequecy (xx00MHz). Finding possible way to implement it.
-Studying the limitation on those instruments.
-Digesting the tech note from www.Johansontechnology.com.

Finally, I would like to wish you and your family have a wonderful 2001.

Regards,

DC-6022 ---> the car was hit severely after catching sight of first
sunrise of 2000/1/1 ^_^

In article <3A4C4401.40998837@pacific.net>,
brooke@pacific.net wrote:
> Hello DC-6022:
>
> The Agilent 4291B was made to make this measurement.
> Note that the error spec on all network analyzers is so great they
can not
> make this measurement.
> I personally like the 16912 fixture if your caps have metal on the
ends.
>
> 73,
>
> Brooke Clarke, N6GCE & Agilent employee

Sent via Deja.com
http://www.deja.com/

5328. Re: ISO info about using house wiring as a TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 17:21:30 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92l5isgpe1@bob.news.rcn.net>
Source record: 173476

UL approved capacitors for AC line bypass service are usually disc ceramics rated for 3kV. I wouldn't use any less than a cap approved by UL for this application.

Peter

"Goldreged" <goldreged@aol.comJUNKBLOK> wrote in message news:20001230112543.11051.00000305@ng-fy1.aol.com...
> <<Don't fall for the house wiring antenna scams.>>
>
> My mom bought one of them pieces of GARBAGE.
> I tried to get it to work for 2 hours... The bent coat hangers worked better.
> Took it apart & found capacitors rated @ 125 volts... I wouldn't use anything
> that wasn't rated for DOUBLE the voltage when using the house wiring...
> (Electrician for 15 years)
>
> Ed G.
> KB1DQX
> (Please Remove "JUNKBLOK" to E-mail.
> Unless it's a Flame.)
>

5329. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 18:09:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92l8asiuk1@slb7.atl.mindspring.net>
Source record: 173477

Thread:

Oh! Uh... stupid me, I guess I just didn't get it!

Now I think I get it... we are being told here on this NG that we may communicate with N1IR on the NG at will, with the single exception of communications on the topic of fractals.

To communicate with N1IR on the subject of fractals we must use another conduit. Some other place on the Internet I guess, who cares?

Is this right?

If this is true, then I find the proferred information to be a non-sequitor, since, like most hams I have little or no interest in those impractical fractal thing-a-ma-jigs. What good are they????

However I was elated to read that "directive" at first, since I originally had the impression that N1IR and his band of merry harranguers (sp) were movin on! But now I see that ain't so...

Oh well, there's always next year I suppose.

-Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20001228093843.08814.00000143@ng-ff1.aol.com...
> I will repeat (and expand) Phil's post again for the opportunity of those
who
> did not read accurately or completely.
>
> I am happy to answer fractal antenna questions on the reflector when I
have
> time. But not on USENET or e-mail. Please do not send ANY 'ham' fractal
> antenna questions via e-mail, especially not to commercial e-mail. They
will
> just get erased as of 1 January and not read at all. Thanks!
>
> 73
> Chip N1IR
>
> ----------
>
> QST--
>
> You are invited to join the fractal antenna reflector at:
>

> fractalantenna-subscribe@egroups.com
>
> This lively groups discusses the exciting and state of the art antenna
> technology based on fractals. Topics range from antenna theory to
practical ham
> uses. Recent list size is 265. The reflector is moderated and no spam or
> personal attacks OR off-topic posts are allowed. Archives to subscribers
only.
>
> Dr. Nathan Cohen, N1IR, has recently announced that the fractal antenna
> reflector will be the 'net conduit for contact with him on this subject,
so if
> you have fractal
> antenna questions, this is the place!
>
> Happy Hammin'
>
> Phil N1ZKT
>
>
>
>
>

5330. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 18:27:34 UTC
From: rwclark@seanet.com
Message-ID: <3a67268f.601566967@news.seanet.com>
Source record: 173478

On Sat, 30 Dec 2000 12:00:48 GMT, Bob Miller <bamiller@texas.net>
wrote:

>rwclark@seanet.com (Richard Clark) wrote:
>
>>
>>Hi Bob,
>>
>>The GPO can do this in a heart-beat if all you are looking for is
>>>more pages, photos, charts
>>>and illustrations
>>
>>Some pubs are free too.
>
>Well, the GPO is supported by taxes.
>
>Bob
>k5qwg
>
Hi Bob,

Now that there is a commercial value applied to the spectrum (in the marketplace of auction), we Hams are supported by taxes too. Those frequencies that we have access to, if they were to be sold by Uncle Sam, then the US would derive an income. Denied that (by virtue of our "entitlement"), the US must seek some other source of revenue - taxes.

Taxes work for me, I also use the GPO. Elsewhere in this forum is a link to tax paid effort to create a propagation modeler VOACAP - I use that too. Taxes paid for the Mismatch Uncertainty calculator I got from NIST - I use that too.

There are also commercial correlatives to each of these - I use them too.

Make taxes your friend ;-)

73's
Richard Clark, KB7QHC

5331. Re: Need Match Box for R-7000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 18:41:24 UTC
From: "Dr. Conrad Connie" <coontail@my-deja.com>
Message-ID: <92la8jlkv1@nnrp1.deja.com>
Source record: 173480

In article <901A6517Emarkemprimenetcom@206.165.3.80>,
markem@primenet.com (M.M.) wrote:
> I need the matching box for a Cushcraft R-7000. The part number is
MN-7000.
> Cushcraft's price for it is just shy of a whole new antenna so I was
hoping
> someone might have one from a junked R-7000. If so, please let me
know. Or,
> if anyone has a wiring diagram I might be able to repair it. It was
damaged
> by a lightning strike.
>
> Or, if someone wants a junk R-7000, let me know. It looks fine except
for
> the box. I don't see any other damage at all. I'd expect to see
something
> else damaged by the strike but I sure don't see anything obvious. I
don't
> think it was a direct strike. It also wiped out some of my computer
gear,
> telephones, answering machine, and $250 damage to my roof-top A/C
unit. No
> damage to the house except we might have to re-upholster the chair I
was
> sitting in... :-)
>
> 73... Mark AA7TA
>

Is the box the same as an R7 ? If so I'll sell you one real cheap.

Sent via Deja.com
http://www.deja.com/

5332. Re: Radiation angle of Magnetic Loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 18:44:38 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A4E2C58.76A76EDF@earthlink.net>
Source record: 173479

The theoretical short antennas are not inefficient;it is when we try to BUILD a short antenna that we run into inefficiency. A theoretical antenna has lossless conductors and loading elements, where a real antenna has all kinds of losses.

I use the rule of thumb that the efficiency of a small antenna is directly related to the product of size, cost and weight, divided by "k" -- how difficult it is to erect. "k" for an easy to erect antenna is very high, and for a difficult to erect antenna, may approach 1. There should be a frustration factor in there too, to allow for the antennas that get thrown out because they are too expensive, hard to build, or to erect. (grin)

All this unscientific grumbling aside, it's well known that reducing losses improves the signal. The Bug-Catcher uses a low-loss coil. A large ground plane reduces IR ground losses. Raising the mounting point further from the Earth's surface on a vehicle also reduces current flowing in that lossy ground. Spacing coil turns to reduce turn-to-turn capacitance, moving a top hat away from the coil, mounting the anna in the clear, away from conductors; all these are incremental improvement s that show up in places like W6RCA's shoot-out results. And in our enjoyment of our hobby.

I have in my garage the makings of a small magnetic loop; about 20 feet of 2.5 inch copper tubing and a 15 kV vacuum capacitor. I don't expect this to equal a dipole on 40 meters, or even a vertical on 80. But it WILL let me get on the air without putting up masts in my tiny back yard and alerting the neighbors that they can blame all their electronic problems on ME. It could also let me null out muchof the locally generated QRN. I count those as positives. Maybe I should factor THAT into my small-antenna algorithm, eh?

Happy New Year!

Cortland

"Dr. Conrad Connie" wrote:

> In article <3A4BD401.39B91B41@earthlink.net>,
> Cortland Richmond <ka5s@earthlink.net> wrote:
> > If you mount a small magnetic loop so that it stands vertically, it
> radiates
> > equally well (or, equally poorly!) at all vertical angles, with nulls
> in the
> > directions perpendicular to the loops plane; if you sight through the
> circle,
> > you are sighting along the null direction. If you mount such a loop
> > horizontally, it will radiate equally well in all azimuth directions,

> with nulls
> > at 90 degrees and 180 degrees elevation.
> >
> > A small loop is NOT very efficient. Neither is ANY small antenna.
> >
>
> Although theory predicts short antennas have low effeciency, the fact
> remains that many mobile antennas, which are very short for either 40 or
> 75 meters, appear to equal and often out perform large dipoles.
> I have been active in a net which attracts both mobile and fixed
> stations on 40 and 75. I am very surprised by the performance of SOME
> mobiles at distances equalling the radius of the USA. This is true on 40
> and to lesser extent on 75. In fact I have copied mobiles on 160 at
> about 500 miles with very good signals.
> Many times these mobiles are as much as 6 or more db stronger than an
> equivalent fixed station.
>
> I can only conclude, without absolute proof, small vertical antenna do
> radiate at low angles and the more power used allows these antennas to
> sound like high dipoles in some instances. The quality of the ground
> plane seems very significant. Usually best mobiles are 18 wheelers.
>
> -
>
> Sent via Deja.com
> http://www.deja.com/

5333. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:03:50 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4E3196.DE54A35C@pim.com>
Source record: 173481

Stick it up your gay ass Hambrecht. And you are correct.. I
command the English language and you look foolish... AT WILL.
So run along in defeat fag.

Fred Hambrecht wrote:

> One is always pleased to see a learned Professor who has such a command of
> the English language. Your limited use of the English language is more in
> line with some of the uneducated morons that drop by from time to time, or
> perhaps you are over stating your qualifications.
>
> "Prof. Beaker" <beaker@pim.com> wrote in message
> news:3A4D23F8.D9B683D6@pim.com...
> > You are sure a nutcase aren't you Pennino?
> > Just what is your real problem?
> > Wife beating? Wow that really came out of left field.
> > I bet YOU ARE the one with a domestic abuse conviction.
> > Have a happy new year Pennino you fucking loser.
> > Are you a spick or Italian?
> >
> >
> >
> > Jim Pennino wrote:
> >
> > > Prof. Beaker <beaker@pim.com> wrote:
> > > > You take YOUR prozac Pennino. Do you think everyone has
> > > > their eyes glued to the TV all day long like yourself?
> > >
> > > Do you still beat your wife? The question assumes a whole lot.
> > >
> > > It is obvious Prof. Beaker isn't a professor of logic.
> > >
> > > Since the story was a head line story on the Los Angeles Times,
> > > the Orange County Register, and every little local paper around, it
> > > would be hard to miss if you EVER read a newspaper or just glance at
> > > a news stand in passing.
> > >
> > > Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> > > News and Contra Costa Times.
> > >
> > > You might try reading a newspaper once in a while.
> > >
> > > It was on every news segment of every radio station of all formats;
> rock,
> > > oldies, talk, easy listening, etc.

> > >
> > > You might try listening to the radio on the way to and from work once
> > > in a while.
> > >
> > > It was on every news broadcast of all the TV networks.
> > >
> > > Since you don't seem to know much about what's happening in the world,
> > > you might also be interested to know Bush is now officially President
> > > Elect, Elian is back in Cuba and Elvis is still dead.
> > >
> > > Jim Pennino
> >
> >
> >

5334. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:05:47 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4E320A.497E2462@pim.com>
Source record: 173482

Good riddens Pennino.. spick boy. Now we don't have to hear
from you anymore. Of course we all know you'll be reading my
posts in the future and that you just are not capable of coming
up with good replies. Good riddens.

Jim Pennino wrote:

> Prof. Beaker <beaker@pim.com> wrote:
> > You are sure a nutcase aren't you Pennino?
> > Just what is your real problem?
> > Wife beating? Wow that really came out of left field.
> > I bet YOU ARE the one with a domestic abuse conviction.
> > Have a happy new year Pennino you fucking loser.
> > Are you a spick or Italian?
>
> > Jim Pennino wrote:
>
> >> Prof. Beaker <beaker@pim.com> wrote:
> >> > You take YOUR prozac Pennino. Do you think everyone has
> >> > their eyes glued to the TV all day long like yourself?
> >>
> >> Do you still beat your wife? The question assumes a whole lot.
> >>
> >> It is obvious Prof. Beaker isn't a professor of logic.
> >>
> >> Since the story was a head line story on the Los Angeles Times,
> >> the Orange County Register, and every little local paper around, it
> >> would be hard to miss if you EVER read a newspaper or just glance at
> >> a news stand in passing.
> >>
> >> Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> >> News and Contra Costa Times.
> >>
> >> You might try reading a newspaper once in a while.
> >>
> >> It was on every news segment of every radio station of all formats; rock,
> >> oldies, talk, easy listening, etc.
> >>
> >> You might try listening to the radio on the way to and from work once
> >> in a while.
> >>
> >> It was on every news broadcast of all the TV networks.
> >>
> >> Since you don't seem to know much about what's happening in the world,
> >> you might also be interested to know Bush is now officially President

> >> Elect, Elian is back in Cuba and Elvis is still dead.
> >>
> >> Jim Pennino
>
> Congratulations, you are the first person from this newsgroup that I have
> kill filed. Though tempted by others, you are the first to have totally
> worthless postings; not even amusement value.
>
> Since you probably don't know what "kill filed" means, I'll explain it
> to you.
>
> I will NEVER see ANY post from you ever again.
>
> So from now on you're screaming and swearing like a little child in an
> empty room.
>
> PLONK
>
> Jim Pennino

5335. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:09:26 UTC
From: rwclark@seanet.com
Message-ID: <3a6929d0.602399995@news.seanet.com>
Source record: 173483

On Sat, 30 Dec 2000 02:11:07 GMT, Pervert_Extraordinaire
<valued_customer1@att.com> wrote:

>Jim Jerzycke wrote:
>> You might want to try using a small audio transformer to give you some
>> isolation between the receiver audio output and the sound card input.
>> Radio Shack has some that are suitable for this purpose. We had a
>> similar problem at our club station, and this cleared it up.
>> 73, Jim
>
>In other words, inductively couple the receivers audio out to the
>sound cards audio in? I suppose this would alleviate any ground
>offset/loop problems between my receiver and my PC.
>
>Am I correct?

Hi OM,

This is the symptom I spoke of when we last discussed grounding and
the necessity to tie all grounds together.

An isolation transformer is a limited cure and sometimes the only
solution (there are designs where there must be separate grounds).
The limit is imposed by any other ground referenced connection that
bridges that core's isolation (like an rs232 connector to your
external modem). If you attempt to isolate your audio with a
transformer and a ground loop is reintroduced (or already existing) by
another connection, you haven't got a solution.

This last, the second (or third or fourth or...) existing path, is the
most pernicious. It simply goes to first principles - ground all
equipment to the same point. Do not cascade connections unless each
connection towards the central ground grows correspondingly larger -
and shorter (a contradiction at some level - but again this is not the
BEST solution).

Let me illustrate this last imperative of a weak solution. Your Amp
is at the end of this chain of ground connections. For whatever
reason it introduces 1 amp of 60Hz current into ground. The path to
ground is laced through your audio mixer board and then through 0.001
Ohms of wire to ultimate ground. You have your audio levels elevated
by 1 mV of 60Hz hum IF your audio mixer also connects to another
ground path by virtue of that audio input (almost necessary by
definition). Audio full output levels are frequently based at a level
of 100 mV or 1V. The difference between the two would be hum in the
background or hum over the signal. The solution is no hum at all by

breaking that 1 Amp path and sending it to ground separately from the mixer's ground path.

1 Amp and 0.001Ohms are not exotic characteristics. The 1 Amp is admittedly there through some mishap (we are amateurs remember) and in all likelihood would be overlooked if it did not introduce this Hum (it will probably evidence itself somewhere else too, but that is another topic). 0.001 Ohm is pretty aggressive, but not terribly difficult to achieve. There is every likelihood that your ground path encounters more resistance. However, you can tolerate higher resistances if you tie every piece of equipment to ground through its own path. Interconnects between gear will then offer paralleled paths to ground rather than series paths.

To add to the mix, there is another option - the ground plane. In this scenario, all gear ground goes directly to a extremely close sheet of metal (typically layered on the table top, or back of the bench) which in turn has its own beefy ground drop. This is a very attractive solution in that it also gives a level of protection to the operator too if it is part of the table top. It also is very useful for static control if you handle sensitive devices. It also is very low in Z which aids in noise control (non-power line related noise that is) and RF stability.

73's
Richard Clark, KB7QHC

5336. Hy-gain vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:21:11 UTC
From: rware@voyager.net
Message-ID: <3a4e348c$0$29999$44a10c7e@news.net-link.net>
Source record: 173484

I am interested in finding information about a Hy-gain 18v antenna.
Any comments, observations, experience? Would anyone have an
instruction manual?

Thanks
Ray
kc8iwt

5337. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:43:03 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92ldsimjt1@iac5.navix.net>
Source record: 173485

You certainly "demonstrated" your command of the English language. We are all impressed with the elegant descriptive language that so well exhibits your superior intellect.

Rec.Radio.CB awaits your return.

No need to respond, as you have been placed along with the rest of the potty mouthed children, in the kill file.

"Prof. Beaker" <beaker@pim.com> wrote in message news:3A4E3196.DE54A35C@pim.com...
> Stick it up your gay ass Hambrecht. And you are correct.. I
> command the English language and you look foolish... AT WILL.
> So run along in defeat fag.

5338. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 19:43:17 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4E3AD5.30806@hiwaay.net>
Source record: 173486

guess what- you have proven yourself to be a false poster (ie not a
prof.) so-

PLONK- bye bye

Bill

Prof. Beaker wrote:

> Good riddens Pennino.. spick boy. Now we don't have to hear
> from you anymore. Of course we all know you'll be reading my
> posts in the future and that you just are not capable of coming
> up with good replies. Good riddens.
>
>
>
> Jim Pennino wrote:
>
>
>> Prof. Beaker <beaker@pim.com> wrote:
>>
>>> You are sure a nutcase aren't you Pennino?
>>> Just what is your real problem?
>>> Wife beating? Wow that really came out of left field.
>>> I bet YOU ARE the one with a domestic abuse conviction.
>>> Have a happy new year Pennino you fucking loser.
>>> Are you a spick or Italian?
>>
>>> Jim Pennino wrote:
>>
>>>> Prof. Beaker <beaker@pim.com> wrote:
>>>>
>>>>> You take YOUR prozac Pennino. Do you think everyone has
>>>>> their eyes glued to the TV all day long like yourself?
>>>>
>>>> Do you still beat your wife? The question assumes a whole lot.
>>>>
>>>> It is obvious Prof. Beaker isn't a professor of logic.
>>>>
>>>> Since the story was a head line story on the Los Angeles Times,
>>>> the Orange County Register, and every little local paper around, it
>>>> would be hard to miss if you EVER read a newspaper or just glance at
>>>> a news stand in passing.
>>>>
>>>> Oh, sorry, PIM is in the bay area; it was also big news in the Mercury

>>>> News and Contra Costa Times.
>>>>
>>>> You might try reading a newspaper once in a while.
>>>>
>>>> It was on every news segment of every radio station of all formats; rock,
>>>> oldies, talk, easy listening, etc.
>>>>
>>>> You might try listening to the radio on the way to and from work once
>>>> in a while.
>>>>
>>>> It was on every news broadcast of all the TV networks.
>>>>
>>>> Since you don't seem to know much about what's happening in the world,
>>>> you might also be interested to know Bush is now officially President
>>>> Elect, Elian is back in Cuba and Elvis is still dead.
>>>>
>>>> Jim Pennino
>>>
>> Congratulations, you are the first person from this newsgroup that I have
>> kill filed. Though tempted by others, you are the first to have totally
>> worthless postings; not even amusement value.
>>
>> Since you probably don't know what "kill filed" means, I'll explain it
>> to you.
>>
>> I will NEVER see ANY post from you ever again.
>>
>> So from now on you're screaming and swearing like a little child in an
>> empty room.
>>
>> PLONK
>>
>> Jim Pennino

5339. Re: RF ground/Lightning ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 20:59:34 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <XZr36.1505$94.145454@e420r-atl2.usenetserver.com>
Source record: 173487

For maximum equipment protection the RF and Lightning grounds should be separate. A good protection for a tower is three ground rods a few inches from the tower legs. The connection should be at least #8 copper from each leg to the associated ground. The connection should not have sharp bends, but a smooth curve with 6 inch or so radius. An s-curve is OK. Lightning takes what it sees as the shortest path (least impedance). I have had success in keeping lightning out of the shack by putting a one turn loop in the coax and motor control line as it leaves the tower.

A tower close to the shack makes a very loud bang when it takes a stroke!
w4mb

5340. Tidying up the old millenium

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 21:08:01 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <VMs36.116671$eT4.8532615@nnrp3.clara.net>
Source record: 173490

on November 16 Mark Keith wrote:

>Fractenna wrote:
>>
>> >>From: fractenna@aol.com (Fractenna):
>> >
>> >>I am not a public figure.
>> >
>> >The number of public posts that you have made, Chip, suggest otherwise.
The
>> >personal life that I am sure you lead that extends significantly past
the
>> >content of your posts is not a news item, but the posts you have made
here
>> >certainly are.
>> >
>> >73,
>> >Ed Hare, W1RFI
>>
>> That is not correct.

>I wonder what is incorrect.

>3483 rec.radio.amateur.antenna
>10 uk.radio.amateur
>10 rec.radio.amateur.homebrew
>10 sci.fractals
>10 rec.radio.amateur.misc
>8 rec.radio.amateur.dx
>7 rec.radio.shortwave
>7 rec.radio.cb
>4 sci.physics.electromag
>4 rec.radio.amateur.policy
>3 sci.electronics.design
>3 rec.radio.swap
>3 rec.radio.amateur.equipment
>3 rec.radio.amateur.space
>2 alt.internet.services
>1 sci.electronics.components
>1 sci.electronics.equipment

>You send 3483 posts on this NG and you are not public? I'm reminded of
>all the times you remind all that this is a public forum. Oh, sheeeeet,
>I get it, this doesn't apply to you.
>

>> Ask an attorney's counsel on this.

>Who is the attorneys counsel? Is he any better than the attorney? About
>the same, worse? Does he have a ph.d?
>Is he a ham? Does he build antennas? Or is the counsel more than one? A
>flock of sheep? A flock of seagulls?
>Or is the counsel a big Texas bull? Huuummmm, maybe thats it...You know
>what they call cow doo-doo here in Texas don't you? A cow-chip.... MK

>This should help, but if it doesn't, check rec.radio.cb for further
>instructions. MK
>--
>http://web.wt.net/~nm5k

and I followed with:

>> Ask an attorney's counsel on this.

>counsel = advice

>He's right, you are wrong. Now why not back off and give the guy a chance.
>On the evidence of the last week's postings he is obviously trying a new
>approach and surely deserves to be given another chance. How about a fresh
>start all round?

>Not looking for controversy - just fair play

>73, John, G8OZH

So now the following is necessary:

Mark,

I must apologise. Not for suggesting that you fired off the wrong response
but for my own stupidity in recommending the fool be given another chance! I
had been following this NG long enough to know better and even had FRACTured
intellect in my kill list!

It won't happen again - New Year's Resolution!

Happy New Year to all

John, G8OZH

5341. Re: J - Pole question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 21:13:39 UTC
From: Emptor Phriesadommazille <Finfor@rextov.net>
Message-ID: <7es36.193$y12.22115@news7.onvoy.net>
Source record: 173488

Raise the connection point of the center cond. and the shield, up or down as necessary. It's usually about 1 1/2 inches for a J pole and up to twice that for a super J pole.

Ken wrote in message ...
> Can someone help me out with the specifics on how to tune the feed
>line that connects to
>the main element? I have the unit built, but am not sure how to tune it .
>Raise the driver element up or down, or the feed line up or down on the
>driver element?
>Thanks,
>Ken
>
>
>
>

5342. Re: Need Match Box for R-7000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 21:46:43 UTC
From: k1bqt@aol.com
Message-ID: <20001230164643.10778.00000711@ng-cr1.aol.com>
Source record: 173489

> Is the box the same as an R7 ? If so I'll sell you one real cheap.<

It probably is. Give it a try.

Rick K1BQT

5343. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 22:00:19 UTC
From: k1bqt@aol.com
Message-ID: <20001230170019.10778.00000713@ng-cr1.aol.com>
Source record: 173491

Hi Peter--

>...I originally had the impression that N1IR and his band of merry harranguers (sp) were movin on!<

Are you kidding? Best we can hope for is BU will put 'em all back on "academic pro" next semester and give us another reprieve.

(PS--got an extra "r" in there).

Rick K1BQT

5344. Re: RV installation trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 22:06:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A4E5C7D.A5B5C43C@oio.net>
Source record: 173492

Bill,
It sounds like there are induced currents in the thermostat
wiring when you use an antenna that uses the trailer for part
of the antenna sysem. You might try torroids on the thermostat
wiring as suggested, and maybe a 0.01 cap for by-passing.
'Doc

5345. Re: Hy-gain vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 22:19:01 UTC
From: Pete <pete@etep.com>
Message-ID: <pbt36.45917$36.1524610@news1.rdc1.il.home.com>
Source record: 173493

Where can I buy the 18avt at?

<rware@voyager.net> wrote in message
news:3a4e348c$0$29999$44a10c7e@news.net-link.net...
> I am interested in finding information about a Hy-gain 18v antenna.
> Any comments, observations, experience? Would anyone have an
> instruction manual?
>
> Thanks
> Ray
> kc8iwt

5346. No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 23:54:05 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <26ss4tcsdle7d9e5fl3bfk9ngqftbmo2pn@4ax.com>
Source record: 173495

On 29 Dec 2000 03:26:30 GMT, wa8ulx@aol.com (WA8ULX) wrote:

> After checking his Call it appears hes one of them Techs, what a surprise

Anyone who won't learn Morse code is capable of any other monstrous
crime.

5347. No-code kills II

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-30 23:54:06 UTC
From: "W.G. Ewald" <wgewald@att.net>
Message-ID: <niss4tsigpdtpdo7orh9lvulhube0qfetg@4ax.com>
Source record: 173494

On 29 Dec 2000 22:53:53 GMT, johnl84238@aol.com (JOHNL84238) wrote:

>I think I may have discovered an important correlation:
>1)The latest QST on p.9 implies that hams who are cw ops are more satisfied
>hams.They get more satisfaction because they know the code.....I am a cw
>op...and I know I do.
>2)This guy's was probably a NO-CODE Tech, hence didn't know the code, wasn't
>a cw op....was not satisfied with just being a NO CODE Tech....and hence...
>3)Capped all those poor innocent people.
>Maybe the FCC should start doing background checks before issuing NO-CODE Tech
>licenses.
>Seasoned CW ops are satisfied, happy people and would never hurt anyone.
>73,
>dah-dit dah

5348. Re: QST--INVITATION TO FRACTAL ANTENNA REFLECTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 00:15:13 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92ltna$a7j$1@slb6.atl.mindspring.net>
Source record: 173496

Hey Rick:

Hope Christmas was merry for you and best wishes for a Happy New Year...
Keep up the good work!

-Peter K1PO, Cary, NC

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001230170019.10778.00000713@ng-cr1.aol.com...
> Hi Peter--
>
> >...I originally had the impression that N1IR and his band of merry
harranguers
> (sp) were movin on!<
>
> Are you kidding? Best we can hope for is BU will put 'em all back on
"academic
> pro" next semester and give us another reprieve.
>
> (PS--got an extra "r" in there).
>
> Rick K1BQT

5349. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 01:32:54 UTC
From: wa8ulx@aol.com
Message-ID: <20001230203254.05606.00001414@ng-md1.aol.com>
Source record: 173497

>Anyone who won't learn Morse code is capable of any other monstrous
>crime.
>

Of course thats why he is No-Code CBlusser

5350. Catching FMcable stations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 01:40:57 UTC
From: blairt@direct.ca
Message-ID: <3a548a4f.1095793@news.direct.ca>
Source record: 173498

A bit OT, but I thought some experts probably hang here who can provide an answer.
I am trying to hook up a JVC minisystem which I gave my girlfriend for Christmas, in order that she can receive cable FM stations. The JVC has the clip connectors for an external antenna, one clip for ground, and the other for "75 ohms". I have tried both using a matching transformer on the end of the coax, but this isn't effective, I guess, because it is really to match twinlead (300 ohms) to the back of the set. The owner's manual says to strip the end of the coax and insert the center conductor into the 75 ohm clip, and the braid into the grounding clip. This isn't working either.
Do I need something like a "matching" transformer that neither matches nor transforms, i.e. 75 ohms coax straight thru to the back of the JVC? At the same location,formerly,there was a 15 year old Mitsubishi receiver with a female insert on the back which took a male connector on the end of the coax which worked and received all the cable stations.
Compounding the problem here might be the fact that the cable signal has been diluted by several splitters around the house, although the Mitsubishi worked fine under the same circumstances. I tried the JVC, at a different location(another house) using a matching transformer and it captured the stations OK,.I was wondering whether trying a RS signal booster (25 bucks) might work if I am faced with a weak cable signal situation.
Any suggestions? (and thanks for the bandwith).
Blair.

5351. Re: QUESTION: Can the "shortened radials" thread get any longer??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 02:00:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4E9336.A7FE9669@dvol.com>
Source record: 173499

Joe wrote:

> Last time I checked, the shortened radials thread was up to 137
> articles. Does a newsgroup thread become more effective as it
> lengthens?

>
Absolutely. Any number of threads went up close to the 300 posts mark
during the code test wars over in rrap, the "really good stuff" was
almost always posted just before the thread imploded.
>--

> Regards,
> Joe Schlatter

>
w3rv

5352. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 02:14:53 UTC
From: Bigdad <Bigdad@rworld.com>
Message-ID: <xEw36.4052$1%2.199916@sjc-read.news.verio.net>
Source record: 173500

"W.G. Ewald" <wgewald@att.net> wrote in message
news:26ss4tcsdle7d9e5fl3bfk9ngqftbmo2pn@4ax.com...
> On 29 Dec 2000 03:26:30 GMT, wa8ulx@aol.com (WA8ULX) wrote:
>
> > After checking his Call it appears hes one of them Techs, what a
surprise
>
> Anyone who won't learn Morse code is capable of any other monstrous
> crime.

I've found that CW ops tend to be stuck up self centered people that feel
that no one else is worth a damn unless they cow tow to their beliefs that
you're not a ham unless you can use morse code. I passed a code test yes but
i choose not to use it and i dont think Morse is the measure of the man and
should not hamper the growth of our hobby. My opinion.

WB9HNJ

5353. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 02:21:30 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4E982A.DE323A6D@att.com>
Source record: 173501

Richard Clark wrote:

Hi Richard, thanks for chiming in!

> An isolation transformer is a limited cure and sometimes the only
> solution (there are designs where there must be separate grounds).
> The limit is imposed by any other ground referenced connection that
> bridges that core's isolation (like an rs232 connector to your
> external modem). If you attempt to isolate your audio with a
> transformer and a ground loop is reintroduced (or already existing) by
> another connection, you haven't got a solution.

The weather receiver drives the demodulated audio output via a LM380
amp which is, of course, referenced to weather receiver ground. The
PC sound card receives the demodulated audio input via <insert hardware
here> which is, of course, referenced to PC ground. Since both the
weather receiver and PC are powered by A/C, both of their references
are tied together.... but through a questionable path no doubt. Looks like
the transformer would make things worse since it would remove the least
impedance path (the audio feed shield) between the two devices.

> This last, the second (or third or fourth or...) existing path, is the
> most pernicious. It simply goes to first principles - ground all
> equipment to the same point. Do not cascade connections unless each
> connection towards the central ground grows correspondingly larger -
> and shorter (a contradiction at some level - but again this is not the
> BEST solution).

Pernicious: adj. Destructive or deadly.

<SNIP>

I'm WAS wondering if I have a ground offset between my receiver and PC.
In both my old 'case' (RS2006) and new 'case' (R139) I've had my receiver
powered
via a connection to the wall receptical directly.... and my PC powered
via a connection to my surge suppressor and then to the wall receptical. This
would certainly 'lift' my PC ground above my receiver ground proportional to the
current/impedance of the surge supressor. This differential would be
counteracted
by the shield of the audio feed..... which would conduct current and generate
60Hz
noise. Hmmmm. However, I also experienced this APT noise problem when using the
receiver-speaker to PC-microphone connection to formulate the audio feed.
This speaker/micprophone is the mother of all isolation techniques.

Did you get a chance to look at my APT images? I've been speculating this noise is 60Hz based given I see 30 events over a .250mS synch. This is 120Hz. Each half wave of 60Hz injecting it's own individual grief. However, I've seen 60Hz noise on other APT images and they are more periodic than mine. The noise on my images appears to be less periodic. This makes me question my speculation.

Thanks again.

5354. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 02:50:14 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4E9EE6.77C8CE1C@dvol.com>
Source record: 173502

Cecil wrote:

> Fractenna wrote:
> > Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> > and shoot people.
>
> Nope, but an amazing (at least to me) number of hams are.

>
As in who gives a rat's ass if he has a ham ticket or not? Unfreakingbelievable.
>--

> http://www.mindspring.com/~w6rca

>
b.

5355. Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 03:25:29 UTC
From: Donald Campbell <castles@jps.net>
Message-ID: <3A4EA7D9.55842AD7@jps.net>
Source record: 173503

I am seriously considering the purchase of a Cushcraft A3S tri-bander.
I would appreciate feedback from users of this antenna in terms of
reliability of the traps and other hardware. Also performance
experiences.

Thanks and 73, Don W6QEY

5356. Re: New Low

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 03:39:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92m9pv$d6f$0@208.207.71.172>
Source record: 173504

Tom W8JI wrote:
>
> On Fri, 29 Dec 2000 11:31:32 -0700, Larry Benko <benko@aztek-eng.com>
> wrote:
>
> >Once again the ratio of antenna related posts to bullshit
> >is at a near record low. Congrats!!!
> >
> >LArry, W0QE
>
> When my server saiud there were 271 new posts in two days, I knew N1IR
> was busy again.
>
> The boy really knows how to trash a newsgroup!
>
> 73 Tom

Emphasis on boy and trash.

5357. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 04:08:16 UTC
From: Ted Bruce W2ICV <>
Message-ID: <hpat4t4kbg70oetbifc4bdo5uv2teps53p@4ax.com>
Source record: 173505

Tom,

That's what I'm looking for. Always works, not fussy. When I went from only 3 quarter wavelength radials on the ground to 5, my 20m vertical went from a flat swr, lossy dummy load to a usable antenna with better matching and better signals. Then I added 6 short (8 to 10) foot radials, and *subjectively* I feel that signals in & out got better. Also, the swr got a little steeper. I'm only 5 feet away from the lot boundary, so symmetrical radial patterns aren't possible. The soil is typical 2-3 inches of "woods dirt" (I'm surrounded by oak trees), 1 foot of Georgia red clay, and several feet of hard pan below.

I like Maxwell, Ternan, et al as much as anybody, but I also think Edison's philosophy bears merit...experiment, experiment, and experiment. If I waited until the most perfectly engineered, elegant design were complete for my antenna, I'd never get around to laying wire on (or under) the ground until I was buried with it. Sooner or later, you have to go with something like my interpretation of Moxon's approach: just do it. Otherwise, you get into a sort of Zeno's paradox...an arrow can never reach the target, because there are an infinite number of halfway points that it must try to pass.

73,
Ted W2ICV

On Fri, 29 Dec 2000 19:48:24 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>On Thu, 28 Dec 2000 11:00:44 -0600, Mark Keith <nm5k@wt.net> wrote:
>
>>Richard Clark wrote:
>>
>>>
>>> Thus to answer your question in the context of this thread, shorter
>>> radials may be effective for a MATCH condition, but have no effect in
>>> the launch condition. The same answer could be applied to lengthened
>>> radials (that is, until they are some 5 to 10 wavelengths long) too.
>>
>>Hummmm, Overall I agree except I'm not sure I would say the system in
>>the near field has no effect at all. I notice reading about above ground
>>counterpoises that they say the "almost perfect" above ground radial
>>system has little effect on the vertical pattern due to the reason you
>>give.
>
>The "almost perfect" above ground systems using four or less radials

>are certainly critical systems...since the radials couple into
>everything (including the lossy dirt below them) quite well.
>
>My idea of almost perfect is a system that always works, and isn't
>fussy. It also is a system that puts the RF where I want it instead of
>where luck or chance dictates.
>
>73 Tom

5358. Re: Radio Shack Coax any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 04:14:38 UTC
From: Ted Bruce W2ICV <>
Message-ID: <bcct4tgl6aeflthp225d2ku0p5lsoi6ctk@4ax.com>
Source record: 173506

I'd also look at the shield coverage. I recently bought some coax at
the Atlanta RadioShack.com store. The RadioShack.com house brand
RG-58U had about 70% braid, while their Belden RG-58U had 95%. I
didn't compare the RG-8's, since I was looking for lightweight qrp
cable.

Ted W2ICV

On 26 Dec 2000 01:52:02 GMT, k7jy@aol.com (K7jy) wrote:

>Well I've received a number of great replies about my original post, but
>nobody's answered my question yet. I'm wondering if anyone has the db loss
>figures for Radio Shack RG/8 coax? There seems to be universal agreement that
>it's not very good, that it's stiff, that it's shield is thin, etc. What I'm
>looking for is the proof in the numbers. Anybody know them? Rad Shack used to
>sell the thick stuff a few years ago, but I haven't seen it in their stores
>lately. Many thanks and 73s, John, K7JY.

5359. 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 04:23:41 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <hxy36.204$y12.25443@news7.onvoy.net>
Source record: 173507

Can anyont tell me the dimentions of a gamma match for 6 meters.
I am working on a 4 el beam and would appreciate some help.

The handbook says .5 wavelength but i cannot get it to tune up. I have been trying it in the 12" ballpark with no luck.

Thanks

Ross / N0MSS

5360. Re: Need Match Box for R-7000

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 04:56:48 UTC
From: markem@primenet.com
Message-ID: <901AD51B3markemprimenetcom@206.165.3.70>
Source record: 173508

coontail@my-deja.com (Dr. Conrad Connie) wrote:

> markem@primenet.com (M.M.) wrote:
>> I need the matching box for a Cushcraft R-7000. ...
>
> Is the box the same as an R7 ? If so I'll sell you one real cheap.
>

I don't know but I'm willing to give it a try. What price did you have in mind? Email me and maybe we can make a deal...

Thanks... Mark markem@primenet.com

5361. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 05:17:47 UTC
From: dcoffey@mindspring.com
Message-ID: <3a4ec117.871180603@news.mindspring.com>
Source record: 173509

"riddens" ?? "Professor" ??? HA

PLOINK

"Prof. Beaker" <beaker@pim.com> wrote:

>Good riddens Pennino.. spick boy. Now we don't have to hear
>from you anymore. Of course we all know you'll be reading my
>posts in the future and that you just are not capable of coming
>up with good replies. Good riddens.
>
>
>

5362. Mosley Electronics Saga FINAL ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 05:48:58 UTC
From: wa7aw@bentonrea.com
Message-ID: <3a4ec89a.8166380@news.bentonrea.com>
Source record: 173510

Below are emails from Mosley, please notice the dates
on the emails. My comments are in all caps between the
various emails. Please reply directly to me as there
is no need to clutter up the reflector any more concerning
this Mosley "rip off"
wa7aw@bentonrea.com
Mosley's address
mosley@mosley-electronics.com
www.mosley-electronics.com

At 10:26 AM 04/10/2000 -0500, Mosley wrote:
Mr. Hammers:

We will have your antenna on the tower sometime in the next two weeks.
We
will keep you informed as things progress.

Mosley Electronics, Inc.

At 04:22 PM 05/03/2000 -0500, Mosley wrote:
Mr. Hammers:

Please take note we have not forgotten about you. We just want to be
in a
position where we do not have to rush your antenna off the main tower
for
some other matter.

Your patience is appreciated.

Gary

NOTICE HOW THE ATTITUDE IS STARTING TO CHANGE FROM THIS DATE FORWARD.

At 11:53 AM 06/08/2000 -0500, Mosley wrote:
Mr. Hammers:

Your antenna will be shipped back to you at the end of this month.

You were told up front, before you were given authorization to send
the
antenna back, that other matters had priority and tower time was
limited due
to a number of factors.

With regards to a refund, that is not an option. We will honor our
warranty

and repair or replace anything found defective.

The next e-mail which you will receive from us will be when the
antenna is
ready to ship.

Sincerely,
Gary Wurdack, Jr.

At 01:14 PM 08/03/2000 -0500, Mosley wrote:
Mr. Hammers:

You were made fully aware of the conditions concerning the warranty
evalutation and any possible delays as well as prior commitments.

As per our last e-mail, we will notify you when the antenna is ready
to be
shipped back to you. At that time, it was the end of June. Due to
circumstances beyond my control, work had stopped.

Again, we will notify you when the antenna is ready for shipment.

Sincerely,
G.A. Wurdack, Jr.
VP Operations

HOW MUCH PATIENCE SHOULD A PERSON HAVE AFTER
PAYING 5 GRAND FOR A PRODUCT THAT DOESN"T WORK ?

Return-Path: <mosley@mosley-electronics.com>
From: "Molsey Electronics, Inc." <mosley@mosley-electronics.com>
To: "John L. Hammers" <wa7aw@bentonrea.com>
References: <2.2.32.20000810002353.00735278@mail.bentonrea.com>
Subject: Re: PRO-96-S Settlement Mr Wurdack Jr. & Sr.
Date: Thu, 10 Aug 2000 09:15:45 -0500
X-MSMail-Priority: Normal
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400

Mr. Hammers:

I am getting tired of these games. You are the one threatening suit.
Forward your attorney's contact information as I requested, or have
your
attorney call me, and we will go from there.

Or, sit back and wait for us to complete our evaluation.

Sincerely,

G.A. Wurdack, Jr.
VP Operations

Return-Path: <mosley@mosley-electronics.com>
From: "Molsey Electronics, Inc." <mosley@mosley-electronics.com>

To: "John L. Hammers" <wa7aw@bentonrea.com>
References: <2.2.32.20000808204022.00712a54@mail.bentonrea.com>
Subject: Re: PRO-96-S Settlement Mr Wurdack Jr. & Sr.
Date: Wed, 9 Aug 2000 16:34:31 -0500
X-MSMail-Priority: Normal
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400

Mr. Hammers:

As I explained to you last time, we will contact you when the antenna is
ready.

You were made fully aware that since your public actions, the only way we
would work with you is if we had the antenna back for evaluation. It has
been our belief from the start that your problems were due to installation
errors.

By having the antenna back, we can verify and document that the antenna we
shipped you works. All our preliminary ground evaluations indicate that the
component parts are checking out; however, we won't be able to verify this
until all the tests are completed.

Prior to sending the antenna back, you were made fully aware that no time
table would be set. I explained to you that you would be bumped for other
pressing matters, which you had no problem with. We also discussed any
possible delays mother nature could add as well as any other unforeseen
delays, which you understood.

Since you have continued to make this issue a public matter, I suggest you
give me your attorney's contact information, and I will have our attorney
contact him.

Sincerely,

G.A. Wurdack, Jr.
VP Operations

MORE MOSLEY REPLIES......

Return-Path: <mosley@mosley-electronics.com>
From: "Molsey Electronics, Inc." <mosley@mosley-electronics.com>
To: "John L. Hammers" <wa7aw@bentonrea.com>
References: <2.2.32.20000812010413.006aadbc@mail.bentonrea.com>
Subject: Re: PRO-96-S Settlement Mr Wurdack Jr. & Sr.
Date: Mon, 14 Aug 2000 10:22:40 -0500
X-MSMail-Priority: Normal
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400

Mr. Hammers:

You should know R&D in antenna designs can take several weeks or several
months to complete a design from start to finish. I told you before you
sent your antenna back, that our product development schedule came first. I
am not going to rehash the delays, but you know very well that some things
cannot be rushed nor avoided.

We are very close to having your antenna's evaluation completed. I cannot
commit to a completion date as I am not involved in the evaluation, it is
out of my hands, but I am told it will be very soon.

The choice is yours. You can wait until we are finished and get your
antenna back, or you can proceed with your suit. As I am sure your attorney
has informed you, that process could drag this situation out for the next
couple of years and you would still be without the antenna.

We know the antenna design works. We have been in business for over 50
years and all our designs work and our reputation backs that up. You paid
for antenna that works and we are making sure that is what we sent you, and
if there is something wrong with yours, we will repair or replace whatever
may be defective.

Upon legal advice, this will be our last contact with you other than when
our evaluation has been completed. Any more e-mail demanding any kind of a
reponse will not be answered.

Sincerely,

G.A. Wurdack, Jr.
VP Operations

THEN THIS SETTLEMENT OFFER VIA MOSLEYS' ATTORNEY

>From JOShea@suelthauswalsh.com Wed Nov 29 13:43:02 2000
X-Mailer: Novell GroupWise 5.2
Date: Wed, 29 Nov 2000 13:44:14 -0600
From: "John O'Shea" <JOShea@suelthauswalsh.com>
To: my attorney in missouri
Subject: Re: John Hammers
X-MIME-Autoconverted: from quoted-printable to 8bit by
mail3.primary.net
id eATJh2s18535

The antenna parts returned by your client have been tested by Mosely Electronics and work properly. Mosely Electronics is willing to ship the
parts back to your client for installation with the caveat that your client agree to sign an agreement ensuring that he will not refer to Mosely Electronics or their products on any web sites.

Mosely Electronics is also willing to test the antenna (in St. Louis) for
your client personally so that he is assured that it works properly before
delivery. We can undertake to return the antenna at any time after your
client signs an agreement to this effect. Mosely Electronics is rejecting your clients previous offer to settle the matter for $4,000. I
will wait to hear from you.

AND THEN FURTHER CLARIFICATION OF MOSLEYS' INTENTIONS

Return-Path: <JOShea@suelthauswalsh.com>
Date: Tue, 05 Dec 2000 17:29:01 -0600
From: "John O'Shea" <JOShea@suelthauswalsh.com>
To: wa7aw@bentonrea.com
Subject: Re:
Content-Disposition: inline
X-MIME-Autoconverted: from quoted-printable to 8bit by
greyhound.bentonrea.com id MAA26849

Mosely Electronics will agree to redeliver the antenna parts to Mr. Hammers. The antenna is working properly. Mr. Hammers can come to St. Louis
to view a testing of his antenna if he prefers prior to shipment. Mr. Hammers will be given a new warranty on the antenna. Mosely Electronics
will attempt to add to the color codes for Mr. Hammer's benefit to prevent
him from installing the antenna incorrectly. Mosely Electronics agrees to
assist Mr. Hammers with questions about installation, if any. Prior to

shipping the antenna parts, Mr. Hammers will be required to sign a settlement agreement subjecting him to Missouri jurisdiction and to a liquidated damage amount in the event that he makes further comments about
Mosely Electronics on the internet. We can ship the antenna at any time.

Mr. John O'Shea
Suelthaus & Walsh, P.C.
7733 Forsyth Blvd., 12th Floor
St. Louis, MO 63105

MY REPLY TO MOSLEY WAS AS BELOW

Let me see if I understand your position correctly.

Do you refuse to refund the money I paid for the Pro-96 ?
Do you refuse to agree to a partial refund for the Pro-96 ?
Do you refuse to return the Pro-96 without conditions ?

FINAL ANALYSIS FOLLOWS,
(Sent to me by a ham who wishes to remain anonymous.)

The only amusing thing about this is Mosley's attorney misspelling their
name in every instance! This really gives a lot of credibility to the "offer". Looks to me as if they have the same quality control at the plant
as they have at the attorneys office.

Once again Mosley or "Mosely" as your attorney refers to you--good job!!!!!

This "offer" to settle is not an offer at all. It is a release of liability
request to benefit Mosley, disguised as an offer.

Mosley is deeply worried about their public image and this disaster they
have created.
This vague "offer" is a veiled attempt at a public relations trick to fool
the general public and get Mosley into a position to claim to win the "good
guy/white hat award"!

Be cautious of the SPIN. They want to publicly say that they "offered" to
send the antenna back, BUT, Mr. Hammers is the one who refused to cooperate.
They will announce to the public that Mr. Hammers is the unreasonable bad
guy when telling their side to their customer base. They will conveniently

forget to mention the one sided unreasonable demands by their attorney. They
will not mention their current possession of (your paid in full antenna) AND
(your money)--both at the same time.

Their offer is shallow on the surface but if we break it down into parts,
one item at a time, one will realize that it is ALL entirely in their favor,
with nothing of any value or benefit for Mr. Hammers, except all the risk of
his investment and most importantly, the waiver of all of his rights. They
send him a box of parts and he agrees to release their liability. Fair?

THEY WILL SEND HIS ANTENNA BACK IF HE AGREES TO ACCEPT THE FOLLOW TERMS and ASSUMPTIONS

1. "The antenna is working properly" Do we take their word for it? By what
standard? A dummy load has good swr and the lightbulb of N6BT transmits.
Will this antenna perform as
well as the other Mosleys? Considering Mr. Hammers recent experience and a
check of the Champion Radio Tribander test, that would not be something to
brag about.

2. Why should Mr. Hammers pay even more money for his own travel to St Louis
plus
>accommodations to "view" performance in an unknown and completely unscientific environment?

3. New Warranty? Is it as good as the last warranty? The
warranty is only as good as the company backing it. In this circumstance I
see no value here.

4. If the antenna instructions are clear and complete they should not have
to imply fault to Mr. Hammers for a future action.

5. "Attempting" to put on colors? Do they have no confidence that they are
able to actually accomplish that minimum technical achievement?

6. "Assistance" Is the NEW Mosley assistance policy better than the OLD
Mosley assistance policy? No value here.

7. "Rights" Giving up all of Mr. Hammers rights!! Agreeing to come to Mo. to
file suit if it is necessary? I think not.

Are they suggesting pre determined liquidated damages as a penalty for exercising free speech? Libel isn't "libel" if it is the truth! There is no
penalty for stating the truth or how, where or how many times it may be
stated.

Are they attempting to short circuit the legal remedy process by attempting
to deny the
consumer even his right to claim possible misrepresentation or fraud?

After digesting all of their offers I see nothing whatsoever to benefit Mr.
Hammers. Also, I see a lot of very subjective and unenforceable "offerings"
with no value other than to gain the liability release for Mosley.

I suspect public opinion and pressure have come to bear and they realize the
public relations disaster they have created. Mosley's name and reputation is
on the line, worldwide, and they want out with absolutely no blame or liability, AND, at Mr. Hammers expense.

The antenna may be no better than before and they may well know it. Under
the terms of their current offer, once he gets it up, only then may he discover the same problems he found last time. However, this time they have
demanded that he give up a majority of his rights to protections afforded by
the law, and even if he ops to file suit that he must agree to travel to
Missouri to litigate it at their convenience in their local courts. This
demand raises another point. Perhaps Mr. Hammers needs to investigate the
fraud statutes and interstate commerce.

THE BIG QUESTION: If they are so confident that the antenna performs as
advertised--why do they demand that he sign away "all rights and recourses"
BEFORE they even ship it or before he gets a fair chance to test it? Hummmmmmm? Never heard of Force 12, Cushcraft, M2 or anyone else demanding
such an agreement prior to shipping an antenna. I think Mosley knows something and they are trying to cover their behinds in advance.

Question: What is it called when Mosley's attorney makes an attempt to force
Mr. Hammers to perform an act, ie: to sign an agreement under duress, not in
his best interest to "get back what he already owns". This is a fine line
here but there are legal terms which may define such at attempt. I am
surprised at these tactics by their attorney of coming dangerously close to
the line, if not crossing it by intent.

I suspect that 30,000 hams in Dayton, many of whom will stop by the Mosley
booth to ask about this and many refusing to do business with them will cost
them tens of thousands more in revenue than they will ever save on Mr.
Hammers buy back.

Mosley's position here is the classic example of trying to win a very small
battle while losing the entire war. The Ham community is watching (with
checkbooks in hand).

My suggested counter offer is twofold: Either of these would greatly benefit
the public image and perception of the Mosely company.

First:
The best solution for all concerned would be a quick, simple and liability
free solution.

AGREEMENT
Upon receipt of a full refund from Mosley, Mr. Hammers shall cease any and
all comments or discussions of this matter. Further, Mr. Hammers will notify
all interested parties that the matter is settled to the satisfaction of
all. Mosley company will retain possession after the refund, will declare
ownership of the antenna and have the right to resell it at will. This would
be the best for Mosley's public image.

Second: This second choice will work although there are certain areas, the
very nature of which are less than objective, which lend themselves to
differing opinions, thus a frustrating and time consuming continuance of

this unfortunate situation.

AGREEMENT
Mosely will immediately furnish Mr. Hammers with a complete
set of updated instructions
for his inspection and allow sufficient time for his questions and
comments.

Immediately thereafter, subject to Mr. Hammers approval of such
instructions, by mutual agreement, Mosely will ship the antenna back
to Mr.
Hammers at Mosley's expense.

Upon receipt of the antenna, Mr. Hammers will notify all interested
parties
that the antenna has been received, that positive progress is being
made by
both parties and will refrain from any comments until it is in the air
and
tested by an independent antenna expert, agreeable to both parties,
known to
this industry and at Mr. Hammers'expense.

Mosley will have the right to appoint a representative of their
choosing to
be present at the
assembly, raising and testing of the antenna.

The opinions of the expert will be made public via the internet to all
interested parties. If either party challenges the test results, each
will
reserve the right to
a second and final evaluation by a second tester, agreeable to both
parties
and at the challengers expense. The performance criteria shall be the
figures originally published by the Mosley Company.

If the antenna performs as advertised, Mr. Hammers will then publish
his
acceptance, cancel any existing actions, sign a waiver of any future
actions
against Mosley, (excepting all provisions of the standard warranty),
and
refrain from any further public
comments concerning this circumstance.

If the antenna does not perform to its advertised specification,
Mosley will
agree to refund all of Mr. Hammers money and upon receipt of the
refund, the
antenna will be returned to Mosely at their expense. Mr. Hammers will
then

notify all interested parties that the matter is settled and refrain from
any further public comments.

All statements included herein are all personal observations and opinions
sent to Mr. Hammers privately in an effort to aid negotiations for the
benefit of both parties and is not a suggestion of any legal action or legal
advice.

My personal opinion is if The Mosley Company continues to follow these
practices of treating customers in this manner, they won't have to worry
about the performance of their products because they simply won't be around
long enough to support the warranties on any of their products. So sad that
misguided and over principled managers could destroy such a good company,
long standing with a previously fine reputation. A reputation gone for less
than the price of one antenna. Foolish

THE OFFERS MENTIONED ABOVE WERE MADE TO MOSLEY, MOSLEY REFUSED TO
REFUND ANY OF THE PURCHASE PRICE. THEY EVEN REFUSED TO ACCEPT THE
PRODUCT BACK AND CHARGE A RESTOCKING FEE. MOSLEY REFUSES TO DELIVER
THE ANTENNA, ANSWER MY EMAILS, OR ANSWER ANY OF MY QUESTIONS TO DATE.
IF MOSLEY REFUSES TO ANSWER MY QUESTIONS NOW, WHAT WILL THEY DO IF I
WERE TO HAVE ANY PROBLEMS WITH THE RETURNED PRODUCT ? MORE REFUSAL ?

PLEASE LOOK CAREFULLY AT ANY COMPANY BEFORE YOU BUY ANY PRODUCT.
I GOT SCREWED OUT OF OVER $5,000.00, PLEASE DON'T LET THIS HAPPEN
TO YOU. For details on this disaster please see this URL
http://users.bentonrea.com/~wa7aw/tower/page14.html

I would be most appreciative if you would FORWARD this email
(in its entirety) to all who might be considering the purchase
of any new amateur radio equipment.

One of my xmas presents is a new force 12 5BA antenna, I will post
my experiences with force 12 after it arrives, and should the Mosley
get here before the Force 12, anyone want to buy an Mosley
Pro-96-S antenna really cheap ???

happy new years 2001

WA7AW
John H.

5363. Re: Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 05:55:41 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <xTz36.209318$U46.6414596@news1.sttls1.wa.home.com>
Source record: 173511

"Donald Campbell" <castles@jps.net> wrote in message
news:3A4EA7D9.55842AD7@jps.net...
> I am seriously considering the purchase of a Cushcraft A3S tri-bander.
> I would appreciate feedback from users of this antenna in terms of
> reliability of the traps and other hardware. Also performance
> experiences.

Donald,

I have had one up for close to 6 years now and am quite pleased. I have only wires and verticals to compare to but the difference is stupendous. I can work over 90% of what I hear on SSB and that is with a FT990 and 100 watts. I read people bad mouthing Cushcraft but I have certainly feel I've gotten my money's worth. Never had a problem with the traps or any other parts. It is mounted on the roof on a Glen Martin tripod. The difference never ceases to amaze me.

Glenn de KB7PKC

5364. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 07:53:43 UTC
From: paul <paul@nospam.com>
Message-ID: <3A4EE607.47A6@nospam.com>
Source record: 173512

Cecil wrote:
>
> G0DJA wrote:
> > For a quarter wave divide the wavelength by 4 (E.g., a quarter wave on 80M
> > is 80/4 = 20M)
>
> That is a free space number. For metal antennas, that number must be reduced
> by a certain percentage because of the difference in the speed of light in free
> space VS metal. For a wire antenna, the reduction is about 5%.
> --
> http://www.mindspring.com/~w6rca

Ah yes, the velocity factor. All of this is good and nice but I
suggest that the inquisitor buy an ARRL handbook. It doesn't matter
what year. These questions are answered in every one!

I don't have a book handy but I do remember that there are certain
things to keep in mind with a 5/8 wave antenna. You can't just hook up
a piece of metal (cut to length) to the center of your coax and expect
it to work. I think that all 5/8 waves need a loading coil to match a
coax. Someone else might expand on this point.

Paul
KD4GNU

5365. Re: Tidying up the old millenium

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 08:05:31 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4EE8CB.6D88@wt.net>
Source record: 173517

John Burrell wrote:

> Mark,
>
> I must apologise. Not for suggesting that you fired off the wrong response
> but for my own stupidity in recommending the fool be given another chance! I
> had been following this NG long enough to know better and even had FRACTured
> intellect in my kill list!

No apologies needed. Myself, I don't use a kill file at all. If I see a thread that doesn't interest me, I just quit reading it. I'm sure it's annoying to the vast majority , but much of it is quite comical to me. I know if the comedy channel gets slow, Heckle and Jeckle will be cooking up something soon. Placed in a Peyton Place atmosphere of course...With Perry Mason as guest star... :+ Happy New year! Watch out for HAL 9000. He's getting cranky. MK

--
http://web.wt.net/~nm5k

5366. Re: Hams Helping SWLs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 08:23:50 UTC
From: pmunsel@aol.com
Message-ID: <20001231032350.07918.00000473@ng-mb1.aol.com>
Source record: 173513

Hello Al, I was given a lot of help by Ham's when I was getting started with SWL'ing. They helped me with antenna's, and with information concerning the gear I drug up, and stations I was hearing. I started in the mid 60's as a kid in high school. I have not done much lately with either SWL or Ham, as my job keeps me pretty busy. I agree that we should try to help each other, and perhaps generate a little more interest in both areas. When asked, I always make time to answer the questions I can, or direct the folks to someone, or someplace they can get them. I at one time asked some very ignorant sounding questions, but the guys helped me, and as I learned, I looked at others asking the same questions as interested, not ignorant...
73,
Paul Munsel N5XMV
Hearne, Tx.

5367. Re: Butternut Mini-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 08:45:17 UTC
From: dbanka <dbanka@hotmail.com>
Message-ID: <3A4EF21D.F4D71250@hotmail.com>
Source record: 173514

i halve a butternut vertical it works great

Bill wrote:

> Has anyone used or know of any experiencesm with the Butternut HF5B? It is
> also a 5 band mini-beam. It's about $200 cheaper than the Hex-Beam. Is there
> a performance difference????

5368. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 09:57:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4F0302.EF5C0F72@eznec.com>
Source record: 173515

Bigdad wrote:
>
> I've found that CW ops tend to be stuck up self centered people that feel
> that no one else is worth a damn unless they cow tow to their beliefs that
> you're not a ham unless you can use morse code. I passed a code test yes but
> i choose not to use it and i dont think Morse is the measure of the man and
> should not hamper the growth of our hobby. My opinion.
>
> WB9HNJ

Believe it or not, there are at least a few of us CW ops who use CW
simply because we like to.

Roy Lewallen, W7EL

5369. Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 10:12:22 UTC
From: NC <chickenhawk@softhome.net>
Message-ID: <92n0u4$2mit$1@corolla.OntheNet.com.au>
Source record: 173516

Hi all I know this is probably the wrong news group to be posting this to I
am looking for plans to build a base Antenna for my UHF cb 477mhz unit just
wondering if anybody has any ideas on how to go about his weather I make a
simple dipole or a vertical I don't want to use a directional beam as I
need to cover a 360 degree area but just wanting some ideas on how to go
about building one if anyone can help I will be greatly appreciated.
Please feel free to e-mail me
Thanks in advance
73's
Nathan chickenhawk@softhome.net

5370. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 12:47:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92nas4lcl3@lure.pipex.net>
Source record: 173518

"Bill Aycock" wrote
> GAry- please get it right before you preach- Antimony boils at about
> 2500 degrees, F, so the soldering iron that will do that is one I dont
> want to hold in my hand. I would like to know where this bit of
> 'information' originated. Do you know?
>
> Bill- W4BSG

Well Bill NASA spent a great deal of money MUS$ investigating solder, and soldering reliability.
As I was working for them back in the 60s and 70s I was sent on a weeks course to learn about soldering and how to solder. There was an examination and a few test pices to complete at the end of the course. That fact that I passed with a good mark, and my memory though not perfect is not so bad that I would forget the few useful bits of information that I picked up.

Still we are probably discussing an obsolete technology if lead is to be eliminated from electronic equipment.
Of course the fact that in the olden days, (50s) one was taught (not NASA) to produce a third hand by holding the resin core solder in the mouth is ample evidence that everything that we are taught is not always true, and that one man's meet is another's poison.
And please don't acuse me of having a mental condition prematurly brought on by lead poisoning. ;)

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

5371. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 12:51:21 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92nas5lcl4@lure.pipex.net>
Source record: 173419

Tectronix used to supply silver solder on little bobbins that formed a part
of the osciloscope in order to solder components onto the ceramic tag boards
that they used in their equipment.
Silver solder can be soldered with a number 9 curie point tip.

Of course some of us have been around long enough to have done it;
not just read about it.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

"Hassen Ben Sober" <HassenBenSober@kumputer.net> wrote in message
news:u%v26.28250$3B5.1048396@newsread2.prod.itd.earthlink.net...
> Donno about your Silver Solder-
>
> But- What I use- You ain't gonna melt with a Soldering Iron :-)
>
> The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.
>
> That's why it's used in High Pressure AC Systems :-)
>
> "Jim Pennino" <jimp@mail.specsol.com> wrote in message
> news:sq1d29.u3e.ln@mail.specsol.com...
> > Bill Aycock <baycock@hiwaay.net> wrote:
> > > GAry- please get it right before you preach- Antimony boils at about
> > > 2500 degrees, F, so the soldering iron that will do that is one I dont
> > > want to hold in my hand. I would like to know where this bit of
> > > 'information' originated. Do you know?
> >
> > > Bill- W4BSG
> >
> > <rest snipped>
> >
> > Getting antimony into solution in the first place is a bit of a chore,
but
> > once there, the melting point of the alloy is not much affected.
> >
> > Don't recall seeing any solder with antimony in it, but lineotype (SP?)
> > metal had quite a bit by design (makes the alloy harder and molds
"crisper").
> > And a soldering iron will melt it.
> >
> > Bullet casters prefer lead alloys with a bit of antimony for the same

reasons.
> >
> > Ever hear of silver solder? You can't melt pure silver with any ordinary
> > soldering iron either, but once alloyed with lead and/or tin....
> >
> > Jim Pennino
> >
> >
>
>

5372. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 12:55:40 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92nas6lcl5@lure.pipex.net>
Source record: 173420

Me sir Me,
How many of you repaired and calibrated them to a seconadry traceable
standard?
The handbooks that came with them were super, why more companies don't
introduce a little humour into ther tech data I do not know. A full day at
the bench can be tiring enough, the light relief from the humourous drawings
was a welcome.

--
Gary7SLL
1 20' W 51 23' N
http://www.gary.peach.dial.pipex.com/

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:s08e29.ogo.ln@mail.specsol.com...
> Hassen Ben Sober <HassenBenSober@kumputer.net> wrote:
> > Donno about your Silver Solder-
>
> > But- What I use- You ain't gonna melt with a Soldering Iron :-)
>
> > The Melting Temp of Silver Solder is Damn near the Melting temp of
Copper.
>
> > That's why it's used in High Pressure AC Systems :-)
>
> The silver solder used in electonics, as opposed to plumbing and whatever
> else, usually runs from 2% to 6% silver and uses ordinary electronic
> soldering techniques and equipment.
>
> OK, OF role call; how many of you worked on a Tek 'scope with the little
> roll of silver solder under the cover for replacing compenents on the
little
> silver metalized ceramic strips?
>
> Jim Pennino
>

5373. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 12:58:09 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92nas7lcl6@lure.pipex.net>
Source record: 173421

BTW I agree about the slack naming of the silver bearing solder.
I have used the powdered silver for putting flanges on Q Band Silver wave guide and certainly that would only melt with a torch.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a506db9.423176896@news.seanet.com...
> On Wed, 27 Dec 2000 18:20:12 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:
>
> >
> > >OK, OF role call; how many of you worked on a Tek 'scope with the little
> > >roll of silver solder under the cover for replacing compenents on the
little
> > >silver metalized ceramic strips?
> > >
> > >Jim Pennino
>
> Yo!
>
> 73's
> Richard Clark, KB7QHC

5374. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 13:55:12 UTC
From: richardharrison@webtv.net
Message-ID: <13340-3A4F3AC0-13@storefull-117.iap.bryant.webtv.net>
Source record: 173424

Reg wrote:
"The skin depth of radio waves is much less than 1/2-wavelength."

Ed Laport had smething to say about short radials when discussing long-wave antennas. At low frequencies, antennas and radials tend to be too short. What to do? Exhume the radials and drive long ground radials at their extremes.

Reg gave r-f penetration (skin depths) for waves of various frequencies in soil of 100-ohms per square meter resistivity, and permitivity of 15. For 200 KHz, it is about 36 feet. For 2 MHz, it is about 12 feet. At higher frequencies the soil`s capacitance tends to bypass the soil`s resistance, but soil capacitance is usually lossy,

I have no quarrel because I have not measured r-f penetration depths. I am aware that a wave spreads less when its progress is easy, but when obstructed, the wave tends to bypass obstructions. In poor soil, waves go deeper to get around resistance in the topsoil.

Ed Laport was likely writing for the worst case by saying waves could penetrate the soil down to 1/2-wavelength below the surface. I don`t remember his exact words, but I`ll bet he qualified the depth based on soil characteristics. I`d also bet he got it right. I am the probable culprit in not quoting his exact words in their entirety.

Best regards, Richard Harrison, KB5WZI

5375. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:02:39 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <ITxPOts7dvPKPSgYP03w2CB2kVIJ@4ax.com>
Source record: 173422

"NC" <chickenhawk@softhome.net> wrote:

>Hi all I know this is probably the wrong news group to be posting this to I
>am looking for plans to build a base Antenna for my UHF cb 477mhz unit just
>wondering if anybody has any ideas on how to go about his weather I make a
>simple dipole or a vertical I don't want to use a directional beam as I
>need to cover a 360 degree area but just wanting some ideas on how to go
>about building one if anyone can help I will be greatly appreciated.
>Please feel free to e-mail me
>Thanks in advance
>73's
>Nathan chickenhawk@softhome.net
>

Get an antenna for the 440 mhz ham band, and snip off a half-inch or
so, or whatever it takes to resonate slightly higher at 477 mhz.

I didn't know there was a CB band on 477 mhz... something new?

Bob
k5qwg

5376. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:08:58 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <XD1POmayaveqJqxfNVKI7YWVv0sG@4ax.com>
Source record: 173423

rwclark@seanet.com (Richard Clark) wrote:

>On Sat, 30 Dec 2000 12:00:48 GMT, Bob Miller <bamiller@texas.net>
>wrote:
>
>>rwclark@seanet.com (Richard Clark) wrote:
>>
>>>
>>>Hi Bob,
>>>
>>>The GPO can do this in a heart-beat if all you are looking for is
>>>>more pages, photos, charts
>>>>and illustrations
>>>
>>>Some pubs are free too.
>>
>>Well, the GPO is supported by taxes.
>>
>>Bob
>>k5qwg
>>
>Hi Bob,
>
>Now that there is a commercial value applied to the spectrum (in the
>marketplace of auction), we Hams are supported by taxes too. Those
>frequencies that we have access to, if they were to be sold by Uncle
>Sam, then the US would derive an income. Denied that (by virtue of
>our "entitlement"), the US must seek some other source of revenue -
>taxes.
>
>Taxes work for me, I also use the GPO. Elsewhere in this forum is a
>link to tax paid effort to create a propagation modeler VOACAP - I use
>that too. Taxes paid for the Mismatch Uncertainty calculator I got
>from NIST - I use that too.
>
>There are also commercial correlatives to each of these - I use them
>too.
>
>Make taxes your friend ;-)

Oh, taxes have been my friend a long time :-) (We liberals are like
that.)

Maybe I missed some of the original argument, but I still think the
arrl handbook is a bargain at $32. Some may disagree. Whatever.

Have a good day!

Bob
k5qwg
>
>73's
>Richard Clark, KB7QHC

5377. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:18:27 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a4f3fa3.166983776@news.azstarnet.com>
Source record: 173425

On Sun, 31 Dec 2000 12:51:21 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:

>Tectronix used to supply silver solder on little bobbins that formed a part
>of the osciloscope in order to solder components onto the ceramic tag boards
>that they used in their equipment.
>Silver solder can be soldered with a number 9 curie point tip.
>
>Of course some of us have been around long enough to have done it;
> not just read about it.

I have done it too. However, I used *silver-bearing solder*, not silver solder
like I use to solder copper pipe with a MAPP torch.

Wes N7WS
>
>--
>Gary7SLL
>1° 20' W 51° 23' N
>http://www.gary.peach.dial.pipex.com/
>
>"Hassen Ben Sober" <HassenBenSober@kumputer.net> wrote in message
>news:u%v26.28250$3B5.1048396@newsread2.prod.itd.earthlink.net...
>> Donno about your Silver Solder-
>>
>> But- What I use- You ain't gonna melt with a Soldering Iron :-)
>>
>> The Melting Temp of Silver Solder is Damn near the Melting temp of Copper.
>>
>> That's why it's used in High Pressure AC Systems :-)
>>
>> "Jim Pennino" <jimp@mail.specsol.com> wrote in message
>> news:sq1d29.u3e.ln@mail.specsol.com...
>> > Bill Aycock <baycock@hiwaay.net> wrote:
>> > > GAry- please get it right before you preach- Antimony boils at about
>> > > 2500 degrees, F, so the soldering iron that will do that is one I dont
>> > > want to hold in my hand. I would like to know where this bit of
>> > > 'information' originated. Do you know?
>> >
>> > > Bill- W4BSG
>> >
>> > <rest snipped>
>> >
>> > Getting antimony into solution in the first place is a bit of a chore,
>but

>> > once there, the melting point of the alloy is not much affected.
>> >
>> > Don't recall seeing any solder with antimony in it, but lineotype (SP?)
>> > metal had quite a bit by design (makes the alloy harder and molds
>"crisper").
>> > And a soldering iron will melt it.
>> >
>> > Bullet casters prefer lead alloys with a bit of antimony for the same
>reasons.
>> >
>> > Ever hear of silver solder? You can't melt pure silver with any ordinary
>> > soldering iron either, but once alloyed with lead and/or tin....
>> >
>> > Jim Pennino
>> >
>> >
>>
>>
>
>

5378. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:24:56 UTC
From: Dennis <dennis1449@dcwis.com>
Message-ID: <B6749DD8.2FAC%dennis1449@dcwis.com>
Source record: 173426

> From: "ehchvac" <ehchvac@mediaone.net>
> Organization: Road Runner
> Newsgroups: rec.radio.amateur.antenna
> Date: Mon, 25 Dec 2000 05:27:08 GMT
> Subject: antenna tuners
>
> will an antenna tuner or a tuner with amp help a long wire, and if so any
> opinions on which one, the radio is a drake r8b.
> thanks in advance
>
>
I bought an antenna tuner for use with a 70' random wire antenna and my
Drake R8B. I did NOT find any advantage to using the tuner, in fact there
was a BIG DISADVANTGE in that you need to retune the tuner when switching
frequency bands.

Plug the long wire into the 500 Ohm "Antenna B" spring clip and enjoy a
great receiver.

5379. Re: antenna tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:27:19 UTC
From: Dennis <dennis1449@dcwis.com>
Message-ID: <B6749E67.2FAD%dennis1449@dcwis.com>
Source record: 173427

> From: "ehchvac" <ehchvac@mediaone.net>
> Organization: Road Runner
> Newsgroups: rec.radio.amateur.antenna
> Date: Mon, 25 Dec 2000 05:27:08 GMT
> Subject: antenna tuners
>
> will an antenna tuner or a tuner with amp help a long wire, and if so any
> opinions on which one, the radio is a drake r8b.
> thanks in advance
>
>
BTW, check out the rec.radio.shortwave newsgroup. Great discussions on
receivers and antennas there.

5380. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 14:56:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4F490D.24560A6@IEEE.org>
Source record: 173428

Bob Miller wrote:
> Maybe I missed some of the original argument, but I still think the
> arrl handbook is a bargain at $32. Some may disagree. Whatever.

It was a better bargain at $3.50 when I got mine. :-)
--
http://www.mindspring.com/~w6rca

5381. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 16:19:09 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A4F5C7D.8040107@hiwaay.net>
Source record: 173429

Gary- my comments were in reference to the 'boiling' of Antimony, only. I have not found a reference to solders with this element , in what was a limited search. Antimony is used in several lead alloys that are commonly cast, because Sb, like water, but unlike most substances, expands when it solidifies on cooling. Thats why it is used in type metal, and in bullet casting- it gives a 'crisp' surface that is true to the die.

I have been using non-lead solders in some projects I am involved in, because they concern objects that are handled, and there are regulations that dictate 'lead-free'. I actually find the newer solders easy to work with, unlike some of the reports I have seen.

When I was active in Aerospace work, we had to have certified solderers. I was not one of them, but it was something we had to specify and certify. We sent many operators to Marshal Space Flight Center classes.

As to the 'Lead poisoning', I may have been more at risk than you- at one time- MANY years ago, I used white lead in some activities. We were very ignorant, and I now find that scary.

Bill- W4BSG

5382. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:01:28 UTC
From: Chris B <cab1971@nospambellsouth.net>
Message-ID: <_DJ36.110$wz3.7141@news2.atl>
Source record: 173430

I've been trying to do this stuff for a while and can't figure out A) Which
frequencies to monitor and when, and if I am getting them B) which "decoder:
to use in the receiving software (looks like about 20 different kinds of
"satellite transmitters? Meteor NS, Meteor SN, etc.)
Can you shed some light on this?? Would be much appreciated!!
thanks
cb

"Pervert_Extraordinaire" <valued_customer1@att.com> wrote in message
news:3A4D3060.7B02FA70@att.com...
> [Followup set to rec.radio.amateur.antenna]
>
> Hello,
>
> I've been receiving weather sat images for several weeks.
> I've progressed from an unmodified Radio Shack 2006 scanner
> with a Discone antenna, to a Hamtronix R139 receiver with a
> home-brew QFH antenna. My image quality has improved as I've
> modified/upgraded the hardware. However, I'm at a loss how
> to improve further.
>
> My present setup:
>
> Receiver:
> -Hamtronix R139 Weather Sat Receiver
> http://www.hamtronics.com/
>
> Antenna:
> -Home-brew QFH antenna, located at ground level
> -50' interconnect, RG-213U coax, soldered PL259 and BNC
> -antenna made with RG-58 coax per the following.
> http://www.rig.org.uk/Members/Software/body_software.html
>
> Demodulator:
> -Dell 600Mhz, Turtle Beach Montego II A3D 320 sound card
> -SatMon
> http://www.satsignal.net/
>
> I am getting vertical noise lines across the image. It appears
> to be 60Hz related as there are 30 lines across one of the .250sec
> NOAA horizontal scans. (120Hz) I've located the receiver ~10 feet away
> from my PC, I've located the antenna as far away from the PC as possible,
> I've tried disconnecting the power supplys for the speakers
> and printers. I've turned off the monitor. I've moved the feed cables

around
> (with respect to my PC and PC power lines) but note little noise
improvement.
>
> I had the QFH located in the attic at one time. However it was connected
> with RG-58 and had similar noise problems. I'm quite sure it I re-install
> it (even with my improved RG-213U coax) I'd see the same noise.
>
> I note the noise does decreases slightly as the bird overflys. This leads
me
> to believe the noise is entering on the antenna rather than my demodulated
> (and screened) audio feed.
>
> I do have a cell tower located 1/4 mile from me.
>
> This appears to be my last major hurdle before obtaining quality images.
>
> Any help would be greatly appreciated!!
>
> This is a link to an example file.
> http://home.att.net/~valued_customer/12292147.jpg
>
> Followup set to rec.radio.amateur.antenna

5383. Re: Modeling Tape measure antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:09:37 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <kvpu4tg5rqffgf7ad6eunj26kvb6qbg424@4ax.com>
Source record: 173431

"Reg Edwards" <g4fgq.regp@btinternet.com>
shared these priceless pearls of wisdom:

->The percentage decrease in resonant frequency is
->approximately -

Reg -- I posted a question here a couple of weeks ago. It must have gone into hyperspace or something. I can't get your computer program to go wide enough to see the vswr at band edges. Is there a way to fudge it so that I can see out a little further?

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

5384. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:12:02 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <CNJ36.216$y12.27025@news7.onvoy.net>
Source record: 173432

Bob Miller <bamiller@texas.net> wrote in message
news:ITxPOts7dvPKPSgYP03w2CB2kVIJ@4ax.com...
> "NC" <chickenhawk@softhome.net> wrote:
>
> >Hi all I know this is probably the wrong news group to be posting this to
I
> >am looking for plans to build a base Antenna for my UHF cb 477mhz unit
just
> >wondering if anybody has any ideas on how to go about his weather I make
a
> >simple dipole or a vertical I don't want to use a directional beam as I
> >need to cover a 360 degree area but just wanting some ideas on how to go
> >about building one if anyone can help I will be greatly appreciated.
> >Please feel free to e-mail me
> >Thanks in advance
> >73's
> >Nathan chickenhawk@softhome.net
> >
>
> Get an antenna for the 440 mhz ham band, and snip off a half-inch or
> so, or whatever it takes to resonate slightly higher at 477 mhz.
>
> I didn't know there was a CB band on 477 mhz... something new?

Probably the family radio service, didn't know external antennas were legal
on that band.
>
> Bob
> k5qwg
>

5385. Re: 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:12:05 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A4F68E5.3D0F@wt.net>
Source record: 173433

Rosco wrote:
>
> Can anyont tell me the dimentions of a gamma match for 6 meters.
> I am working on a 4 el beam and would appreciate some help.
>
> The handbook says .5 wavelength but i cannot get it to tune up. I have been
> trying it in the 12" ballpark with no luck.
>
> Thanks
>
> Ross / N0MSS

In one example I also show appx 12 inches, with the rod about 1 inch
from the element. "This type using the coax cap inside the rod". 3/8
inch tubing used. There should be a spot around there somewhere. How is
the beam mounted? If it's not mounted yet on a tower etc, point it
straight up when trying to tune. May cut down on coupling effects in the
area. MK
--
http://web.wt.net/~nm5k

5386. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:16:34 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4F69F2.E55BC74F@dvol.com>
Source record: 173434

Fractenna wrote:

> Shouldn't the americal radio relay league be doing damage control before the
> press starts playing up the ham radio angle on this guy??

>
Completely ass-backward non-thinking.
>

> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go
> and shoot people.
>
> Some of us don't even have guns...or even evil thoughts against others.
>
> Just a thought.
>
> Phil
> de N1ZKT

>
Hey, Fracky - Seven more folk down here in Philly just got taken out with
firearms in a crack house. Must be the season. I'll let ya know if any of the
perps have ham tickets so that you can notify your local friendly ARRL Director
so he can stir the pot.
>
w3rv

5387. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:25:57 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4F6C25.32EF271A@att.com>
Source record: 173435

Chris B wrote:
>
> I've been trying to do this stuff for a while and can't figure out A) Which
> frequencies to monitor and when, and if I am getting them B) which "decoder:
> to use in the receiving software (looks like about 20 different kinds of
> "satellite transmitters? Meteor NS, Meteor SN, etc.)
> Can you shed some light on this?? Would be much appreciated!!
> thanks
> cb

Only if you help me solve my noise problem. ;-)

I'm only doing APT (Automatic Picture Transmission). There are others.
The following is limited to APT.

A) Frequencies:
1) NOAA12 137.500
2) NOAA14 137.620
3) Meteor 137.300
4) Resurs 137.850
x) For Satellite Tracking, try SatScape at http://www.satscape.co.uk/

B) Decoder and receiving S/W
1) I used a Radio Shack 2006 with the IF moded to accept a wider FM signal. Now
use a Hamtronix R139.
You can do this with an unmoded (IF) scanner initially, but the limited IF BW
reduces picture quality greatly.
2) Sound card on your PC
3) WxSat http://www.hffax.de/WX_Satellite/WXSat/wxsat.html -or- SatSignal
http://www.satsignal.net/

Recommend the following site for additional info:
http://www.geocities.com/tegwilym/
http://www.hffax.de/Beginners_Guide/APT/apt.html
http://www.rig.org.uk/Imaging/imaging.html
http://ecco.bsee.swin.edu.au/chronos/metsat/metsat-own.html

It's really cool. EMAIL me if you like. Remove the "1" from my address.

BTW, I'm a long way from being anything but a simple beginner....

5388. Re: Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:28:06 UTC
From: Donald Campbell <castles@jps.net>
Message-ID: <3A4F6D54.E12E9EDF@jps.net>
Source record: 173436

Hi Glenn,

Thanks for the response on the Cushcraft. So far you are the only person who responded. I have a US Tower and we put it up yesterday. The rotor is at the bottom which will be nice. I will put a two meter beam on top of the tri-bander.

Thanks again and 73, Don W6QEY

5389. Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:40:04 UTC
From: Andy Brinkley <andy@brinkleyelectronics.com>
Message-ID: <3A4F6F74.C49806E5@brinkleyelectronics.com>
Source record: 173437

Looking to purchase and install a Discone Antenna in the near future, and would like any comments on the quality of the ones on the market. I have seen prices from $39.99 up to $179.99 for what appears to be the same style antenna.

TNX

Andy NC4AB

5390. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:46:49 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <z3BPOtehj1aKoi7jAFYNEEdRc9fI@4ax.com>
Source record: 173438

Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Bob Miller wrote:
>> Maybe I missed some of the original argument, but I still think the
>> arrl handbook is a bargain at $32. Some may disagree. Whatever.
>
>It was a better bargain at $3.50 when I got mine. :-)

Umm, what century was that, Cecil :-)

Bob
k5qwg

5391. Re: Catching FMcable stations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 17:46:54 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92nreh$qd4$1@bob.news.rcn.net>
Source record: 173439

You'd see the picture quality suffering on the televisions long before the
FM signals would be that severely affected. It appears you are doing
everything
correctly. That leaves two possibilties. The JVC is defective--can you
receive off-air
signals using an antenna on the set? The cable company is having problems
with the
system--try another receiver on the cable.

Peter

"blair thompson" <blairt@direct.ca> wrote in message
news:3a548a4f.1095793@news.direct.ca...
> A bit OT, but I thought some experts probably hang here who can
> provide an answer.
> I am trying to hook up a JVC minisystem which I gave my girlfriend for
> Christmas, in order that she can receive cable FM stations. The JVC
> has the clip connectors for an external antenna, one clip for ground,
> and the other for "75 ohms". I have tried both using a matching
> transformer on the end of the coax, but this isn't effective, I guess,
> because it is really to match twinlead (300 ohms) to the back of the
> set. The owner's manual says to strip the end of the coax and insert
> the center conductor into the 75 ohm clip, and the braid into the
> grounding clip. This isn't working either.
> Do I need something like a "matching" transformer that neither matches
> nor transforms, i.e. 75 ohms coax straight thru to the back of the
> JVC? At the same location,formerly,there was a 15 year old Mitsubishi
> receiver with a female insert on the back which took a male connector
> on the end of the coax which worked and received all the cable
> stations.
> Compounding the problem here might be the fact that the cable signal
> has been diluted by several splitters around the house, although the
> Mitsubishi worked fine under the same circumstances. I tried the JVC,
> at a different location(another house) using a matching transformer
> and it captured the stations OK,.I was wondering whether trying a RS
> signal booster (25 bucks) might work if I am faced with a weak cable
> signal situation.
> Any suggestions? (and thanks for the bandwith).
> Blair.

5392. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:01:03 UTC
From: k1bqt@aol.com
Message-ID: <20001231130103.21943.00000077@ng-fc1.aol.com>
Source record: 173440

> Not all of us hams are 300 pound-grrrizly adams-- loner- man-mountains who go and shoot people.<

Our local Rabbi looks like that, but he's a very jovial fellow. Fact is, being big, single, growing a beard, and even owning legally registered guns rank pretty low on the list of indicators predictive of a person who may commit crimes of vengence.

On the other hand, chronic expressions of persecution coupled with habitual threats to initiate adversarial action in order to "set things right" rank pretty high.

In the movie "Falling Down", the professionally-dressed bespectacled character portrayed by Michael Douglass didn't look like Grizzly Adams at all, but he did have an axe to grind!

So, apparently, did Mr. McDermott. Despite holding down a full time job, the Boston Globe reported he was in the process of losing everything --including his car, a big chunk of his future earning potential, and therein his ability to pay rent. One need not be a "shrink" to understand how little of life those realities must leave a clinically depressed man to cling to.

Now, it appears, the very institutions so deeply invested in stealing away his life have suffered hideous and irrepairable losses, and are concurrently stuck with the legal obligation to clothe, feed, and house him for the remainder of his life (note that McDermott didn't attempt to take his own life or confront police officers when they arrived on the scene, and note that there's no death penalty in Mass). For a hopeless and deeply troubled soul, this grotesque solution might have looked like an attractive turn of fate.

If, indeed, Mr. McDermott of Bartlett St. in Haverhill is KB1EVA, it's sad that he has been stereotyped by Dr. Cohen, a man who ought to know better. It's even sadder that no one in our fraternity was close enough to McDermott to intervene and prevent this tragedy from ever happening.

Rick K1BQT

5393. Re: Butternut Mini-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:09:46 UTC
From: X@Y.Z.net
Message-ID: <slrn94utj9.58q.X@animas.frontier.net>
Source record: 173442

On Sun, 31 Dec 2000 00:45:17 -0800, dbanka scribbled:
>Bill wrote:
>
>> Has anyone used or know of any experiencesm with the Butternut HF5B?
>> It is also a 5 band mini-beam.
>
>i halve a butternut vertical it works great

Don't you just *love* usenet?

Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

5394. Re: antenna stacking

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:27:48 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <EUK36.221$y12.27481@news7.onvoy.net>
Source record: 173441

I have about 4 feet seperation between my beams.

I don't see any bleed over, but i am only running 40 watts on both bands.

I don't see any pattern change either.

<alco-ge@postoffice.swbell.net> wrote in message
news:3A4BA262.11C9983C@postoffice.swbell.net...
> I currently run a 2 element quad but am going to change to a multi
> element beam for 6m. I also have a 2M beam that I want to mount
> horizontally on the same mast. How much vertical seperation do I need
> to have between the two beams?
>
> Ed
> w5etm@qsl.net
>
>

5395. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:39:06 UTC
From: richardharrison@webtv.net
Message-ID: <13340-3A4F7D4A-40@storefull-117.iap.bryant.webtv.net>
Source record: 173443

Bigdad wrote:
"---I don`t think Morse is the measure of the man and should not hamper the growth of our hobby.

As all citizens deserve equal rights, benefits, and treatment under the law, these should be regulated only in the public interest, convenience, and necessity, (PICON) as shown in the old communications act of 1934. Most of the act was in the spirit of public safety. Humans shouldn`t interfere with vital communications. Commercial monopolies which are natural results of restricting access to a limited resource also had to be regulated.

Access to radio frequencies should be as unregulated as is practical.

Ruling CW permissible on any ham band, anywhere, at anytime is nonsense. Emergency access is already allowed to anyone on any frequency in dire emergencies. You don`t have to be a ham to try to save a life with radio.

To allow universal CW access is akin to allowing horsemen to excercise their hobby on any public trail, pathway, or road, because there have almost always been horsemen around, though now superseded by motorists.

Morse is now obsolete and quickly started to become so with the first practical voice modulation. Just as the telephone replaced telegraph for practical purposes, voice modulation makes CW obsolete.

In the early days of radio, sinking ships gave radio and its telegraphers fame and celebrity. They deserved it.

Hams at times provided the only communications available, by CW, in early times, and they were the only game in town. They too gained celebrity, and deserved it.

Face it! It`s mostly over. Too many cell phones are around in most emergencies for a ham to be indispensable. Anyone can use wireless with no license, just pay the monthly fee.

Ham radio is a hobby, and CW is just a niche within this hobby which deserves no more than encouragement for its preservation. People need fun and CW is fun for some. It is also nice to have demonstrations of how it used to be. It makes you appreciate the present. Horsemanship is similar in its status as a hobby. It is fun and profitable for some, but doesn`t deserve first consideration in accommodations. There are too many other users of the facilities who want to use other equipment.

Best regards, Richard Harrison, KB5WZI

5396. Re: 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:45:47 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92nut1$5f4$1@iac5.navix.net>
Source record: 173444

12" may be a bit short, I would start with a 14" or longer adjustable rod. What I normally do is to take a piece of tubing that will allow the center conductor to slide through with a snug fit (10"long) and simply run the center conductor of the coax through it.(strip off at least 20") The end of the tubing closest to the center point of the antenna is held by a piece of insulating material. I then take another piece of tubing (10") that will slide over the first and and make a bracket that hooks to the sliding piece and the boom. The amount of capacitance between the coax center conductor and the tubing will give you enough C, then move the sliding piece back and forth for best SWR. I would start at 15" and work my way in. When done you can cut off the excess center conductor about 1" past the end of the gamma rod. The braid of the coax is connected to the center of the boom with a nut, bolt and round lug. Cover this connection with a silicon sealer.

"Rosco" <rvaagen@nospam.hotmail.com> wrote in message
news:hxy36.204$y12.25443@news7.onvoy.net...
> Can anyont tell me the dimentions of a gamma match for 6 meters.
> I am working on a 4 el beam and would appreciate some help.
>
> The handbook says .5 wavelength but i cannot get it to tune up. I have
been
> trying it in the 12" ballpark with no luck.
>
> Thanks
>
> Ross / N0MSS
>
>

5397. snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:46:02 UTC
From: inagaddadavida@webtv.net
Message-ID: <29958-3A4F7EEA-33@storefull-116.iap.bryant.webtv.net>
Source record: 173453

i have been using a "snake" antenna made of 100 feet of coax, terminated with a 75 ohm resistor. the termination is supposed to keep a resistive load no matter what the frequency presented. the use of coax shield as the element is supposed to act as some sort of impedance transformer. the shield picks up signal but yet it is its own transmission line at 75 ohms. this holds the impedance to 75 ohms when the random length of antenna should be thousands of ohms. is this all crap? most people tell me that it is crap, but this antenna works very well for rx. i have several antennas to use but i only seem to use the snake anymore. (i have a severe noise problem here) essentially i have a random wire with coax shield as the element. it works better with a earth ground but thats not portable. so i thought about a counterpoise, to improve ground but no need to drive a rod.......then i thought "what is a random wire with a counterpoise? its a dipole!" a snake dipole? hmmmmmm. what do you guys think of all of this? is there any benefit or difference between the counterpoise and element design (unbalanced hertz type?) or the dipole, with both elements being equal coax elements? (balanced antenna) what impedance at the feed point? (2 elements at 75 ohms each, connected to a feedline. 37 ohms? 150 ohms?) will the dipole be as wide band as the random wire? ouch! owww! my head hurts! opinions please......

5398. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 18:49:31 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <%cL36.11782$7f3.823921@bgtnsc07-news.ops.worldnet.att.net>
Source record: 173445

Just a guess... but by looking at the headers,
it would appear that "NC" is in Australia.

Don't know what services available there, NC
but the first respondent was correct. Buy an
amateur 70 cm antenna and modify it, or
home brew a small quarter-wave ground plane.

Details in any good antenna book.

Gary, WG7X

Rosco <rvaagen@nospam.hotmail.com> wrote in message
news:CNJ36.216$y12.27025@news7.onvoy.net...

> > "NC" <chickenhawk@softhome.net> wrote:
> > >am looking for plans to build a base Antenna for my UHF cb
477mhz unit
> > I didn't know there was a CB band on 477 mhz... something
new?

>
> Probably the family radio service, didn't know external
antennas were legal
> on that band.
> >
> > Bob
> > k5qwg
> >
>
>

5399. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:03:23 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92nvu1$5ur$1@iac5.navix.net>
Source record: 173448

Most non-CW folks are reacting like little children at the dinner table, "I don't like that", in spite of the fact they have not spent any time on CW. Just as you found you really liked green beans once you tried them, CW is also enjoyable!

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3A4F0302.EF5C0F72@eznec.com...
> Bigdad wrote:
> >
> > I've found that CW ops tend to be stuck up self centered people that feel
> > that no one else is worth a damn unless they cow tow to their beliefs that
> > you're not a ham unless you can use morse code. I passed a code test yes but
> > i choose not to use it and i dont think Morse is the measure of the man and
> > should not hamper the growth of our hobby. My opinion.
> >
> > WB9HNJ
>
> Believe it or not, there are at least a few of us CW ops who use CW
> simply because we like to.
>
> Roy Lewallen, W7EL

5400. vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:03:52 UTC
From: "Larry D. Clark" <me@nowwhere.com>
Message-ID: <3A4F8317.741DFF80@swbell.net>
Source record: 173447

hi

wonder if someone could point out a
url that has a practical discussion on
how to properly connect a pair of
vertical antennas so that the result is
as uni-directional as possible.

tnx

73
kd5foy
em12

5401. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:04:50 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4F8352.462533B2@IEEE.org>
Source record: 173452

Fred Hambrecht wrote:
> Most non-CW folks are reacting like little children at the dinner table, "I
> don't like that", in spite of the fact they have not spent any time on CW.
> Just as you found you really liked green beans once you tried them, CW is
> also enjoyable!

And tonight is Straight Key Night 2001. See you on 40m?
--
http://www.mindspring.com/~w6rca

5402. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:06:08 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4F839F.1BFE1BBD@pim.com>
Source record: 173446

Go Fuck yourself you pathetic asshole.
You've "demonstrated" how much of a limpdick a man
can be. Congratulations dumgheap.
Thanks for making me important enough to do a search on... loser.

Fred Hambrecht wrote:

> You certainly "demonstrated" your command of the English language. We are
> all impressed with the elegant descriptive language that so well exhibits
> your superior intellect.
>
> Rec.Radio.CB awaits your return.
>
> No need to respond, as you have been placed along with the rest of the potty
> mouthed children, in the kill file.
>
> "Prof. Beaker" <beaker@pim.com> wrote in message
> news:3A4E3196.DE54A35C@pim.com...
> > Stick it up your gay ass Hambrecht. And you are correct.. I
> > command the English language and you look foolish... AT WILL.
> > So run along in defeat fag.

5403. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:06:40 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4F83BF.DFB3F8AE@pim.com>
Source record: 173450

Good riddens asslick.

Bill Aycock wrote:

> guess what- you have proven yourself to be a false poster (ie not a
> prof.) so-
>
> PLONK- bye bye
>
> Bill
>
> Prof. Beaker wrote:
>
> > Good riddens Pennino.. spick boy. Now we don't have to hear
> > from you anymore. Of course we all know you'll be reading my
> > posts in the future and that you just are not capable of coming
> > up with good replies. Good riddens.
> >
> >
> >
> > Jim Pennino wrote:
> >
> >
> >> Prof. Beaker <beaker@pim.com> wrote:
> >>
> >>> You are sure a nutcase aren't you Pennino?
> >>> Just what is your real problem?
> >>> Wife beating? Wow that really came out of left field.
> >>> I bet YOU ARE the one with a domestic abuse conviction.
> >>> Have a happy new year Pennino you fucking loser.
> >>> Are you a spick or Italian?
> >>
> >>> Jim Pennino wrote:
> >>
> >>>> Prof. Beaker <beaker@pim.com> wrote:
> >>>>
> >>>>> You take YOUR prozac Pennino. Do you think everyone has
> >>>>> their eyes glued to the TV all day long like yourself?
> >>>>
> >>>> Do you still beat your wife? The question assumes a whole lot.
> >>>>
> >>>> It is obvious Prof. Beaker isn't a professor of logic.
> >>>>
> >>>> Since the story was a head line story on the Los Angeles Times,
> >>>> the Orange County Register, and every little local paper around, it

> >>>> would be hard to miss if you EVER read a newspaper or just glance at
> >>>> a news stand in passing.
> >>>>
> >>>> Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> >>>> News and Contra Costa Times.
> >>>>
> >>>> You might try reading a newspaper once in a while.
> >>>>
> >>>> It was on every news segment of every radio station of all formats; rock,
> >>>> oldies, talk, easy listening, etc.
> >>>>
> >>>> You might try listening to the radio on the way to and from work once
> >>>> in a while.
> >>>>
> >>>> It was on every news broadcast of all the TV networks.
> >>>>
> >>>> Since you don't seem to know much about what's happening in the world,
> >>>> you might also be interested to know Bush is now officially President
> >>>> Elect, Elian is back in Cuba and Elvis is still dead.
> >>>>
> >>>> Jim Pennino
> >>>
> >> Congratulations, you are the first person from this newsgroup that I have
> >> kill filed. Though tempted by others, you are the first to have totally
> >> worthless postings; not even amusement value.
> >>
> >> Since you probably don't know what "kill filed" means, I'll explain it
> >> to you.
> >>
> >> I will NEVER see ANY post from you ever again.
> >>
> >> So from now on you're screaming and swearing like a little child in an
> >> empty room.
> >>
> >> PLONK
> >>
> >> Jim Pennino

5404. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:07:02 UTC
From: "Prof. Beaker" <beaker@pim.com>
Message-ID: <3A4F83D5.416BA856@pim.com>
Source record: 173449

Good riddens dungheap.

Dennis WA4YYQ wrote:

> "riddens" ?? "Professor" ??? HA
>
> PLOINK
>
> "Prof. Beaker" <beaker@pim.com> wrote:
>
> >Good riddens Pennino.. spick boy. Now we don't have to hear
> >from you anymore. Of course we all know you'll be reading my
> >posts in the future and that you just are not capable of coming
> >up with good replies. Good riddens.
> >
> >
> >

5405. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:11:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A4F84CA.2395B432@IEEE.org>
Source record: 173454

"Larry D. Clark" wrote:
> wonder if someone could point out a
> url that has a practical discussion on
> how to properly connect a pair of
> vertical antennas so that the result is
> as uni-directional as possible.

It's in the ARRL Antenna Book. Seems the best one can do is
spacing of 1/4WL with a phasing of 135 deg for a 4.5dB gain.
--
http://www.mindspring.com/~w6rca

5406. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:13:01 UTC
From: Dan Yemiola <Dyemiola@LexComInc.Net>
Message-ID: <3A4F853D.38D44776@LexComInc.Net>
Source record: 173451

Rosco wrote:

> Bob Miller <bamiller@texas.net> wrote in message
> news:ITxPOts7dvPKPSgYP03w2CB2kVIJ@4ax.com...
> > "NC" <chickenhawk@softhome.net> wrote:
> >
> > >Hi all I know this is probably the wrong news group to be posting this to
> I
> > >am looking for plans to build a base Antenna for my UHF cb 477mhz unit
> just
> > >wondering if anybody has any ideas on how to go about his weather I make
> a
> > >simple dipole or a vertical I don't want to use a directional beam as I
> > >need to cover a 360 degree area but just wanting some ideas on how to go
> > >about building one if anyone can help I will be greatly appreciated.
> > >Please feel free to e-mail me
> > >Thanks in advance
> > >73's
> > >Nathan chickenhawk@softhome.net
> > >
> >
> > Get an antenna for the 440 mhz ham band, and snip off a half-inch or
> > so, or whatever it takes to resonate slightly higher at 477 mhz.
> >
> > I didn't know there was a CB band on 477 mhz... something new?

This man is in AUSTRALIA.
The OZ CB band in the UHF has been there for 30+ years.
Same basic Idea as the US CB. The US's Class "A" CB (now GMRS) was supposed to
be like this.
It's just that the UHF frequency band placement avoided the fiasco that the
FCC's placement of CB on 27 MHz created.
UHF guaranteed that the service stayed local and low power.

>
>
> Probably the family radio service, didn't know external antennas were legal
> on that band.

Australian Rules for CB Just like football are different.Dan
AI8O

5407. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 19:35:14 UTC
From: jflanders2@home.com
Message-ID: <3a4f89b5.8609511@news>
Source record: 173455

My 1963 ARRL Handbook is marked $3.50

My 1968 ARRL Antenna book is marked $2.50

When I first started buying QST at newsstands in about 1949, the
Lifetime ARRL membership fee was a whopping $20 total. Somebody with
some of these old issues could look back and see just when it started
up - I think it was within a year or two of that.

Just shows how we no longer have dollars - they are now dollarettes.

Jerry W4UK

On Sun, 31 Dec 2000 17:46:49 GMT, Bob Miller <bamiller@texas.net>
wrote:

>Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
>>Bob Miller wrote:
>>> Maybe I missed some of the original argument, but I still think the
>>> arrl handbook is a bargain at $32. Some may disagree. Whatever.
>>
>>It was a better bargain at $3.50 when I got mine. :-)
>
>Umm, what century was that, Cecil :-)
>
>Bob
>k5qwg
>

5408. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 20:35:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4F9895.79C31FD9@dvol.com>
Source record: 173456

Jim wrote:

> i have been using a "snake" antenna made of 100 feet of coax, terminated
> with a 75 ohm resistor. the termination is supposed to keep a resistive
> load no matter what the frequency presented. the use of coax shield as
> the element is supposed to act as some sort of impedance transformer.
> the shield picks up signal but yet it is its own transmission line at 75
> ohms. this holds the impedance to 75 ohms when the random length of
> antenna should be thousands of ohms. is this all crap? most people tell
> me that it is crap, but this antenna works very well for rx. i have
> several antennas to use but i only seem to use the snake anymore. (i
> have a severe noise problem here) essentially i have a random wire with
> coax shield as the element. it works better with a earth ground but
> thats not portable. so i thought about a counterpoise, to improve ground
> but no need to drive a rod.......then i thought "what is a random wire
> with a counterpoise? its a dipole!" a snake dipole? hmmmmmm. what do you
> guys think of all of this? is there any benefit or difference between
> the counterpoise and element design (unbalanced hertz type?) or the
> dipole, with both elements being equal coax elements? (balanced antenna)
> what impedance at the feed point? (2 elements at 75 ohms each, connected
> to a feedline. 37 ohms? 150 ohms?) will the dipole be as wide band as
> the random wire? ouch! owww! my head hurts! opinions please......

>
Are you sure you don't mean "snake oil" antenna?
>
w3rv

5409. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 20:53:05 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A4F9CB1.67025DC@oio.net>
Source record: 173457

Jim,
A snake antenna is a receive only antenna. It was originally
meant to be a full wave length at what ever frequency/band you
find of interest, and terminated in a resister of the same value
as the cable's characteristic impedance (RG-58=50 ohm, RG59=75,
etc). The primary 'draw' of a snake antenna is that it's quiet.
Since it's only used for recieving, and since it's usually made
from 50 ohm coax, you really don't need to worry about impedance
matching to a receiver. If you decide to make a 'dipole' out of
two snake antennas, I still wouldn't worry about imdepance, receivers
usually aren't all that 'picky' about matching. As to how well
it works? Who knows, give it a try and tell us.
'Doc

5410. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:00:38 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <92o84k$j0d$1@slb6.atl.mindspring.net>
Source record: 173460

Fred Hambrecht wrote in message <92nvu1$5ur$1@iac5.navix.net>...
>Most non-CW folks are reacting like little children at the dinner table, "I
>don't like that", in spite of the fact they have not spent any time on
CW.....

Just mention CW Fred, and the "freebanders" go berserk! They won the
battle but will still do anything that they can to eliminate the mode. It
is a painful reminder to those that came in before the rule change that they
came in through the back door!

Dean Craft -- W4IHK

5411. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:03:57 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <e2q8202cAHA.320@cpmsnbbsa09>
Source record: 173467

Brian Kelly wrote in message <3A4F9895.79C31FD9@dvol.com>...
>
>
>Jim wrote:
>
>> i have been using a "snake" antenna made of 100 feet of coax, terminated.

massive snip

> ouch! owww! my head hurts! opinions please......
>
>>
>Are you sure you don't mean "snake oil" antenna?
>>
>w3rv
>
Brian: For an antenna to really qualify as "snake oil", it'll have to be
some variant of a "Fractal" !

Hope this helps

Mike Lucas W5CHR

5412. Re: Hy-gain vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:23:09 UTC
From: Clarence R Carlson <iowadoc@micron.net>
Message-ID: <Pine.NEB.4.30.0012311316560.231-100000@sagan.relativity.net>
Source record: 173458

Isn't the 18v a simple vertical with a loading coil, tapped, at it's base?
IIRC, you move the tap for each band. I had one in the mid '70s, worked my
first dx (an OA5) on it as a novice. It wasn't a half bad antenna for
10-20 and it seemed ok for 40, though nothing special.
I used it 'cuz it was a gift from a friend and for the money worked fine.
When I got some decent dipoles up, they did a better job and I abandoned
it. It was a pain in the neck to run out to the antenna and set the tap.

On Sat, 30 Dec 2000 rware@voyager.net wrote:

> Date: Sat, 30 Dec 2000 19:21:11 GMT
> From: rware@voyager.net
> Newsgroups: rec.radio.amateur.antenna
> Subject: Hy-gain vertical
>
> I am interested in finding information about a Hy-gain 18v antenna.
> Any comments, observations, experience? Would anyone have an
> instruction manual?
>
> Thanks
> Ray
> kc8iwt
>

--
Clarence R Carlson
Itinerant Philosophers of Iowa, LTD

5413. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:25:49 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A4FA457.DF85B62B@home.com>
Source record: 173459

Jim wrote:

> i have been using a "snake" antenna (snipped)

> Ouch! owww! my head hurts! opinions please......

Never heard of this one. Where did you get the information on it? Do you
use it for transmitting -- if so, on what frequencies please?

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5414. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:31:15 UTC
From: N5NUG <n5nug@ix.netcom.com>
Message-ID: <3A4FA5A3.43093EC4@ix.netcom.com>
Source record: 173461

Hello Cecil and the Group.... My ARRL Handbook also cost $3.50...
1962 vintage when I was 16.... 73, and Happy New Year to All.. Ed -
N5NUG ex WN5AIR back then..

5415. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:32:41 UTC
From: rwclark@seanet.com
Message-ID: <3a6d9b43.696978281@news.seanet.com>
Source record: 173462

On Sun, 31 Dec 2000 02:21:30 GMT, Pervert_Extraordinaire
<valued_customer1@att.com> wrote:

>Richard Clark wrote:
>
>Hi Richard, thanks for chiming in!
>
>> An isolation transformer is a limited cure and sometimes the only
>> solution (there are designs where there must be separate grounds).
>> The limit is imposed by any other ground referenced connection that
>> bridges that core's isolation (like an rs232 connector to your
>> external modem). If you attempt to isolate your audio with a
>> transformer and a ground loop is reintroduced (or already existing) by
>> another connection, you haven't got a solution.
>
>The weather receiver drives the demodulated audio output via a LM380
>amp which is, of course, referenced to weather receiver ground. The
>PC sound card receives the demodulated audio input via <insert hardware
>here> which is, of course, referenced to PC ground. Since both the
>weather receiver and PC are powered by A/C, both of their references
>are tied together.... but through a questionable path no doubt. Looks like
>the transformer would make things worse since it would remove the least
>impedance path (the audio feed shield) between the two devices.
>
>> This last, the second (or third or fourth or...) existing path, is the
>> most pernicious. It simply goes to first principles - ground all
>> equipment to the same point. Do not cascade connections unless each
>> connection towards the central ground grows correspondingly larger -
>> and shorter (a contradiction at some level - but again this is not the
>> BEST solution).
>
>Pernicious: adj. Destructive or deadly.
>
>
><SNIP>
>
>I'm WAS wondering if I have a ground offset between my receiver and PC.
>In both my old 'case' (RS2006) and new 'case' (R139) I've had my receiver
>powered
>via a connection to the wall receptical directly.... and my PC powered
>via a connection to my surge suppressor and then to the wall receptical. This
>would certainly 'lift' my PC ground above my receiver ground proportional to the
>current/impedance of the surge supressor. This differential would be
>counteracted

>by the shield of the audio feed..... which would conduct current and generate
>60Hz
>noise. Hmmmm. However, I also experienced this APT noise problem when using the
>receiver-speaker to PC-microphone connection to formulate the audio feed.
>This speaker/micprophone is the mother of all isolation techniques.
>
>Did you get a chance to look at my APT images? I've been speculating this noise
>is 60Hz based given I see 30 events over a .250mS synch. This is 120Hz. Each
>half wave of 60Hz injecting it's own individual grief. However, I've seen 60Hz
>noise on other APT images and they are more periodic than mine. The noise on my
>images appears to be less periodic. This makes me question my speculation.
>
>Thanks again.

Hi OM,

As for the images. I notice the 120 Hz signal you have in your image (60 Hz power component no likely). The interference's waviness appears to be a beat note with your own 60 Hz mains (or the 30 Hz ref. for the video). This would suggest the interference is remote. Remote is a rather tenuous label given that it could be an aquarium heater next door.

So many possible problems here barring correct grounding.

First problem is the presumption that your gear connected to wall socket finds ground. Perhaps... and in the worst possible way. Put bluntly, this is a wild card.

How to troubleshoot this?

First: make sure you can re-establish the problem with the minimum of gear and connections on a regular basis. Many of the steps of troubleshooting will seem to fix the problem while also killing the signal (the operation was a success, but the patient died).

Second: attempt to replace the suspect source/path with a 50 Ohm load and observe if the interference goes away or remains. IMPORTANT: Take care not to disturb ground paths while you are opening and loading the signal path. Repeat this from the antenna connection (at the antenna) back toward the receiver. Continue this with a 600 Ohm resistor when the signal is converted to audio and track back towards the computer. This will separate over the air sources from nearby sources.

Third: (or concurrent with step two above) break the ground path and observe if the interference goes away or remains. This can be very frustrating if you lose track of all the combinations of ground and signal condition (in other words write down all the tests and results so you don't get wrapped around the axle).

Alternative: replace all sources of power with freestanding batteries and break ALL ground paths (do not open shields however) and observe if the interference goes away or remains. The sense of this is that

from the antenna to the computer there are only ever two wires conducting (batteries leads don't count) and no path to ground exists until we hit the computer (with a humongous wire to ground and the cold side of the AF tied to it). This is more complex in that the interference may have gone away and your job is to add it back carefully (so that you can isolate the source).

The steps above are about the simplest way to describe the job before you. They encompass a lot of territory, and yet leave much to be explored. Most of these steps presume the interference is coming from you (a ground loop).

If on the other hand tests reveal the interference is remote, you need to find a way to reject the signal. One option would be to build an array or bank of antennas. By phasing them, you could reject the interference, however, given that your signal is moving (circling over you) phasing would be problematic. Others here in this board may have some discussion in that venue perhaps.

This may well devolve to an isolation transformer in the audio path, but even here you have to pick the right point. Also, be aware that there are isolation transformers for 120VAC too (I use one for my shack) that allow you to control ground absolutely and kill power-line borne noise.

Please note this could take a lot of time. Good Luck :-)

73's
Richard Clark, KB7QHC

5416. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:40:01 UTC
From: rwclark@seanet.com
Message-ID: <3a6fa737.700038922@news.seanet.com>
Source record: 173464

On Sun, 31 Dec 2000 14:02:39 GMT, Bob Miller <bamiller@texas.net>
wrote:

>
>Get an antenna for the 440 mhz ham band, and snip off a half-inch or
>so, or whatever it takes to resonate slightly higher at 477 mhz.
>
>I didn't know there was a CB band on 477 mhz... something new?
>
>Bob
>k5qwg

Hi Bob,

Good start, but 0.5 inch may be too aggressive. I would suggest 0.25
inch (or 5 mm) at a time.

73's
Richard Clark, KB7QHC

5417. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:42:00 UTC
From: fractenna@aol.com
Message-ID: <20001231164200.26416.00000574@ng-cr1.aol.com>
Source record: 173465

>Hello Cecil and the Group.... My ARRL Handbook also cost $3.50...
>1962 vintage when I was 16.... 73, and Happy New Year to All.. Ed -
>N5NUG ex WN5AIR back then..
>

IMHO, the value is diminished --as a general EE ref--compared to other pubs, especially CD-ready ones. Example? ART OF ELECTRONICS by Horowitz and Hill.

In 1962, I am of the opinion the handbook was the primo resource. I bought my first one in 1967 for $5.00. Had all the tube configs in it:-)

Glow lil' glowbug!

73
Chip N1IR

5418. Cuhscraft 80mts Kit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:43:13 UTC
From: Rui Nascimento <rui.nascimento@netvisao.pt>
Message-ID: <978299025.32356@news>
Source record: 173463

Hi have for sale a Kit for 80 mts to the Cushcraft R7000 Plus 8 (vertical).

5419. 80 mts Cushcraft Kit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:45:19 UTC
From: Rui Nascimento <rui.nascimento@netvisao.pt>
Message-ID: <978299152.868954@news>
Source record: 173466

Hi have a new 80 meters Kit for sale to the Cushcraft vertical antena
R7000 Plus.

5420. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 21:52:10 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92o9qe$t0b$1@bob.news.rcn.net>
Source record: 173468

Doug DeMaw did a feature on the coaxial snake antenna for QST magazine some decades back. It is a low noise receive only antenna, like a Beverage, and is not for transmitting. I beleive it was intended for 160 meters, and also perhaps 80 meters. The coax is laid on the ground in as straight a line as possible.

Pete

"Irv Finkleman" <finkirvNOSPAM@home.com> wrote in message news:3A4FA457.DF85B62B@home.com...
> Jim wrote:
>
> > i have been using a "snake" antenna (snipped)
>
> > Ouch! owww! my head hurts! opinions please......
>
> Never heard of this one. Where did you get the information on it? Do you
> use it for transmitting -- if so, on what frequencies please?
>
>
>
> --
>
> Please hit 'REPLY TO' e-mail address before sending. Thanks.
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada
>
>

5421. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 22:24:08 UTC
From: Dante'@inferno.net
Message-ID: <92obm8$nr2$4@news.uky.edu>
Source record: 173369
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3A4D435D.8AB637B1@att.com>, valued_customer1@att.com says...
>
snip
>Any suggestions on how to attack this. How does one
>identify a bad insulator? Look for carbon tracks. ;-)
snip
Use a handheld scanner tunned to an unused spot in the VHF civil air band
(108-138) to "track down" noise sources. Remember the air band is AM and you
should be able to hear the noise fairly clear. To verify a power pole has a
bad insulator (or wire junction), use a 3Lb{1Kg} (or so) hammer to tap,
(DO NOT SLAM the pole!) a little tap will do. You should be able to hear the
noise change when the pole is taped.
Good luck and expect some very strange looks!

5422. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 22:43:00 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A4FB675.70BB9CEE@att.com>
Source record: 173370
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Speaker to Animals wrote:
> In article <3A4D435D.8AB637B1@att.com>, valued_customer1@att.com says...
> snip
> >Any suggestions on how to attack this. How does one
> >identify a bad insulator? Look for carbon tracks. ;-)
> snip
> Use a handheld scanner tunned to an unused spot in the VHF civil air band
> (108-138) to "track down" noise sources. Remember the air band is AM and you
> should be able to hear the noise fairly clear. To verify a power pole has a
> bad insulator (or wire junction), use a 3Lb{1Kg} (or so) hammer to tap,
> (DO NOT SLAM the pole!) a little tap will do. You should be able to hear the
> noise change when the pole is taped.

Will the scanner allow me to narrow down the potential poles? In other words,
will the noise change volume as I approach the offending pole? Or must I
hammer on all poles within a mile of my house? ;-)

> Good luck and expect some very strange looks!

Yea.... I'd expect quite a few.
Hope I don't see a group of people in white coats approaching. ;-)

5423. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 22:49:49 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A4FB71E.CBB7C766@earthlink.net>
Source record: 173371

Well, let's see:

Cheap discone: Cheap mounting bracket, plated TV type hardware. With only one bracket, might twist in a strong wind. Can rust.
Expensive discone: Cast or machined mounting bracket. Maybe two brackets instead of just one for better wind resistance. Stainless or aluminum hardware.

Cheap discone: Light-weight, thin-walled elements.
Expensive discone: Heavier, thick-walled or even solid elements.

Cheap discone: Elements crimped to screw-in terminations. Susceptible to vibration.
Expensive discone: Elements with built in termination or welded to termination secured with setscrews or jam nuts.

Cheap discone: Short cone and small disc.
Expensive discone: Longer cone and wider disc.

Cheap discone: 100 mhz and up; low band reception via capacitance of elements.
Expensive discone: 80 Mhz and up with auxiliary element resonating in the low-VHF range.

Cheap Discone: Type UHF connection with poor UHF impedance characteristics.
Expensive discone: Type N or BNC connector good through over 1 GHz.

Cheap discone: Buy your own cable or cheap cable provided.
Expensive discone: Length of low-loss cable (relatively) provided.

Difference in use? For VHF-high and up reception, very little! But I will give you an example of a difference that counts; after a year on the mast, (including Massachusetts Winter) elements on my Tandy discone were loose at the crimps; a Diamond merely needed setscrews tightened.

Cortland

Andy Brinkley wrote:

> Looking to purchase and install a Discone Antenna in the near future,
> and would like any comments on the quality of the ones on the market. I
> have seen prices from $39.99 up to $179.99 for what appears to be the
> same style antenna.
>
> TNX
>
> Andy NC4AB

5424. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 23:49:15 UTC
From: fractenna@aol.com
Message-ID: <20001231184915.22072.00000205@ng-fc1.aol.com>
Source record: 173372

>If, indeed, Mr. McDermott of Bartlett St. in Haverhill is KB1EVA, it's sad
>that he has been stereotyped by Dr. Cohen, a man who ought to know better.

Mr. Littlefield--

I demand that you retract this statement. It is maliciously incorrect.

The only comment I made about McDermott is that there was an apparent discrepancy between dates and e-mail addresses (re: KB1EVA), and thus it was premature to assume they were the same fellow.

I have NO additional information; have not had an interest or desire to pursue it; and have no idea WHY you have made this outrageous statement.

This is your last chance to just DROP ME from your repertoire of people to harrass. Tomorrow is more than just another day. I have publicly made it clear what happens--legally--in the new year.

Rick--JUST--FOCUS--ON SOMETHING--ELSE==> NOT me.

OK?

73
Chip N1IR

5425. Happy New Year

Newsgroup: rec.radio.amateur.antenna
Date: 2000-12-31 23:52:13 UTC
From: fractenna@aol.com
Message-ID: <20001231185213.22072.00000207@ng-fc1.aol.com>
Source record: 173373

I wish to thank the many people who have offered friendship, information, and good camaraderie in the last year on this NG.

As Dickens said--'it was the best of times, it was the worst of times'.

Here's to a happy, civil, and fun NG in the year of the space odyssey -- and new millenium!

73
Chip N1IR